



NCREIF

Document Name: NPI - Property Submission Template – User Guide
Version: V3.0

I. Contents

I. Contents	2
II. INTRODUCTION	2
NCREIF Contacts.....	3
History of the NCREIF Property Indexes	3
III. QUALIFICATION	4
Qualification as a Data Contributing Member	4
NCREIF Property Index Inclusion Criteria.....	4
IV. GETTING STARTED	4
Data Contact.....	4
Timing	5
Initial Property Setup Overview.....	5
V. DATA SUBMISSION	6
A. Submission File Overview	6
1. Templates.....	6
2. Tabs	6
3. Data Types	7
4. List of Values	7
B. Submission File Tabs	8
5. Static Tab	8
6. Status Tab.....	9
7. Activity Tab.....	10
8. Transaction Tab	10
VI. APPENDICES	14
1. NCREIF Property Index Inclusion Criteria	14
2. Expanded Field Definitions	15
3. Transaction Tab - Use Case Examples	23
4. Chart of Accounts.....	24
5. NCREIF Property Level Index Formula.....	28
6. NCREIF Geographic Regions and Divisions	29
7. Definition and Calculation of Annualized Rates of Return	31
8. FAQ.....	34

II. INTRODUCTION

This manual is your guide to the data collection and submission process used to produce and maintain the NCREIF Property Index (NPI) and the NCREIF Property Database (NPD). This manual provides step-by-step instructions on:

- Initial Property Submission
- Quarterly Data Submission
- Property Disposition Submission

You will find within this manual all of the procedures and illustrations of screens used to submit property data. Contact the NCREIF office if you have any questions regarding any portion of the data submission procedure. There is also valuable information in the appendices, including a ‘Frequently Asked Questions’ section.

It is our intent to make this manual compatible with the Real Estate Information Standards (REIS). However, the REIS is an ever-changing document, and inconsistencies may occur. These items will be addressed on an ongoing basis as we periodically revise this data collection manual.

Please take the time to read this manual thoroughly, and always feel free to contact our office with any questions you may have.

NCREIF Contacts

National Council of Real Estate Investment Fiduciaries
200 E. Randolph Street | Suite 5135
Chicago, IL 60601

Phone: 312-819-5890

Fax: 312-819-5891

Website: www.NCREIF.org

History of the NCREIF Property Indexes

The National Council of Real Estate Investment Fiduciaries (NCREIF) is an association of institutional real estate professionals who share a common interest in their industry. Although June 17, 1982, marks the official beginning of NCREIF, the difficult task of uniting a highly competitive industry began in the late 1970s. Following several meetings, 14 investment managers agreed in principle to form a non-profit entity to foster research on the asset class. This led to the development of a database consisting of property operating information which evolved into what has now become the NCREIF Property Index. On January 1, 1995, thirteen years after its inception, NCREIF assumed full responsibility for the Index, its publication and distribution.

III. QUALIFICATION

Qualification as a Data Contributing Member

In order for your company to maintain its status as a Data Contributing Member, you must report quarterly on all properties whether eligible for the **NCREIF Property Index (NPI)**, the general **NCREIF Property Database (NPD)**, or both.

NPI Qualifying Data Contributing Members are investment managers that manage or own institutional real estate that qualifies for inclusion in the NPI, with a market value of at least \$50 million held in a fiduciary, tax-exempt setting.

Non-NPI Qualifying Data Contributing Members are investment managers or other corporations who own or manage institutional real estate with a market value of at least \$50 million in a fiduciary setting but do not currently own or manage properties qualifying for inclusion in the NPI (see Section B for qualifying criteria), but with data qualifying for the NPD (see Appendix A).

As a condition of membership, all members must contribute, upon request, data relating to their entire publicly and privately held institutional real estate investments to the NCREIF Property Database.

NCREIF Property Index Inclusion Criteria

To qualify for inclusion in the NCREIF Property Index, a property is:

- Operating (e.g., not under development) lifecycle stage.
- Acquired, at least in part, on behalf of a tax-exempt investor held in a fiduciary environment.
- In the Apartments, Hotel, Industrial, Office, or Retail property types.
- Reported (accounting basis of reporting) at market (fair) value.
- Valued quarterly (internally or externally) and externally appraised at a minimum of once every three years.

A full list of qualifying property characteristics for inclusion in the NCREIF Property Index and the general NCREIF Property Database can be found in Appendix 1.

IV. GETTING STARTED

Data Contact

You must determine who will be your company's Data Contact. NCREIF strongly recommends that your contact be an individual who is familiar with real estate data, attends the NCREIF conferences, and participates in committee sessions. The individual should have a strong personal computer and technical background with experience in performance measurement. Additionally, the individual should have a close proximity to the compilation of the numbers (e.g., an individual from the accounting or portfolio management department).

It is also strongly recommended that the NCREIF Designated Representative, the Data Contact, and an alternate Backup Data Contact read this manual, discuss the procedures, and devise a timely quarterly data submission plan.

The Data Contact's responsibilities typically include:

- Installing NCREIF software and software updates.

- Entering new property and property transaction data.
- Collecting required property descriptors and quarterly data into an Excel file.
- Correcting errors and responding to reported warnings, where necessary.
- Submitting completed data submission files to the NCREIF website.
- Responding to questions from NCREIF about submitted data.
- Reviewing and internally distributing NCREIF reports

Timing

Approximately four weeks before your data is due, NCREIF will notify you via a submission notification email that the user portal is available to data contributing members.

The completed data should be uploaded to the NCREIF website no later than the 20th day of the month following the end of each reporting quarter.

Names of any companies who have not submitted data or have submitted data after the deadline has passed, resulting in a delay of the release of the NPI, may be published in that quarter's issue of the NCREIF Real Estate Performance Report.

Initial Property Setup Overview

PLEASE NOTE REGARDING INITIAL PROPERTY SUBMISSION:

A full quarter of ownership is not required before submitting a new property to the NCREIF Property, provided that you can submit a valid end-of-quarter market value along with the initial property submission data.

PLEASE NOTE: Two-quarters of data are required before a return is included in the NCREIF Property Index.

Information should be submitted for a new property when:

- A firm investment cost is available and suitable for use as the initial, valid end-of-quarter market value, or:
- An end-of-quarter appraised or fair market value is available after acquisition (via purchase or transfer). This may be after a full or partial quarter of ownership.

The property will then enter the NPI when it consecutively amasses either:

- 1) one partial quarter with a fair value end-of-quarter market value followed by one full quarter of data, or
- 2) two full quarters of data or
- 3) is approved with a 'Full 90-day Quarter Submission' quarter submission entry (i.e., the property was acquired on or shortly before the 1st day of the reporting period).

V. DATA SUBMISSION

A. Submission File Overview

Fields that changed from the prior submission template.

1. Templates

Two files are available in the Portal for this submission

Property Submission Template	The base template that should be populated. It contains the tabs required for submission and the List of Values.
Property Packaged Template	The packaged version provides additional information; Chart of Accounts, Business Rules, and a change log (to identify template updates and changes from version to version)

2. Tabs

The original excel submission template has been redesigned. It now splits the required data into meaningful collections that help you identify the fields that need to be completed more easily.

Submission Template Tabs

1	Static	Infrequently changing data
2	Status	Used to record the current metrics/valuation of the entity
3	Activity	Used to record financial transactions or additional metrics for the entity
4	Transaction	To record detailed transactional information for entities that are affected in this submission (e.g., acquisition, disposition, renumbering, consolidation of properties, split of properties)

Each tab will be explained in further detail in the Submission File Tabs section of this document.

The header in each tab of the submission template is structured the same way.

