Who Is Nareit?
The worldwide representative voice for REITs with an interest in U.S. real estate

- Nareit represents the REIT and publicly traded real estate community in the USA. Founded in 1960, the same year that Congress established REITs.

- A non-profit organization based in Washington, DC; we do not manage any funds.

- Funded primarily by over 225 dues-paying corporate members who are REITs and other real estate operating and advisory companies throughout the world.
Who Is Nareit?

A resource to aid in real estate investment allocation decisions

**Government Outreach: Policy & Public Affairs**
- Promote and protect the REIT model through a constructive dialog on Capitol Hill and Executive branch.
- Play a meaningful role with respect to tax, public accounting, and financial standards issues tied to REITs and publicly traded real estate.

**Investor Outreach**
- Broaden and diversify the universe of investors in REITs.
- Work across the retirement savings spectrum and maintain a constructive dialog with many of the largest investors.
- Provide resources for investment decision making.

**Research / Data / Indexes**
- Real estate investor research papers: Internal and third party.
- Indexes: FTSE Nareit (US) and FTSE EPRA Nareit (Global).
- T-Tracker: Quarterly measures of REIT industry performance.

**Meetings & Communications**
- Investor forums and conferences (REITweek, REITworld, REITwise, REITworks).
- Provides content/speakers to PREA, IREI, RELPI.
- Newsletters, blogs, podcasts.

**ESG Initiatives**
- Support REITs as they implement ESG and DEI initiatives and provide guidance on the evolving ESG reporting landscape.
Growth of REITs
The REIT market is now institutionalized and efficient

Source: Nareit, Factset. As of 12/31/22

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**Growth in REIT Equity Market Capitalization**

- 30 REITs are in the S&P 500

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**Top 10 REITs by Equity Market Capitalization**

<table>
<thead>
<tr>
<th>REIT</th>
<th>Ticker</th>
<th>Property Sector</th>
<th>Equity Market Cap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prologis</td>
<td>PLD</td>
<td>Industrial</td>
<td>$104.0B</td>
</tr>
<tr>
<td>American Tower</td>
<td>AMT</td>
<td>Infrastructure</td>
<td>$98.4B</td>
</tr>
<tr>
<td>Equinix</td>
<td>EQIX</td>
<td>Data Centers</td>
<td>$60.6B</td>
</tr>
<tr>
<td>Crown Castle</td>
<td>CCI</td>
<td>Infrastructure</td>
<td>$58.7B</td>
</tr>
<tr>
<td>Public Storage</td>
<td>PSA</td>
<td>Self Storage</td>
<td>$49.2B</td>
</tr>
<tr>
<td>Realty Income</td>
<td>O</td>
<td>Retail</td>
<td>$39.8B</td>
</tr>
<tr>
<td>Simon Property Group</td>
<td>SPG</td>
<td>Retail</td>
<td>$38.6B</td>
</tr>
<tr>
<td>VICI Properties</td>
<td>VICI</td>
<td>Specialty</td>
<td>$31.2B</td>
</tr>
<tr>
<td>Welltower</td>
<td>WELL</td>
<td>Health Care</td>
<td>$31.0B</td>
</tr>
<tr>
<td>SBA Communications</td>
<td>SBAC</td>
<td>Infrastructure</td>
<td>$30.2B</td>
</tr>
</tbody>
</table>
REITS Around the Globe
Nations around the world have adopted REITs as part of their economic development and urbanization strategies.

Source: Equity market capitalization for U.S. listed equity and mortgage REITs from FTSE Nareit All REITs Index, equity market capitalization for companies listed as equity or mortgage REITs in S&P Capital IQ in REIT-regime countries and regions.
U.S. Economy, Commercial Real Estate, and Divergence
Real Estate Performance and Interest Rates

On average, real estate has performed well in different interest rate environments. REITs have outperformed private real estate across the three interest rate groupings.

Average Annual Public & Private Real Estate Total Returns in Different Interest Rate Environments (1978-2022)

<table>
<thead>
<tr>
<th>Interest Rate Environment</th>
<th>FTSE Nareit All Equity REITs</th>
<th>NFI-ODCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low 10-Year Treasury</td>
<td>9.6%</td>
<td>10.8%</td>
</tr>
<tr>
<td>Mid 10-Year Treasury</td>
<td>13.6%</td>
<td>6.8%</td>
</tr>
<tr>
<td>High 10-Year Treasury</td>
<td>16.0%</td>
<td>12.0%</td>
</tr>
</tbody>
</table>

