Coronavirus Pandemic

Impact on Valuing Real Estate Investments

DUFF & PHELPS

Real Estate Advisory Group

April 22, 2020

Agenda

Section I

Introductions

Ross Prindle, MAI, CRE, FRICS

Managing Director, Real Estate Advisory Group, Global Practice Leader

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Ross is primarily focused on real estate valuation and consulting for institutional funds and owner/operators, real estate investment trusts, private equity and hedge funds, and corporate owners/operators of real estate. Ross has a distinct competency to complete large multi-property, multi-national & global valuation engagements.

Ross has been a valuation consultant since 1988. His most recent work experience prior to Duff & Phelps is the Managing Director in-charge of the Real Estate Valuation and Consulting Practice at Standard & Poor's. Before he worked at S&P, Ross was a Midwest partner in the real estate valuation and consulting practice for Arthur Andersen LLP.

Ross received his M.B.A. in finance from Kellstadt Graduate School of Business at DePaul University and his B.S. in real estate and urban planning from the University of Illinois at Champaign/Urbana.

Ross has also spoken several times on hot topics a the NAREIT Law & Accounting Conference Accounting Committee.

Michael Gibbs, MAI, ASA

Managing Director, Real Estate Advisory Group, Southeast & Mid Atlantic Region Practice Leader

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Michael Gibbs is a managing director in the Atlanta office and has more than 25 years of experience in real estate valuation and consulting for public and non-traded REITs, private equity and hedge funds, investment managers, financial institutions, pension funds, institutional owners, and corporate owners. Mike is a member of the Appraisal Institute and holds the MAI and ASA designations.

Mike has been involved in real estate valuation and consulting, appraisal management, tenant representation and corporate real estate since 1992.

Mike received his M.A. in real estate and urban land analysis and his B.S. with a concentration in real estate and letter of completion in finance from the University of Florida. He is also a certified general real property appraiser licensed in Alabama, District of Columbia, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Virginia, Texas and Tennessee.

He is also a member of the Mortgage Bankers Association and the Real Estate Group of Atlanta. He is an active participant of the National Council of Real Estate Investment Fiduciaries, National Association of Real Estate Investment Trusts, International Right of Way Association, Restaurant Finance & Development Industry, and the Alternative & Direct Investment Securities Association.

James Gavin, MAI, CRE, FRICS

Managing Director, Real Estate Advisory Group

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Jim Gavin is a managing director in the San Francisco office and is part of the Real Estate Advisory Group. Jim leads real estate services on the West Coast, which specializes in consulting and valuation assignments. He has more than 30 years of experience in the real estate industry.

Jim's most recent work experience prior to Duff & Phelps was as a managing director of the Real Estate Valuation and Consulting Practice at Standard & Poor's (S&P). Before he worked at S&P, Jim was the West Coast principal-in-charge of real estate valuation and consulting practice for Arthur Andersen LLP.

Jim received his B.B.A., with an emphasis in real estate and urban economics, from the University of Wisconsin and has taken advanced level courses in statistics and accounting in the Masters Business Program at Santa Clara University. Jim is a Member of the Appraisal Institute (MAI), Counselor of Real Estate (CRE) and Fellow of the Royal Institute of Chartered Surveyors (FRICS). He is a past Chairman of the Northern California Experience Committee for the Appraisal Institute, and past member of the CRE Finance Committee. Jim is currently a member of the Tangible Assets Board for the International Valuation Standards Council (IVSC).

Kurt Uhler, MAI

Managing Director, Real Estate Advisory Group

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Kurt Uhler is a Managing Director in the Los Angeles office and part of the Real Estate Advisory Group at Duff & Phelps. Kurt performs valuation and consulting assignments for REITs (publicly traded, public non-traded and private), private real estate companies, corporate clients, pension funds, private equity firms and hedge funds. Kurt leads the seniors housing and healthcare real estate appraisal practice for Duff & Phelps.