- Row 1 - Meta Data about the template
- Row 2 - Name of Data Field to be submitted
- Row 3 - Legacy field (prior template field name)
- Row 4 - Description of the field
- Row 5 - Data Type
- Row 6 - Whether data point is compulsory
- Row 7 - Notes
- Row 8 - Example data

	A	B	C	D
1	NCREIF V1	Property	NPI	Static
2	Manager Property ID	Reporting Period	Property Name	Property Type
3	ManagerPropertyID	ReportingPeriod	PropertyName	PropertyType
4	Unique ID used to identify the property	End date of reporting period	Indicates the name of the property used by the Manager	Property type classification Valid NCREIF property types: -Apartments -Office -Industrial -Retail -Hotel -Land * -Self Storage * -Senior Housing * -Single Family Home * -Other * * Not included in NPI
5	ID	Date	Text	List
6	Required	Required	Required	Required
7				For multiple use buildings, s
8	HAT1234	2021-06-30	Ala Moana Center	Retail

3. Data Types

Numbers	Must be supplied as numbers; can also contain commas, decimal points, and minus signs, but cannot include any other characters (e.g., \$).
Text	Alphanumeric values including special characters.
ID	It can be alphanumeric. Used as an identifier for Properties or Portfolio.
Percentages	Percentage values must be supplied as decimals (e.g., 1 represents 100%, 0.8 represents 80%).
Lists	A list of acceptable value entries for the field and ensure that you provide a value consistent with the values required by the NCREIF database.

4. List of Values

The 'List of Values' (LOV) sometimes referred to as a Value List, is provided in the template for reference.

In each submission tab in the template there are columns identifying the name of the data field that is required. When the data type for this column is shown as List (detailed in the 5th row), you should refer to the List of Values provided in the LOV tab and identify the List matching the name of the data field. Submit a value that matches one of these.

The List of Values will help to ensure data consistency.

	A	B	C	D	E
1	LIST OF VALUES				
2	NPI - Property				
3	Field	Property Type	Lifecycle	City	Region
4	Legacy Field	New	Lifecycle	City	Region
5	Tab	Static	Static	Static	Static
6	Constraints	Required	Required	Required	Derived
7	Notes	For multiple use buildings, select the primary property type. * Property types, Land, Other, Self Storage, Senior Housing and Single Family Homes are not included in the NPI	Lifecycle diversification classification - The current life cycle stage for the property.		
8		Apartment	Conversion	Abilene	Mideast
9		Industrial	Development	Akron	Northeast
10		Office	Expansion	Albuquerque	East North Central
11		Retail	Land	Alexandria	West North Central
12		Hotel	Initial Leasing	Allentown	Southeast
13		Other *	Operating	Amarillo	Southwest
14		Land *	Other	Anaheim	Mountain
15		Farm	Pre Leasing	Anchorage	Pacific
16		Timber	Pre-Development	Ann Arbor	
17		Self Storage *	Redevelopment	Antioch	
18		Senior Housing *	Renovation	Arlington	
19		Single Family Home *		Arvada	

- Row 3 - Field – The field that the list is being validated against
- Row 4 - Legacy Field – The previous field name used in the prior submission template
- Row 5 - Tab – Identifies where the value list is used.
- Row 6 - Constraints – Indicates if an entry is ‘Required’ or ‘Not Required’.
 - If the constraint is ‘Derived’, the field will be automatically updated with a value from the list based on related corresponding entries (e.g., Region will be derived from the ‘City’).
Note: Derived fields are not present in the template. Their values are saved for use in reporting.
- Row 7 - Notes – Helpful hints
- Row 8 - Values - The accepted values for each field are listed starting from row 8.

B. Submission File Tabs

5. Static Tab

The ‘Static’ tab is used to record the data that infrequently changes for a property. When you submit a property for the first time to the NCREIF database, you must supply all required fields and an acquisition transaction record.

- After the property enters the NCREIF database, this static information will roll forward each quarter, meaning you do not need to resubmit the same static property data every time.
- If there are no changes, e.g., static data remains the same, and no properties have been acquired, merged, split, renumbered, this tab can be left empty.
- New property entries require an asset transaction record entry. Failure to supply a transaction record will result in the submission being rejected.

New Fields

Currency (LOV)	Reporting currency for the property.
Country (LOV)	Country where the property is located.
Field previously collected from the Fund Submission template; Leasing Statistics tabs	
Net Rentable Area	The total physical rentable square foot area that may be leased or rented to tenants of the building.
Fields used to derive the correct Property Sub-Type. Failure to provide will result in a submission rejection.	
Number of Beds	The number of beds in the student housing property. Required for student housing properties.
Tenant Type (LOV)	The type of apartment or office tenant: <i>(Required for Apartment and Office)</i> - Apartment: Student-Off Campus or Student-On Campus - Office: Medical-On Campus or Medical-Off Campus
Design (LOV)	The design or specialization of a hotel or industrial property <i>(Required for Industrial and Hotel)</i> .

Leasing Quality (LOV)	The quality of the retail tenant: <i>(Required for Retail)</i> . <ul style="list-style-type: none"> - Retail - Mall - High-End with Grocer - Retail - Mall - High-End without Grocer - Retail - Mall - Non-High-End
Lease Rent Structure (LOV)	The way that rent is calculated and charged if not by leased area <i>(for example, by unit, by bed, etc.) (Required for Senior Housing)</i> .
Valid values to align relationships and data between Fund and Property	
NCREIF Portfolio Submitted?	Flag to identify if the owning portfolio is submitted to NCREIF.

6. Status Tab

The 'Status' tab contains the data fields required to record the valuation and performance of the property.

New fields

Currency (LOV)	Reporting currency for the property.
Begin Debt Book Value	Outstanding principal balance at the end of the prior quarter. This amount equals the outstanding principal balance at the beginning of the quarter.
Begin Debt Market Value	The market value of the outstanding principal balance of all debt outstanding on the property at the end of the prior quarter.
Fields previously collected from the Fund Submission template Leasing tab	
Leased Square Footage	Percentage of the property's net rentable square footage or rentable units that is under lease obligation at the end of the quarter. Irrelevant of occupancy status and solely based on if the square footage is leased. This is not physical or average occupancy

7. Activity Tab

The 'Activity' tab contains property data for financial metrics and measures. The 'Chart of Accounts' tab in the packaged template provides the list of expected accounts (type field), and each listed account must be supplied for each property, even if the value is 0.

New fields

Currency (LOV)	Reporting currency for the property.
Type (LOV)	The name of the accounts that must be provided for each property. Refer to the Chart of Accounts tab in the packaged template for the list of valid Types.
Current Value	Amount of activity in the period.
Period Duration	Duration of period in months.

8. Transaction Tab

The Transactions tab is new for the submissions process. It has been added to reduce the number of queries and issues that have historically been raised through the varying changes to properties, help prevent duplicate property entry submissions and be a key component that links a property to a fund.

A property transaction entry is used for property acquisitions, dispositions (True Sales), or any change to a property's ownership and its impact on the database.

A transaction tab entry is required for:

1. Acquisitions - This is the first submission for the property (typically newly acquired).
2. True Sale – The property is sold to an external organization.
3. Split into Multiple Properties – The property has been broken into 2 or more new properties for submission to the database.
4. Consolidation of Properties – Consolidations record that a prior property is now part of either a new or existing property. All properties will exist in prior periods.
5. Renumbered/Reclassified – You have changed the identifier (Manager Property ID) that you use to reference the property.
6. Transfer – The transfer of ownership of a property between funds and portfolios that you hold and are submitting.
7. No Longer Qualifies, Owner Exited Database, Property Destroyed, Returned to Lender – The property is removed from the index in the quarter it takes place (historical data remains).

Each of the above is identified by the 'Transaction Type', which is explained further below.