Sources: Federal Reserve System; FRED, Federal Reserve Bank of St. Louis; Nareit; NCREIF.
Real Estate Performance and Inflation
Real estate has historically performed well across various inflationary environments
On average, REITs outperformed their private market counterparts across inflation cohorts

Average Annual Public & Private Real Estate Total Returns in Different Inflation Environments (1978-2022)

<table>
<thead>
<tr>
<th>Inflation Environment</th>
<th>FTSE Nareit All Equity REITs</th>
<th>NFI-ODCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low CPI</td>
<td>12.2%</td>
<td>6.9%</td>
</tr>
<tr>
<td>Mid CPI</td>
<td>12.7%</td>
<td>9.2%</td>
</tr>
<tr>
<td>High CPI</td>
<td>15.0%</td>
<td>11.5%</td>
</tr>
</tbody>
</table>

Sources: U.S. BEA; FRED, Federal Reserve Bank of St. Louis; Nareit; NCREIF.
Real Estate Performance and Recessions
REITs have traditionally been well-positioned to take advantage of economic recoveries

Average Annualized Total Returns
Before, During, & After U.S. Recessions*

Russell 1000 Index  FTSE Nareit All Equity Index  NFI-ODCE Index

<table>
<thead>
<tr>
<th>Before (4 Quarters)</th>
<th>During (Annualized)</th>
<th>After (4 Quarters)</th>
</tr>
</thead>
<tbody>
<tr>
<td>-2.0%</td>
<td>15.3%</td>
<td>8.2%</td>
</tr>
<tr>
<td>5.7%</td>
<td>0.6%</td>
<td>22.7%</td>
</tr>
<tr>
<td>13.1%</td>
<td>15.9%</td>
<td>5.2%</td>
</tr>
</tbody>
</table>

Sources: NBER; Nareit; NCREIF; FactSet.
* Averages include the last six U.S. recessions between 1978Q4 and 2023Q1.
Public and Private Real Estate Divergence

Divergence between REIT and private real estate returns is evidence of a dislocation between the markets.

Rolling 4-Quarter Public and Private Real Estate Total Returns
2019Q1 – 2023Q1

Sources: Nareit; NCREIF.
Public and Private Real Estate Divergence
Simple differences of total returns can act as signals of divergence in U.S. public and private property markets

Rolling 4-Quarter Public & Private Real Estate Total Return Differences

Sources: Nareit; NCREIF.
Public and Private Real Estate Divergence
REIT returns tend to significantly rebound after periods where they trail the private market.

Average 4-Quarter Real Estate Total Returns
After REIT Relative Performance Troughs by Depth of Trough

- REIT Trough: -10% to -20% (6 observations)
  - FTSE Nareit All Equity REIT Index: 27.5%
  - NFI-ODCE: 9.2%
- REIT Trough: -20% to -30% (3 observations)
  - FTSE Nareit All Equity REIT Index: 41.8%
  - NFI-ODCE: 1.9%
- REIT Trough: -30% to -40% (2 observations)
  - FTSE Nareit All Equity REIT Index: 54.6%
  - NFI-ODCE: -2.6%

Sources: Nareit, NCREIF.
Cap Rate Divergence
A divergence in public and private cap rates was also evident in 2022
This gap is expected to close by early 2024.

Real Estate Cap Rates, 10-Year Treasury Yields, & Recessions
REIT Balance Sheets: Prepared for Higher Rates
Equity REITs have reduced leverage with debt ratios stabilizing in the low to mid 30% range

REIT Balance Sheets: Prepared for Higher Rates
On average, equity REITs have predominantly utilized unsecured debt with fixed rates.

Unsecured and Fixed Rate Debt as a Percent of Total Debt

REIT Balance Sheets: Prepared for Higher Rates

Equity REITs have focused on extending maturity terms; they also have low interest costs

REIT Solid Operations: FFO Recovery
As of first quarter 2023, recoveries from pandemic (2020 average) operational performance levels are evident across all U.S. equity REIT property sectors