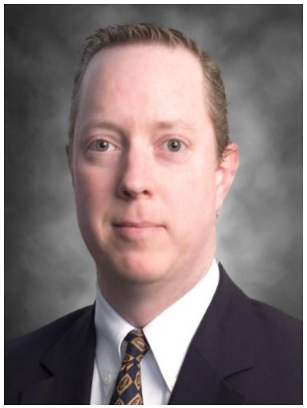
Significant Engagements Include:

- Healthcare Trust of America (HTA) acquisition of Duke Realty Medical Office portfolio
- Ventas, Inc (VTR) acquisition of Ardent Health Services for $1.75B
- Annual Net Asset Value (NAV) calculation for Healthcare Trust Inc
- Ventas, Inc (VTR) acquisition of Biomed's Wexford Science and Technology portfolio
- Brookdale Senior Living (BKD) acquisition of Emeritus Corporation for $2.8B
- Ventas, Inc (VTR) acquisition of Le Group Maurice Seniors Housing Portfolio

Kurt received his B.S. with an emphasis in real estate finance and investments from the University of Southern California. He is a certified general real estate appraiser in multiple states and a Designated Member of the Appraisal Institute.

James Martin, MAI

Senior Director, Real Estate Advisory Group



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James is located in the Boston office of Duff & Phelps and is part of the Real Estate Advisory Group. James has over 20 years of real estate experience with a primary focus on valuations, financial analysis, and due diligence. He has provided a variety of real estate advisory services for owners, operators, developers, private investors, REIT's, and financial institutions. His assignments have included valuations, market and feasibility studies, acquisition due diligence, transaction advisory, asset disposition and REIT mergers and acquisitions.

His most recent work experience prior to Duff & Phelps is a Senior Manager in Ernst & Young's Transaction Real Estate Services Group in Boston, Massachusetts.

James analyses have been completed for financial reporting and tax purposes including valuations for ASC 805 "Business Combinations", ASC 840 'Leases", ASC 420 "Exit or Disposal Cost Obligations", ASC 360 "Property, Plant and Equipment", ASC 810 "Consolidation", and IRS Section 861.

James earned a Masters in Business Administration from Northeastern University, a Bachelors of Engineering from Dartmouth College and a Bachelors of Arts in Physics from Hobart College. He is a Designated Member of the Appraisal Institute and is certified general real estate appraiser in the States of: CT, DE, DC, ME, MA, NH, PA, RI, WV.

James is located in the Boston office of Duff & Phelps and is part of the Real Estate Advisory Group. James has over 20 years of real estate experience with a primary focus on valuations, financial analysis, and due diligence. He has provided a variety of real estate advisory services for owners, operators developers, private investors, REIT's and financial institutions. His assignments have included valuations, market and feasibility studies, acquisition due diligence, transaction advisory, asset disposition and REIT mergers and acquisitions.

Matthew Jaimes

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Matthew Jaimes is a senior director charge of the firm's cost segregation services. He has more than 25 years of cost segregation and construction cost consulting experience.

Matthew has extensive experience analyzing a wide variety of building types and has successfully completed and defended cost segregation analyses ranging in project costs of $500,000 to $2.75 billion. His experience includes analyses of offices and corporate headquarters, casinos, hotels and resorts, office buildings, light and heavy manufacturing facilities, biopharmaceutical facilities, corporate headquarters, banks, restaurants, assisted living and nursing homes, retail outlets and malls, sports and recreation facilities, warehouse distribution facilities, golf courses, hospitals and medical office buildings. He has also served as an expert witness in construction related disputes.

Matthew received his M.B.A. in real estate finance from the University of Southern California and his B.S. in architecture from the University of Michigan. He represented Duff & Phelps as a founding member of the American Society of Cost Segregation Professionals. He is also a member of the National Trust for Historic Preservation.