Required Fields

Default fields required for all 'Transaction Types'.

Manager Property ID	Provide the identifier you use for the property.
---------------------	--

Reporting Period	Date for the reporting period in yyyy-mm-dd format.
NCREIF Portfolio ID	Enter the Fund Portfolio ID if the property has fund ownership. The links a Property to a submitted Fund.
Transaction Date	Date the transaction completed.
Full 90-Day Quarter Submission	Trigger to indicate that this property includes a full quarter of data, fulfilling the requirement to be submitted in the NPI.
Transacting Member	This will be your organization or the organization you transact with (typically the organization you are acquiring from or disposing to). Provided for informational purposes.
Transaction Type (LOV)	A valid transaction must be included, and this must match one of the values provided in the Transaction Type value list. Previously known as Sales Code.
Ownership percentage	The percentage of legal ownership. The percentage is represented as a decimal value. E.g. 1=100% (following an Acquisition) 0=0% (following a True Sale).
Gross Price	The gross sales price paid/received for a property sale before deduction for selling costs and expenses.
Net Price	Gross Price net of any selling costs and expenses, and before debt.
Transaction Cost	Record the costs of Acquisition or Sale.

Non-Required Fields

Non-default field required for an internal sale or if there is a change in Manager.

Prior Manager Property ID	Manager Property ID that was used prior to it being changed/ renumbered e.g. Manager Property ID of the split property; or Manager Property IDs that have been consolidated/merged.
---------------------------	---

- Partial quarter data is required to be reported for all sold 'True Sale' properties up to the date of disposition.
- If the transaction is a partial sale and not a full disposition, then the net partial sale value should be entered in your quarterly activity, 'Partial Sales', and the remaining market value should be adjusted to reflect the amount of the partial sale.
- If the property is NPI qualified, the property is removed from the NPI the next quarter following a sale. Still, all historical information regarding the investment remains in the NPI and/or NPD.

Transaction Types

a. Acquisition

Each new property is required to have an acquisition transaction. This includes your first submission and for any new property acquired.

- The default fields listed above should be completed.
- The transacting Member will be recorded as the organization you are buying from.
- The ownership percentage is set to 1.
- Sales figures are supplied.

b. True Sale

Full sale of a property requires a transaction entry. Partial quarter financial data up to the transaction date is required.

- The default fields should be completed; it is expected that there is an accompanying acquisition record submitted.
- The transacting Member will be recorded as the organization you are selling to.
- Ownership percentage is set to 0.
- Sales figures are supplied.

c. Split into Multiple Properties

A “split into multiple properties” transaction is used to record the creation of new properties from a single entity (e.g., partial sale).

- Prior Manager Property ID will contain the identifier of the original property that is being split.
- Any transacting figures should be recorded.
- Your organization is the Transacting Member.

The market value of the split and remaining properties should equal the total market value of the original property (plus any current quarter activity).

d. Consolidation/Merging of Properties

A consolidation transaction is used to record the merging of properties. For each property that is being merged, there will be a record recorded in the transaction tab. The transactions are used to identify which properties have been merged and what the new identifiers will be.

- Prior Manager Property ID will contain the identifier of the property that one or more properties are being merged into.
- Any transacting figures should be recorded.
- Your organization is the Transacting Member.

The market value of the consolidated property should at least equal the total of the merged properties (plus any current quarter activity).

e. Renumbered

You may have been required to change the identifiers you use for your properties. When this occurs, you are required to provide a renumbering transaction for each property affected.

- Fill in the default fields.
- Manager Property ID will reflect the new identifier for your property.
- Prior Manager Property ID will hold the identifier previously used in submissions.
- Your organization is the Transacting Member.

f. Transfer

A transfer is used to record the transfer of ownership of a property between funds and portfolios that you hold and are submitting.

- The default fields should be completed; it is expected that there is an accompanying acquisition record submitted.
- The Transacting Member will be recorded as your organization.
- Ownership percentage is set to 0.
- Sales figures are supplied.

g. No Longer Qualifies, Owner Exited Database, Property Destroyed, Returned to Lender

The transaction tab will be used to capture the transaction date and transaction type for the property, which is used for analysis purposes. Partial quarter financial data is entered up to the transaction date, and historical data remains in the database.

VI. APPENDICES

1. NCREIF Property Index Inclusion Criteria

All property submissions are included in the NCREIF Property Database (NPD) and used for research and analysis but may not be eligible for inclusion in the NCREIF Property Index.

Properties that do not qualify to enter the NCREIF Property Index are added to the Property Database and require the same quarterly data updates as NPI-qualifying properties.

- **NPI - NCREIF Property Index** - NPI Qualifying Data Contributing Members are investment managers that manage or own institutional real estate that qualifies for inclusion in the NPI, with a market value of at least \$50 million held in a fiduciary, tax-exempt setting
- **NPD - NCREIF Property Database** - Non-NPI Qualifying Data Contributing Members are investment managers or other corporations who own or manage institutional real estate with a market value of at least \$50 million in a fiduciary setting but do not currently own or manage properties qualifying for inclusion in the NPI (see next page for qualifying criteria), but with data submitted to the NPD.

The FOUNDATION Portal submission workflow, Data Quality Services (DQS) process will qualify property inclusion to the NCREIF Property Index. Properties that meet all of the following criteria will be flagged for inclusion in the index calculation:

Included in the current periods index if

1. **Two-quarter submissions** {a partial quarter - Is a property with a transaction date greater than the first day of the quarter}.
 - a. Property submission must include either.
 1. The 'Full 90-Day Quarter Submission' field is set to 1 (true) in the current transaction record.
 2. Property in the current period does not have a True Sale transaction.
The property was acquired in the prior period (Acquisition transaction) and had a valuation value > 0
 3. Two full quarters of data.
Property in the current period does not have a True Sale transaction.
There is a prior period submission for the same property, which was not acquired in the prior period.
2. **Lifecycle**
Property Lifecycle = 'Operating.'
3. **Investor Type**
Investor Type = 'Non-Taxable' or 'Mixed'.
4. **Property Type**
Property Type contains a value of; 'Apartment', 'Hotel', 'Industrial', 'Office', or 'Retail'.
5. **Property Accounting Basis**
Accounting Basis of Reporting = 'Market and REIS Compliant' or 'Market and not REIS Compliant'.

If the above criteria are not met, the property is excluded from the index.

2. Expanded Field Definitions

Field	Definition
10 Year Average Rent Growth	The average annual compound rate of growth projected for market rents over the next 10 years.
3 Year Average Rent Growth	The average annual compound rate of growth projected for market rents over the next 3 years.
Accounting Basis of Reporting	The current accounting basis for the property: 1. Cost: The usual accounting basis before a property is appraised for the first time (i.e., while it is raw land or under construction) or if you are not marking assets to market. 2. Market and REIS Compliant: The usual accounting basis once a property has been appraised (i.e., given a "market value") or if you are fully in compliance with REIS. 3. Market and not REIS Compliant: The accounting basis if you are using market (fair) value accounting but are not in compliance with all provisions of the Real Estate Information Standards.
Acquisition Date	The date an asset is purchased and used to determine the asset's cost basis and holding period.
Address	Full street address of the property.
Admin Expense	Office expenses, licenses, legal, travel, audit. Excludes amounts allocated to repairs and maintenance (MaintenanceExpense), marketing and advertising (MarketingExpense), or property management fees (ManagementFeeExpense), which are separate expense fields, as noted below.
Appraisal Type	Property appraisal type for the quarter. -External - an appraisal by an independent appraiser -Internal - or in-house appraisal -None - no appraisal has been performed.
Base Rent Income	Income derived strictly from leased space, i.e., not including percentage rents.
Begin Debt Book Value	Outstanding principal balance at the end of the prior quarter. This amount equals the outstanding principal balance at the beginning of the quarter.
Begin Debt Market Value	The market value of the outstanding principal balance of all debt outstanding on the property at the end of the prior quarter.
Begin Market Value	The appraised market value excluding the impact of any mortgage financing at the beginning of the quarter (The current appraised market value of the property as determined by either an internal or external appraisal as if it were being sold without existing financing.) This field should equal the ending market value (EndMarketValue) from the previous quarter unless there has been a revision in the previous period market value this quarter. For more information on market value, see Appendix 6.
CapEx Building Capital Expansion	Tangible improvements to the property that result in an expansion of the property's leaseable area.