<table>
<thead>
<tr>
<th>Property Sector</th>
<th>2019 Average</th>
<th>2020 Average</th>
<th>2023:Q1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail</td>
<td>0.601</td>
<td>0.562</td>
<td>0.478</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>0.906</td>
<td>0.914</td>
<td>0.906</td>
</tr>
<tr>
<td>Residential</td>
<td>1.033</td>
<td>1.843</td>
<td>1.748</td>
</tr>
<tr>
<td>Industrial</td>
<td>1.227</td>
<td>1.637</td>
<td>2.530</td>
</tr>
<tr>
<td>Office</td>
<td>1.348</td>
<td>1.622</td>
<td>2.530</td>
</tr>
<tr>
<td>Health Care</td>
<td>1.784</td>
<td>1.761</td>
<td>2.530</td>
</tr>
<tr>
<td>Self-Storage</td>
<td>1.774</td>
<td>1.576</td>
<td>2.530</td>
</tr>
<tr>
<td>Specialty</td>
<td>1.189</td>
<td>1.033</td>
<td>2.530</td>
</tr>
<tr>
<td>Data Centers</td>
<td>1.761</td>
<td>1.230</td>
<td>2.530</td>
</tr>
<tr>
<td>Lodging/Resorts</td>
<td>-1.000</td>
<td>0.478</td>
<td>1.234</td>
</tr>
<tr>
<td>Diversified</td>
<td>1.774</td>
<td>1.906</td>
<td>2.530</td>
</tr>
</tbody>
</table>

REIT Solid Operations: Same Store NOI

Aggregate same-store net operating income (NOI) growth has been keeping up with inflation.
REIT Completion Portfolios
Institutional Investors REIT usage
Most public pension investors invest in REITs as part of their real estate allocation

- Prequin: average allocation to REITs within blended real estate portfolios is 13%.

Note: Figures represent public plans and sovereign wealth funds that invest at least 1% of their total AUM in real estate and invest in REITs as part of their Real Estate allocation. Does not include investors who use REITs as part of their Equity allocation. Not shown: 68% of non-US public plans use REITs in their real estate allocation. Nareit analysis of plan documents and Prequin Real Estate On-line data, January 2023.
Institutional Investors Focusing on “Alternatives”

Expected Capital Deployments in 2022 by Investor Domicile and Type

<table>
<thead>
<tr>
<th>Investors by domicile</th>
<th>Investors by type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asia Pacific</td>
<td>All Investors</td>
</tr>
<tr>
<td>Europe</td>
<td>Fund of funds managers</td>
</tr>
<tr>
<td>North America</td>
<td></td>
</tr>
</tbody>
</table>

Source: ANREV / INREV / NCREIF Investment Intentions Survey 2022; Nareit.
**REITs and Private Real Estate**

REITs and private real estate have different characteristics, which can make them excellent complements in an institutional real estate portfolio.

<table>
<thead>
<tr>
<th></th>
<th>REITs</th>
<th>Private RE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment in Real Estate</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Portfolio Diversification</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Modern Economy Sectors</td>
<td>Yes Tilted to modern economy sectors</td>
<td>Limited Tilted to traditional sectors</td>
</tr>
<tr>
<td>Valuation</td>
<td>Daily (forward looking, market based)</td>
<td>Quarterly (lagging, appraisal based)</td>
</tr>
<tr>
<td>Liquidity</td>
<td>Daily/Liquid</td>
<td>Quarterly/Illiquid</td>
</tr>
<tr>
<td>Reported Volatility</td>
<td>Moderate</td>
<td>Low</td>
</tr>
<tr>
<td>Ease of Tactical Investing</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Historical Return Advantage</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Transparency</td>
<td>Transparent</td>
<td>Opaque</td>
</tr>
<tr>
<td>Fee Drag</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Utilized in Institutional Portfolios</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Portfolio Completion
REITs can be a critical component of a real estate portfolio

- Complements existing real estate allocation
  - Help meet real estate allocation objectives
  - Take advantage of relative valuation opportunities
  - Improves risk/return profile

- Optimizes real estate portfolio
  - Geographic diversification: Ease of access to global real estate
  - Sector diversification: Provides access to the “modern economy” and “traditional” sectors
  - Improve ESG profile

- Efficient and rapid access to “ideal” real estate exposure
  - Customized to each investor’s circumstances
  - Low fee drag
  - Liquid
Historically, the dominant property sectors offering the largest scale and investment opportunity included retail centers, apartment buildings, office buildings, and industrial warehouses.

The industry has expanded to include property types reflecting the evolution of the changing U.S. economy and providing investors with a broader opportunity set.