Field	Definition
CapEx Building Capital Improvement	Tangible improvements to the property that cannot be attributed to tenant space. Examples include roofs, parking lots, elevators, lobbies, HVAC systems, and security systems.
CapEx Initial Acquisition Cost	Costs related to acquisition or development of the property: hard and soft costs, legal and other professional fees, interest and expense carry until Certificate of Occupancy date that has not been included in the initial acquisition cost (InitialCost) field
CapEx Lease Commission	Leasing commissions paid for the procurement of tenants after the Certificate of Occupancy date for the property.
CapEx Other Capital Improvement	All other capital improvements (having a useful life of greater than one year) which do not fit into any other capital improvements category.
CapEx Tenant Improvement	Costs to construct (or reconstruct) space for tenant occupancy after issuing the Certificate of Occupancy. Demolition costs (even when a tenant is not under lease) should also be included in this category. Costs included here should be tangible and should not include, for example, buy-outs, free rent, or moving costs.
CapEx Total	<p>The reported total of all expenditures that are capitalized to the property (as opposed to expensed) in accordance with the policy of the fund or investment. If tenant improvements and/or leasing commissions are capitalized, these should be included.</p> <p>Such costs include those items which become part of the land (trees, irrigation, etc.). Periodic cultural care costs that are capitalized (as inventory or deferred assets) do not affect the property's market value and should not be reported here. (See fields beginning with CapEx for the breakdown of capital improvements into six component fields. The numbers entered into those six fields should sum to the figure entered here.)</p>
City	City where the property is located
Country	Country where the property is located
Currency	Reporting currency for the property
Current Value	Amount of activity in period
Design	The design or specialization of a hotel or industrial property
Discount Rate	The rate used to discount all cash flows to calculate the market value of the property.
Effective Property Share	<p>Represents the sharing percentage of JV income and appreciation booked in the income statement or the statement of equity (re-allocation of equity). The Effective Ownership Share % will likely change from quarter to quarter based on investment performance and structure in place.</p> <p>This sharing % is different from the fund's legal or contract ownership sharing %, usually based on capital funding requirements or other criteria.</p> <p>Applicable to both the balance sheet 'as of quarter' and the income statement' activity during the quarter'</p>

Field	Definition
End Debt Book Value	Outstanding principal balance at the end of the quarter. This amount is the sum of the principal balances of all loans against the property at quarter-end.
End Debt Market Value	The market value of the outstanding principal balance of all debt outstanding on the property at the end of the quarter.
End Market Value	<p>The appraised market value excluding the impact of any mortgage financing at the end of the quarter. (i.e., the property's current appraised market value as determined by either an internal or external appraisal as if it were sold without existing financing.)</p> <p>Please note that this value is not simply market value minus the current loan value. Excluding the impact of mortgage financing does not mean ignore any debt on the property. It means to ignore the impact of above or below market debt on property value.</p> <p>This market value assumes that the property is sold "as if" it did not have a loan - or stated differently as if the existing loan was at the current market interest rate. For more information on market value, see Appendix 6</p>
Full 90-Day quarter Submission	Trigger to indicate this transaction entry is a full 90-days of data and fulfills the requirement to be submitted in the NPI
Going-in Cap Rate	The cap rate that, if applied to the estimated first-year NOI for the property (based on actual occupancy, contract rents, etc.), results in the estimated market value
Gross Price	The gross sales price paid/received for a property sale before deduction for selling costs and expenses.
Gross Square Feet	Gross square feet for the entire property.
Ground Rent	Ground rent expense for a ground lease. Ground rent is considered a part of NOI but a separate line item from the Expense fields.
Insurance Expense	Premiums paid to insure the property
Interest Expense	The accrual basis interest expense for the quarter rather than interest paid. The amount reported should be the total accrued interest expense for all outstanding debt on the property.
Investor Type - Property	<p>The investor type for the property:</p> <ul style="list-style-type: none"> -Taxable-Property is held exclusively for taxable investors. -Non-Taxable-Property is held exclusively for non-taxable investors. -Mixed-Property is held for a mix of non-taxable and taxable investors. -Public REIT-Property is held by a Public REIT
Joint Venture	Is the property ownership via a joint venture agreement
Last Renovated Year	The four-digit year (e.g., 2007) marking the completion of the last major upgrade, retrofit, renovation.
Lease Rent Structure	The way rent is calculated and charged if not by leased area (for example, by unit, by bed, etc.)
Leased Square Footage	<p>Percentage of the property's net rentable square footage or rentable units under lease obligation at the end of the quarter. Irrelevant of occupancy status and solely based on if the square footage is leased.</p> <p>This is not physical or average occupancy</p>

Field	Definition
Leasing Quality	The quality of the retail tenant
Legal Property Share	Contractual ownership share of a property. Represented as a percentage of assets owned after the transaction. Applicable to both the balance sheet 'as of quarter' and the income statement' activity during the quarter'
Lifecycle	The current lifecycle stage for the property: <ul style="list-style-type: none"> -Conversion: Changing from one property type to another property type -Development: Beginning of site and improvement construction through completion -Initial Leasing: Completed construction and <60% occupied and < 1-year operations -Operating: Completed construction with >= 60% occupied status or >= 1 year operations -Pre-Development: In preparation of development (obtaining titles and rights) up to the beginning of site and improvement construction -Redevelopment: Undergoing substantial expansion or re-tenanting, rehabilitation, or remodeling.
Maintenance Expense	Materials and labor, maintenance salaries, cleaning and janitorial, engineering costs.
Management Fee Expense	Fees paid to an external property manager, along with uncapitalized leasing agent fees.
Manager Property ID	Unique ID used to identify the property
Market Rent	Total market rent under existing leases for year one
Marketing Expense	Marketing costs, including salaries, advertising, and promotions.
NCREIF Portfolio ID	Portfolio - If the property belongs to a Fund/Fund ownership
NCREIF Portfolio Submitted?	Flag to determine if the owning portfolio is submitted to NCREIF
Net Operating Income	<p>The net operating income (NOI) reported should be consistent with the results of the property's operations. Most classifications of income and expense and ground rent used to account for properties' operations are universal (e.g., rental income, property tax expense, etc.). Where alternative accounting treatments exist, reporting to NCREIF should be consistent with the accounting practices of your fund (upon which the audit report is based). Properties owned as joint ventures should report as if owned at a 100% basis.</p> <p>Note: 1) Appraisal costs and fund-level asset management fees charged by members are excluded from this calculation. 2) Include property management fees. All income and expense items that are related to individual properties are included in the data submitted.</p> <p>Whatever policy is followed internally regarding what is expensed should be reflected in the data submitted to NCREIF.</p> <p>For example, if leasing commissions are capitalized to the property investment account and no provision is made to expense or amortize these costs, no deductions for these costs are to be shown in the data. If these costs are capitalized and amortized over some useful life or expensed as a period cost, the expense recorded should be deducted in the applicable period.</p>