Source: FactSet, Nareit
New Sectors includes cell tower, data center, self storage, timberlands, single family home, and farmland REITs. All Other includes all other sectors in the FTSE Nareit All Equity REITs index. Data as of March 31, 2023.
Property Sector Diversification
Comparing U.S. Private and Public Real Estate

**Private Real Estate**
- Retail: 9.6%
- Industrial: 31.5%
- Apartment: 28.2%
- Office: 22.9%
- Cell Towers: 1.0%
- Healthcare: 3.5%
- Self Storage: 0%
- Specialty: 0%
- Data Centers: 0%
- Timber: 0%
- Hotel: 0.2%
- Manufactured Homes: 0%
- Diversified: 0%
- Single Family Homes: 0%
- Other: 3.0%
- Parking: 0.1%

**REITs**
- Retail: 14.3%
- Industrial: 11.9%
- Apartments: 9.1%
- Office: 5.4%
- Cell Towers: 14.7%
- Health Care: 7.6%
- Self Storage: 7.6%
- Specialty: 7.0%
- Data Centers: 7.0%
- Timber: 5.9%
- Lodging/Resorts: 2.6%
- Manufactured Homes: 2.4%
- Diversified: 2.3%
- Single Family Homes: 2.2%
- Other: 0%
- Parking: 0%

Source: NCREIF Open End Diversified Core Equity ending market value as of Q4 2022 via NCREIF; FTSE Nareit All Equity Index, equity market capitalization as of December 31, 2022 via Factset.
Case Study: Completion Real Estate Strategy
Adding Public REIT exposure to ‘complete’ an existing Private allocation

Combined portfolio shows 67% private real estate and 33% niche sector REITs percentages, which was proposed to client by LaSalle Securities. Niche residential is comprised of single family homes, manufactured housing and student housing. Public real estate allocation assumes LaSalle Securities’ property sector classifications as of August 31, 2019.

Source: Source: LaSalle Securities, FTSE Nareit All Equity REIT Index, a U.S. healthcare system, fund fact sheets. data as of December 31, 2018

Office 24% 27%
Cell towers 24% 15%
Specialty 38% 9%
Apartments 9% 9%
Health care 9% 9%
Data Centers 6% 9%
Triple net leases 3% 9%
Niche Residential 3% 7%
Retail 2% 5%
Self Storage 3% 7%
Life sciences 1% 2%
Industrial 2% 27%
Data Centers 3% 3%
Retail 3% 25%
Self Storage 3% 16%
Life sciences 16% 16%
REITs and Listed Real Estate Globally

Source: FTSE EPRA Nareit Global Index.
In 2022, 69 REITs in the U.S. reported to GRESB.
- 55 REITs had reported to GRESB in both 2020 and 2021
- 14 REITs were new to GRESB

REITs were compared against 279 private real estate funds.

On a value-weighted basis, seasoned REITs’ overall ESG score was one point higher than private real estate.

“GRESB posted record results in 2022 with a tremendous showing by U.S. REITs leading by example on energy reduction targets, advanced carbon commitments and advanced climate change analysis,” said GRESB Senior Director Dan Winters.
Top ESG Performers
REITs rated 4 or 5 stars by GRESB

<table>
<thead>
<tr>
<th>REIT</th>
<th>Ticker</th>
<th>Property Sector</th>
<th>GRESB Total Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hudson Pacific</td>
<td>HPP</td>
<td>Office</td>
<td>95.2</td>
</tr>
<tr>
<td>Empire State</td>
<td>ESRT</td>
<td>Office</td>
<td>95.0</td>
</tr>
<tr>
<td>Vornado</td>
<td>VNO</td>
<td>Office</td>
<td>92.9</td>
</tr>
<tr>
<td>Kilroy</td>
<td>KRC</td>
<td>Office</td>
<td>91.9</td>
</tr>
<tr>
<td>Brandywine</td>
<td>BDN</td>
<td>Office</td>
<td>91.6</td>
</tr>
<tr>
<td>Boston Properties</td>
<td>BXP</td>
<td>Office</td>
<td>90.6</td>
</tr>
<tr>
<td>Paramount Group</td>
<td>PGRE</td>
<td>Office</td>
<td>90.4</td>
</tr>
<tr>
<td>JBG SMITH</td>
<td>JBGS</td>
<td>Diversified</td>
<td>90.2</td>
</tr>
<tr>
<td>AvalonBay</td>
<td>AVB</td>
<td>Residential</td>
<td>89.1</td>
</tr>
<tr>
<td>SL Green Realty</td>
<td>SLG</td>
<td>Office</td>
<td>89.0</td>
</tr>
<tr>
<td>Veris Residential</td>
<td>VRE</td>
<td>Residential</td>
<td>88.3</td>
</tr>
<tr>
<td>UDR, Inc.</td>
<td>UDR</td>
<td>Residential</td>
<td>87.1</td>
</tr>
<tr>
<td>Digital Realty</td>
<td>DLR</td>
<td>Data Centers</td>
<td>86.8</td>
</tr>
</tbody>
</table>

Contact

If you have any questions, please contact the team

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