Field	Definition
Net Price	Gross Price net of any selling costs and expenses, and before debt.
Net Rentable Area	The square foot area that may be leased or rented to tenants
New Loan Proceed	Proceeds from new borrowing or additional borrowings under existing loan agreements.
Number of Beds	The number of beds in the student housing property
Number Of Buildings	The number of buildings included for this single Property ID
Number Of Floors	The number of floors within the property. For multi-building properties, use the highest number of floors.
Number of Properties	The number of properties, assets or entities reported for this single Property ID
Number of Tenants	Total number of tenants
Number Of Units	The number of units included for this single Property ID
Other Expense	All other expenses accrued during the quarter going into the NOI (NetOperatingIncome) calculation that is not otherwise categorized.
Other Income	All other income going into the NOI (NetOperatingIncome) calculation that is not otherwise categorized.
Other Principal Payment	Early principal payments and any other principal payments not included in the scheduled principal payment column. Balloon payments, whether scheduled or not, are included in the other principal payments.
Ownership Percentage	Percentage of Asset owned after the transaction.
Partial Sales	<p>Partial sales may include items such as the sale of an easement, a parcel of land, or a single building in an industrial park. Indicate in this column the consideration received, less any selling expenses incurred.</p> <p>Remember that a partial sale of a property usually affects the market value of the remaining real estate. If so, the new adjusted market value should be shown. Also, if the partial sale affects the property's size (square footage), remember to change this value in the leaseable area (LeaseArea) and square feet (GrossSquareFeet) fields.</p> <p>Example: If a large warehouse property with a reported market value of \$9,000,000 is subdivided into three contiguous bays and one is sold for \$3,000,000, report the \$3,000,000 partial sale and report the new market value of the property (\$6,000,000, unless and until an external valuation derives a different value for the property).</p>
Percentage Rent Income	Income received as a percentage of the gross or net income to a tenant. Most often applied in retail property leases.
Period Duration	Duration of period in months
Principal Payment Scheduled	Regular (scheduled) loan principal amortization payments as paid in accordance with the loan documents.
Prior Manager Property ID	Manager Property ID of the split property or Manager Property ID's that have been consolidated, merged
Property Name	Indicates the name of the property used by the Manager

Field	Definition
Property Type	<p>Property types collected and included in the NCREIF Property Index and the general NCREIF Property Database:</p> <ul style="list-style-type: none"> Apartments Hotel Industrial Office Retail <p>Note: If a building has multiple uses, select as the property type the building's primary use. For example, if 15% is used for retail space yet, most space is used as office space, select 'Office' as the property type.</p> <p>Other Property Types included in the NPD but not the NPI:</p> <ul style="list-style-type: none"> Self-Storage: Self-storage units. Single and multi-story, basic or climate-controlled. Senior Living: Specialized housing designed specifically to accommodate the needs of senior citizens but whose function is not primarily healthcare. Note: Senior Living facilities without medical care should be classified in the Apartments (A) property type. Other: Any other property type not specified in the property type list. Enter the name of the property type in the OtherType field. Land: Undeveloped land parcels.
Property Sub-Type	<p>Note all subtypes in the list below are derived based on other facts about the property. No subtypes will be selectable.</p> <p>For example, 'Office - High-Rise' is any Office property with more than 25 floors. You need not specify a high-rise since you will be filling in the number of floors later. NCREIF will assign the subtype when the property is loaded into the Database.</p> <p>Property Sub-Types are derived by the Tenant Type, Design, Leasing Quality and Lease Rent Structure entries made in the 'Static' tab for each property submission.</p> <p>The information you provide will enable the system to derive the correct Property Sub-type. Failure to provide all required values will result in your submission being rejected.</p> <p><u>Property Sub-Types:</u></p> <ul style="list-style-type: none"> Apartment – Sub-Types: <ul style="list-style-type: none"> -Student: Usage = Student on Campus OR Student off Campus -Garden: Usage = Not Student AND Design = Garden -Low Rise: Usage = Not Student AND Design = Not Garden AND # Floors < 5 -Mid-Rise: Usage = Not Student AND Design = Not Garden AND # Floors = 5 to 10 -High Rise: Usage = Not Student AND Design = Not Garden AND # Floors > 10 Hotel – Sub-Types: <ul style="list-style-type: none"> -Full Service: Usage = Luxury OR Upper Upscale OR Upscale OR Upper Midscale OR Independent Hotels with F&B Limited

Field	Definition
	<p>-Service: Usage = Midscale OR Economy OR Independent Hotels without F&B</p> <p>Industrial – Sub-Types:</p> <p>-Manufacturing: Design = Manufacturing</p> <p>-Warehouse: Design = General Purpose Warehouse OR Distribution Warehouse</p> <p>-Flex: Design = General Purpose Flex OR R&D OR Showroom</p> <p>-Specialized: Design = Refrigerated Storage OR Air Cargo OR Truck Terminal OR Mixed OR Other</p> <p>Office – Sub-Types:</p> <p>-Medical: Usage = Medical</p> <p>-CBD: Usage = Not Medical AND (zip code lookup)</p> <p>-Urban: Usage = Not Medical AND (zip code lookup)</p> <p>-Secondary Business District: Usage = Not Medical AND (zip code lookup)</p> <p>-Suburban: Usage = Not Medical AND (zip code lookup)</p> <p>Retail – Sub-Types:</p> <p>-Street: Design = Street</p> <p>-Strip: Design = Strip</p> <p>-Mall: Design = Mall</p> <p>Seniors Housing – Sub-Types:</p> <p>-Independent Living: Design = Majority Assisted Living</p> <p>-Assisted Living: Design = Majority Assisted Living</p> <p>-Continuing Care: Design = Continuing Care Retirement Community</p> <p>-Skilled Nursing: Design = Majority Nursing Care</p> <p>Other – Sub-Types:</p> <p>-Lab: Design = Lab Buildings; Data Center: Design = Data Center</p> <p>-Operating Land: Design = Operating Land</p> <p>-Entertainment: Design = Entertainment</p> <p>-Manufactured Housing: Design = Manufactured Housing</p> <p>-Parking: Design = Parking; Other: Other improvement type not already specified</p> <p>Self-Storage – No Sub-Types</p> <p>Land – No Sub-Types</p>
Reimbursement Income	Any payment made by tenants to reimburse the landlord for expenses.
Reporting Period	End date of the reporting period
Tax Expense	Real estate taxes, personal property taxes.
Tenant Type	<p>The type of apartment or office tenant:</p> <p>-Apartment: Student-Off Campus or Student-On Campus</p> <p>-Office: Medical-On Campus or Medical-Off Campus</p>
Terminal Cap Rate	The cap rate that, if applied to the NOI one year after the sale of the property results in the projected resale price.
Transacting Member	<p>Provide the member name for internal sales, splits and merges.</p> <p>For an external sale or acquisition, provide the company name of the buyer or seller</p>
Transaction Cost	Selling and acquisitions costs - Prorations closing statement, money to buyer and seller and prorated costs

Field	Definition
Transaction Date	Date of purchase/sale transaction for disposition. For acquisition, indicate the date that the original investment was made by the purchasing entity
Transaction Type	<p>Type of transaction:</p> <ul style="list-style-type: none"> -Acquisition: The acquisition of a new property and the first submission entry into the database. -Consolidation of properties: Property reporting is consolidated into the operations of another new or existing property. -No Longer Qualifies: Property does not qualify for entry into the NPI or Database. This code is typically only used for recent properties entered that are found not to be eligible properties or were incorrectly entered as properties (e.g., mortgages, etc.). -Owner exited database: Member is no longer a data contributor -Property Destroyed: Property has been destroyed and no longer operates. -Renumbered/Reclassified: The property identifier (Manager Property ID) changed. -Returned to Lender: Property has been returned to the lending institution. -Split into Multiple Properties: Property reporting is split out into two or more other properties. -Transfer: The transfer of property ownership between funds and portfolios that you hold and are submitting. -True Sale: Full sale of a property. If chosen, GrossSalesPrice and NetSalesPrice should also be entered. Note that partial quarter financial data up to the date of sale is required for true sales.
Type	Type of activity (i.e., Account)
Utility Expense	All utility costs, including water, sewer, power, fuel oil, etc.
Year Built	The four-digit year (e.g., 2004), a property was completed.
Zip Code	The property's zip code

3. Transaction Tab - Use Case Examples



NPI Property
Transaction Use Cas

4. Chart of Accounts

Item	CHART OF ACCOUNTS	
1.	Net Operating Income =	2. Operating Income - 3. Operating Expense - 4. Ground Rent
2.	Operating Income	Base Rent Income Contingent Income Expense Reimbursement Other Operating Income
2a	Base Rent Income	Contract Rent Income Escalated Lease Income
2b	Contingent Income	Percentage Rent Income
2c	Expense Reimbursement	Common Area Reimbursement Other Expense Reimbursement Tax Reimbursement Utility Reimbursement
2d	Other Operating Income	Application Fee Income Beverage Income Cable Service Income Clubhouse Rent Income Forfeited Security Deposit Income Garage Income Laundry Income Miscellaneous Operating Income Nonsufficient Funds Fee Income Other Rent Income Parking Income Sales Income Storage Income Telephone Call Income Telephone Commission Income Temporary Tenant Income Vending Income
3.	Operating Expense	General Administrative Expense Management Fee Expense Marketing Expense Other Operating Expense Payroll And Benefit Expense Professional Fees Expense Property Insurance Expense Real Estate Tax Expense Repairs And Maintenance Expense

Item		CHART OF ACCOUNTS
		Utility Expense
3a	General Administrative Expense	Administrative Fees
		Ad Valorem Tax Expense
		Alarm System Expense
		Answering Service Expense
		Auto Repairs Expense
		Bank Charges Expense
		Brochures Expense
		Business License Expense
		Cable Expense
		Commissions Expense
		Computer Repairs Expense
		Courtesy Patrols Expense
		Credit Check Expense
		Education Expense
		Entertainment Expense
		Eviction Expense
		Freight And Shipping Expense
		Leased Equipment Expense
		Leasing Office Expense
		Licenses Expense
		Safety Expense
		Mileage Expense
		Model Apartment Expense
		Office Supply Expense
		Other Administrative Expense
		Permit Expense
		Personal Property Tax Expense
		Postage Expense
		Printing Expense
		Security Expense
		Subscriptions And Dues Expense
		Telephone Expense
		Travel Expense
		Uniform Service Expense
		Utility Vehicle Expense
		Vehicle Lease Expense
3b	Marketing Expense	Advertising Expense
		Apartment Guide Expense
		Banners Expense
		Marketing Expense

Item	CHART OF ACCOUNTS	
		Media Commission Expense
		Newspaper Expense
		Other Marketing Expense
		Promotion Expense
		Signage Expense
		Yellow Pages Expense
		3c)Payroll And Benefit Expense =
3c	Payroll And Benefit Expense	Retirement Plan Expense
		Bonus Expense
		Contract Work Expense
		Employee Benefit Expense
		Employee Insurance Expense
		FICA Expense
		Health Benefits Expense
		Manager Salary Expense
		Other Payroll And Benefit Expense
		Payroll Tax Expense
		Salary Expense
		Temporary Help Expense
		Unemployment Insurance Expense
		Worker Compensation Expense
		3d) Professional Fee Expense =
3d	Professional Fee Expense	Accounting Fees Expense
		Bookkeeping Fees Expense
		Legal Fees Expense
		Other Professional Fee Expense
		3e)Property Insurance Expense =
3e	Property Insurance Expense	Hazard Liability Expense
		Other Property Insurance Expense
		Flood Insurance Expense
3f	Repairs And Maintenance Expense	Common Area Expense
		Electrical System Expense
		Elevator Expense
		Exterminating Service Expense
		Floor Covering Expense
		Janitorial Expense
		HVAC Expense
		Landscaping Exterior Expense
		Landscaping Interior Expense
		Lock Key Expense
		Maid Service Expense
		Make Ready Expense

Item	CHART OF ACCOUNTS	
		Mechanical Expense
		Other Repairs And Maintenance Expense
		Painting Expense
		Parking Lot Expense
		Pest Control Expense
		Plumbing Expense
		Rubbish Removal Expense
		Scavenger Expense
		Snow Removal Expense
		Swimming Pool Expense
		Turnover Expense
3g	Utility Expense	Electricity Expense
		Gas Expense
		Other Utility Expense
		Sewer Expense
		Trash Removal Expense
		Water Expense
4.	Ground Rent	

5. NCREIF Property Level Index Formula

Income Return:

Measures the portion of total return attributable to each property's net operating income. It is computed by dividing Net Operating Income by the average daily investment for the quarter.

$$\frac{\text{Net Operating Income}}{\text{Begin Market Value} + \frac{1}{2} (\text{CapEx Total} - \text{Partial Sales} + \text{Partial Purchases}) - \frac{1}{3}(\text{Net Operating Income})}$$

Capital Appreciation Return:

Measures the change in market value adjusted for any capital improvements or partial sales or the quarter.

$$\frac{(\text{End Market Value} - \text{Begin Market Value}) + \text{Partial Sales} - \text{CapEx Total} - \text{Partial Purchases}}{\text{Begin Market Value} + \frac{1}{2} (\text{CapEx Total} - \text{Partial Sales} + \text{Partial Purchases}) - \frac{1}{3}(\text{Net Operating Income})}$$

Total Return:

Includes appreciation (or depreciation), realized capital gain (or loss), and income. It is computed by adding the Income return and Capital Appreciation return on a quarterly basis.

$$\text{Total Return} = \text{Income Return} + \text{Capital Appreciation Return}$$

6. NCREIF Geographic Regions and Divisions

EAST REGION		MIDWEST REGION	
Northeast Division	Mideast Division	East North Central Division	West North Central Division
Northeast	Delaware	Illinois	Iowa
Connecticut	Kentucky	Indiana	Kansas
Maine	Maryland	Michigan	Minnesota
Massachusetts	North Carolina	Ohio	Missouri
New Hampshire	South Carolina	Wisconsin	Nebraska
New Jersey	Virginia		North Dakota
New York	Washington DC		
Pennsylvania	West Virginia		
Rhode			
Island			
Vermont			
SOUTH REGION		WEST REGION	

Southeast Division	Southwest Division	Mountain Division	Pacific Division
Alabama	Arkansas	Arizona	Alaska
Florida	Louisiana	Colorado	California
Georgia	Oklahoma	Idaho	Hawaii
Mississippi	Texas	Montana	Oregon
Tennessee		Nevada	Washington
		New Mexico	
		Utah	
		Wyoming	

7. Definition and Calculation of Annualized Rates of Return

The annualized rate of return is sometimes technically called the geometric annual rate of return. It is comparable to the rate quoted by a savings and loan. For example, if you were to invest \$1.00 at 5% per year compounded annually, you would have \$1.05 at the end of the year. The ending value of your investment would be 1.05 times its value at the beginning of the year.

If you were to leave the full amount (original investment plus interest) invested for another year, it would be worth 1.05 times as much at the end of the second year. You would have $1.05 \times \$1.05 = \1.1025 at the end of two years. If you would subtract your original \$1.00 you would find that you had earned \$.1025 or 10.25%. Your total rate of return for the two-year period is 10.25%. Your annualized rate of return would still be 5.0% (the rate at which you invested your \$1.00).

In the example above, we knew the annual compound rate of return and found the rate of return for two years. More commonly, we know a two-year rate of return and need to find the annualized rate, the equivalent of a compound rate. For instance, we might know that we had in the bank \$1.1025 from an investment of \$1.00 exactly two years ago. The ending market value of \$1.1025 is 1.1025 times the original value of \$1.00. The figure 1.1025 is called the return relative. The total two-year rate of return of 10.25% is calculated from the return relative as follows:

$$100(1.1025 - 1) = 10.25\%$$

The annualized rate of 5% can be calculated by taking the square root of the two-year return relative in this manner:

$$\begin{aligned} 1.1025^{.5} &= 1.05 \\ 100(1.05 - 1) &= 5\% \end{aligned}$$

The idea of an annualized rate of return for a portfolio of securities is a little more complex than that for a fixed-income investment because of the uneven earnings pattern. The annualized rate of return is calculated from four or more quarterly rates of return. Portfolio A is a hypothetical portfolio with the following rates of return as of September 30, 2021:

PORTFOLIO A	2019	2020	2021
1st Quarter	-3.0%	20.0%	10.0%
2nd Quarter	(8.0)	15.0	2.5
3rd Quarter	(25.0)	(10.0)	2.0
4th Quarter	9.0	5.0	0.0

The first step in calculating an annualized rate of return is to find the return relative of each quarterly rate. The return relatives for the third quarter of 2021 and the first quarter of 2019 are calculated from the rates of 2.0% and -3.0% respectively, below:

$$\begin{aligned} 1 + (2.0/100) &= 1 + .020 = 1.020 \\ 1 + (-3.0/100) &= 1 - .030 = 0.970 \end{aligned}$$

The return relatives for January 2002 through September 2021 are:

PORTFOLIO A	2019	2020	2021
1st Quarter	0.970%	1.200%	1.100%
2nd Quarter	0.920	15.0	2.5
3rd Quarter	0.750	(10.0)	2.0
4th Quarter	1.090	5.0	0.0

To find the annualized rate of return for the year ending September 30, 2021, use the last four quarterly return relatives as follows:

- 1) $1.050 \times 1.100 \times 1.025 \times 1.020 = 1.208$
- 2) $100(1.208 - 1) = 20.8\%$

The portfolio earned 20.8% during the year ending September 30, 2021.

To find the annualized rate of return for the last two years requires an additional step. First, find the two-year return relative:

- 1) $1.090 \times 1.200 \times 1.150 \times 0.900 \times 1.050 \times 1.100 \times 1.025 \times 1.020 = 1.635$

The total two-year return is $100(1.635 - 1) = 63.5\%$. The annualized rate of return is calculated from the square root of the two-year return relative:

- 2) $1.635^{1/2} = 1.279$
- 3) $100(1.279 - 1) = 27.9\%$

The annualized rate of return of 27.9% tells you that you would have been equally well off at the end of the two years to have had your funds in the portfolio with the uneven return earned in the example given above, or in a fund with a return of 27.95% in each of two years.

1. Compounding Income and Appreciation Components of Total Returns

Linking Component Returns Beyond One Quarter

Institutional investors often require that total performance results from real estate be separated into income and appreciation components. Component return information is helpful in understanding the source of performance and this is particularly important with real estate because real estate is relatively less liquid than alternative asset classes. A majority of institutional investment managers and consultants follow an industry practice of calculating time-weighted returns on a quarterly basis and subsequently linking the quarterly returns over longer time periods using a geometric mean linking methodology.

An inherent limitation of component return presentation in conjunction with the current industry practice of linking quarterly returns is that, for time periods beyond one quarter, the sum of the cumulative compounded income return plus the cumulative compounded appreciation return will not equal the cumulative compounded total return. This article examines the problem of compounding component returns beyond one quarter.

2. The Mathematics

The compounding problem may not be intuitive, although it can be described mathematically as shown by the two period geometric mean return linking formula below:

$$(1+I_1+A_1) \times (1+I_2+A_2) = (1+I_1) \times (1+I_2) \times (1+A_1) \times (1+A_2)$$

Where I = income return (decimal) and A = appreciation return (decimal)

The left side of the equation represents the compounding of total investment return over two periods while the right side separately compounds the income and appreciation returns and adds the results together. Multiplying out the terms on the left shows that there are two missing terms on the right: income earned on appreciation and appreciation earned on income:

$$(I_1 \times A_2) + (A_1 \times I_2)$$

This may be clearer with an example:

Year	Income	Appreciation	Total Return
1	4.0%	6.0%	10.0%
2	2.0	3.0	5.0
3	5.0	7.0	12.0

Using the same geometric mean return linking methodology, over the three-year period, the average annual total return is 29.4% ($1.10 \times 1.05 \times 1.12 - 1$) and the average annual appreciation return is 16.8% ($1.06 \times 1.03 \times 1.07 - 1$). The difference between these two is 12.6%. Applying the compounding formula to the annual returns produces an average annual income return of 11.4% ($1.04 \times 1.02 \times 1.05 - 1$). In this example, the difference between the compounded average annual total and appreciation returns exceeds the compounded average annual income return by 1.2%.

In Other Words

The compounded total return represents the average annual growth rate of dollars invested if income is reinvested each period and the compounded appreciation return represents the average annual growth rate of dollars invested if income is distributed each period. The compounded income return is the average annual growth rate of dollars invested if income is reinvested but appreciation is distributed each period. Distributing appreciation quarterly is not a feasible investment policy and for that reason, compounded income returns may not be meaningful to investors.

3. Alternative Solutions

Some investment managers and consultants have adopted a practice of manually adjusting either the compounded income return or compounded appreciation return, forcing the return components to add up to the total. While the results "add up", adjusting the calculated returns is a subjective process, which will most likely vary from Manager to Manager. These differing adjustment approaches lead to a lack of performance comparability between investment managers. For this reason, adjusting component returns in order to make them "add up" is not recommended by NCREIF.

As an alternative, some investment managers do not present component return information for time periods beyond one quarter. These investment managers may present component returns for each annual period and year-to-date for the current year, although, for time periods beyond one quarter, only total return is presented. This approach is consistent with the presentation of returns for alternative asset classes (e.g., the S&P 500 Index for common stocks or the Lehman Brothers Bond Index). While this type of return presentation is theoretically sound and not disputed by NCREIF, it may not satisfy institutional investors' desire for real estate component return data.

A third and final alternative is to calculate and present component returns for extended time periods, without making adjustments that force the components to "add up." As stated previously, compounded income returns may not be meaningful to investors.

4. Conclusion

In conclusion, the sum of the component parts does not always equal the whole. NCREIF recognizes the need to be responsive to the needs of institutional investors. We also need to make them aware of what performance numbers really mean and whether or not the calculations are meaningful. We believe the preferred approach to presenting performance components is to show each component separately, but not to attempt to compound the income component so the numbers "add up."

8. FAQ

I.	Data Deadline
II.	NPI-Eligible Properties
III.	Property Occupancy Falling Below 60%
IV.	Quarterly Data Component Reporting
V.	Properties Acquiring/Retiring Debt
VI.	Property Expansions
VII.	Individual vs. Grouped Property Reporting
VIII.	New Property Submission
IX.	Property Disposition

I. Data Deadline

Question 1: The data deadline is the 20th of the month following quarter-end. If the 20th falls on a Saturday, Sunday, or holiday, when is the data submission due?

Answer: The submission is always due on the 20th, whether it falls on a weekday, weekend, or holiday. Data submissions are expected to be posted to the NCREIF website on or before the 20th.

II. NPI-Eligible Properties

Question 1: Are all properties submitted to NCREIF included in the NPI?

Answer: No. Only properties:

- 1) with a stabilized 'Operating' life cycle
- 2) in the Apartments, Hotel, Industrial, Office, or Retail property types
- 3) held for non-taxable or a mix of non-taxable and taxable investors are included in the NPI.
- 4) account basis of market

All other properties submitted are included in the NPD and used for research and analysis projects but are not eligible for inclusion in the NPI. See *Appendix 1* for the qualifying characteristics of properties included in the NPI.

III. Property Occupancy Falling Below 60%

Question 1: Should I stop submitting a property when its occupancy falls below 60%?

Answer: No. Once a property is submitted to NCREIF, it should always be submitted as long as your company controls the property, regardless of falling below the 60% occupancy level. If the property's life cycle has changed to 'Redevelopment', indicate this in the data submission template static tab, but continue to submit all quarterly data for the property whether it changes the life cycle or not. Do not perform any type of disposition for a property that falls below 60% occupied that you continue to own.

IV. Quarterly Data Component Reporting

Question 1: Should property operations be adjusted to exclude: 1) investment income (investment of excess property funds prior to remittance to fund-level accounts) or 2) interest income (from loans)?

Answer: The properties' net income from operations should be adjusted to exclude "non-rental" income.

Question 2: Should ground rent on properties without leverage be included in NOI?

Answer: In a situation where a mortgage is placed in conjunction with a ground lease, ground rent should be reported as if it were part of the debt.

Question 3: Should interest expense be deducted from net operating income for properties that carry debt?

Answer: No. Interest expense should be included in the 'Interest Expense' in the 'Activity' tab of the submission template, but not subtracted from net operating income. Doing so would "double count" the interest expense for the property return calculations.

Question 4: Should acquisition fees or disposition fees paid to the investment manager be reported?

Answer: Acquisition fees should be included in the 'Transaction Cost' field of the 'Transaction' tab entry regardless of who paid and when the property is first reported. However, the asset should be entered at its most current market value when first submitted to NCREIF.

Disposition fees paid to investment managers should be excluded from transaction costs unless such fees are in lieu of a reasonable sales commission that could have otherwise been paid to a third party.

Question 5: How should loan costs be treated? Some capitalize loan costs as other assets and amortize them over the life of the loan, whereas others capitalize on the property. What is the proper treatment?

Answer: Loan costs should be capitalized over the life of the loan, not to the property.

Question 6: Should income or expenses of an extraordinary nature (e.g., sale of air rights proceeds, condemnation or easement proceeds, casualty gains or losses net of insurance) be reported or disclosed?

Answer: Income or expense of an extraordinary nature that is material (in excess of 5% of net operating income) should be reported; if appropriate, they should be reflected as a 'Partial Sale' in the submission template and explained with the data submission. The market value data fields of the property should also be adjusted considering the remaining value of the property after such a transaction.

Question 7: Should accounting or appraisal adjustments of a material nature be footnoted or restated? Answer: Errors discovered after the Indexes and Reports are published should be corrected by contacting a member of the NCREIF staff. At which time, you will be advised to provide staff with the correct adjustments so that the data can be updated.

Question 8: If I program a computer report to list all amount of ground lease expense for leveraged properties in order to report to NCREIF, will I be reporting ground lease information properly?

Answer: No, only selective ground lease expense (i.e., where the ground lease is with the mortgage lender and not with another third party) should be reported to NCREIF. Ground lease expense (as extracted from your accounting database) will be overstated unless your computer program can make this selected identification.

V. Properties Acquiring/Retiring Debt

Question 1: For a loan that is assumed at acquisition, what is the loan's original amount to be reported?

Answer: The amount assumed at the date of acquisition is the original amount reported, not the original amount of the loan at inception.

Question 2: If a property has been acquired in an all-cash acquisition, should it continue to be submitted if it has subsequently acquired some level of debt? If not, how would it be removed from the NPI and/or Database?

Answer: Any property acquiring debt in excess of 5% of its market value should be submitted with the applicable debt data fields (scheduled principal payments, interest expense, ending balance, etc.). The property will be considered to be “leveraged” based on the debt-based data fields submitted.

Question 3: If the property is not sold, but the debt has been paid off, is the property still included in the Leveraged Report and/or NPI?

Answer: Once a debt is paid off, the property will be excluded from the Leveraged Report but will continue to be included in the NPI. The debt fields on the quarterly data submission will not need to be filled in (i.e., will equal 0) for the property in future quarters.

Question 4: If a loan balance falls below 5%, is the property taken out of the Leveraged Report?

Answer: No, once in the NPI and Leveraged Report, the property stays until it is sold, or the debt is paid off in its entirety and then it will be included in the NPI and Classic (All-Equity) Index. The 5% test only applies upon new property submission.

VI. Property Expansions

Question 1: How do I account for an existing, operating property that undergoes subsequent phases of development or a building addition or expansion?

Answer: Capital expenditures should be withheld from reporting until the development is complete and operational. In the quarter when the development is to be added to the property submission, add the total value of the development/addition/expansion to ‘Capital Improvements/Expenditures’ and ‘Building Expansions’ in the submission template and increase the market value data fields by the total value of the development/addition/expansion. Remember also to adjust the ‘Gross Square Feet’ and ‘Net Rentable Area’ fields.

VII. Individual vs. Grouped Property Reporting

Question 1: Should multiple properties in an Office park or Industrial park be submitted as one property or as individual properties?

Answer: First, determine if the asset has multiple properties or multiple buildings. If the separate buildings or properties in the park can be valued separately, it is preferred that they be reported separately. If that is not possible or practicable, you can report them as one if they have the same zip code. Ensure the static tab fields ‘Number of Properties’ and ‘Number of Buildings’ is filled out correctly.

VIII. New Property Submission

Question 1: Should ‘Transaction Cost’ include all acquisition costs?

Answer: It includes only those costs recorded when the property is added from a ‘Transaction’, transaction type = ‘Acquisition’ tab entry.

Question 2: Should properties be reported that are subject to a subsidy of rental income, such as a master lease, or guaranteed return, such as a net income guarantee? If so, at what point do these subsidies or guarantees become forms of financing? How should these payments/receipts be recorded – as income/expense or as adjusted acquisition/sales price?

Answer: Any acquired property subject to income subsidies or a guaranteed return from the seller in excess of 5% of gross revenue should be omitted from reporting. Other subsidies or guarantees, regardless of amount, should be included in the operating results and reported. Properties so excluded should be added to the submission upon expiration of the subsidy, assuming all other reporting requirements are met. These payments should be reported in accordance with the intent of the guarantee and consistent with the accounting policy of the Fund or Account.

Question 3: Is Gross Square Feet the owned or total square feet for the property?

Answer: The total for the property regardless of ownership (Note: This is not Gross Leasable Square Feet).

IX. Property Disposition

Question 1: How should sales of “excess land” associated with a property be reported? Sale of the land/retention of the property? Sale of the property/retention of the excess land?

Answer: The sale of excess land should be reported using a ‘Transaction’ tab entry and enter the activity as a partial sale in the submission template. The sale of the property/retention of land should also be reported as a partial sale of the property, and the remaining land reported as a sale at its next appraised value.

Question 2: Should an exchange of property be reported as a sale for submission purposes?

Answer: An exchange of properties should be reported as a sale at the last appraised value. There are too many variables (property type, location, “boot”, etc.) to adjust for in this type of transaction.

Question 3: How should the aggregation of smaller properties into one larger investment be reported?

Answer: Use the ‘Transaction Type’ – ‘Consolidation of Properties’ and enter a transaction record to submit and update a new consolidated property number with updated data and market value. Note the market value of the consolidated property should equal the total market value of the smaller properties factoring in current quarter activity.

Question 4: Is the Gross Sales Price before or after selling expenses?

Answer: It is before reduction for selling expenses and debt obligation.