Daniel Carlson, MAI, MRICS, ASA

Managing Director, Texas Regional Leader, Real Estate Advisory Group

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Dan Carlson is a Managing Director in the Houston office of Duff & Phelps, LLC and leads the firm's bank financing appraisal industry group.

Dan is primarily focused on real estate appraisal and consulting for lending institutions and publically-traded RETIs. Dan's appraisals have been used for collateral lending , financial reporting, portfolio valuation, internal planning and decision making purposes. Dan's clients include leading financial institutions involved in balance sheet lending and CMBS securitizations. Dan also has several client's in the REIT sector and CMBS special servicers. Dan is accredited and approved to perform going concern appraisals in conjunction with the SBA lending requirements.

Dan received his masters degree in real estate from the University of Florida and his bachelor of science in regional development from the University of Arizona. Dan is a designated Member of the Appraisal Institute, an Accredited Senior Appraiser and is a state-certified general real estate appraiser in many states throughout the Southern US and Mid-Atlantic. Dan is a member of the Mortgage Bankers Association, the International Council of Shopping Centers and a regular attendee of both NAIOP and ULI conferences and meetings.

Section II

Real Estate Market Impacts

April 22, 2020 - Real Estate Market Impacts

What has changed in the last month or so?

- Over 765,000 confirmed Covid-19 cases and over 40,500 deaths
- New York, New Jersey, Massachusetts, Michigan, Pennsylvania & Illinois have the most cases
- The majority of the U.S. population is sheltering in place
  - Substantial economic disruption
  - Unemployment increasing dramatically (22 Million as April 15, 2020)
- Coronavirus Aid, Relief, and Economic Security Act (CARES) signed into law on March 27, 2020
  - $2 trillion in aid
  - 120-day moratorium on evictions, late fees and other penalties
  - provides up to 90 days of forbearance for residential borrowers with a federally backed mortgage
- U.S. Federal Reserve implementing massive intervention
  - SBA Paycheck Protection Program – Officially ran out of money on April 16, 2020 at a total of $350 Billion – Adding another $300 Billion as of 4/22/2020
- Trump Administration outlines guidelines for States to open up America on April 16, 2020 with Governors having control of when and how
- Public markets remain extremely volatile

April 22, 2020 - Real Estate Market Impacts

What has not changed?

- The definition of fair value: ***the price that would be received TO SELL an asset or paid to transfer a liability in an ORDERLY transaction between market participants at the measurement date.***
- Fair Value ≠ Fire Sale Price
- Fair Value does take into account current market conditions
- The need for fair value:
  - ✓ Investors/Owners need timely reported fair value based Net Asset Values (NAV) for decision making, financial reporting, exercising fiduciary duty.
  - ✓ Financial reporting of quarterly financials is required

April 22, 2020 - Real Estate Market Impacts

What is NOT Known and Knowable as of April 22, 2020?

- When effective treatments for COVID-19 will be available
- When a vaccine will be available to prevent the spread of COVID-19
- Whether summer weather will curtail spread of COVID-19
- Whether and when spread of COVID-19 will return if spread is curtailed
- How long shelter in place and travel restrictions will remain in effect for most affected states
- How will the governors react to the Trump administrative guidance and move to reopen their states - 22 states enacting phase I procedures to reopen as of April 20
- When and by how much the public markets will increase or decrease in value
- The full impact of government and central bank fiscal and monetary policy legislation
- The timing, depth, and length of a potential economic recession

April 22, 2020 - Real Estate Market Impacts

What is Known and Knowable as of April 22,2020?

- Public market prices have decreased significantly
- Energy prices, in particular the price of oil, have decreased significantly
- Selected industries and property types have been significantly impacted
- Many individuals and companies are facing a liquidity crunch
- With increased uncertainty and risk, a market participant's required rate of return has most likely increased
- Central banks and governments are implementing monetary and fiscal stimulus
- The potential for recession has significantly increased

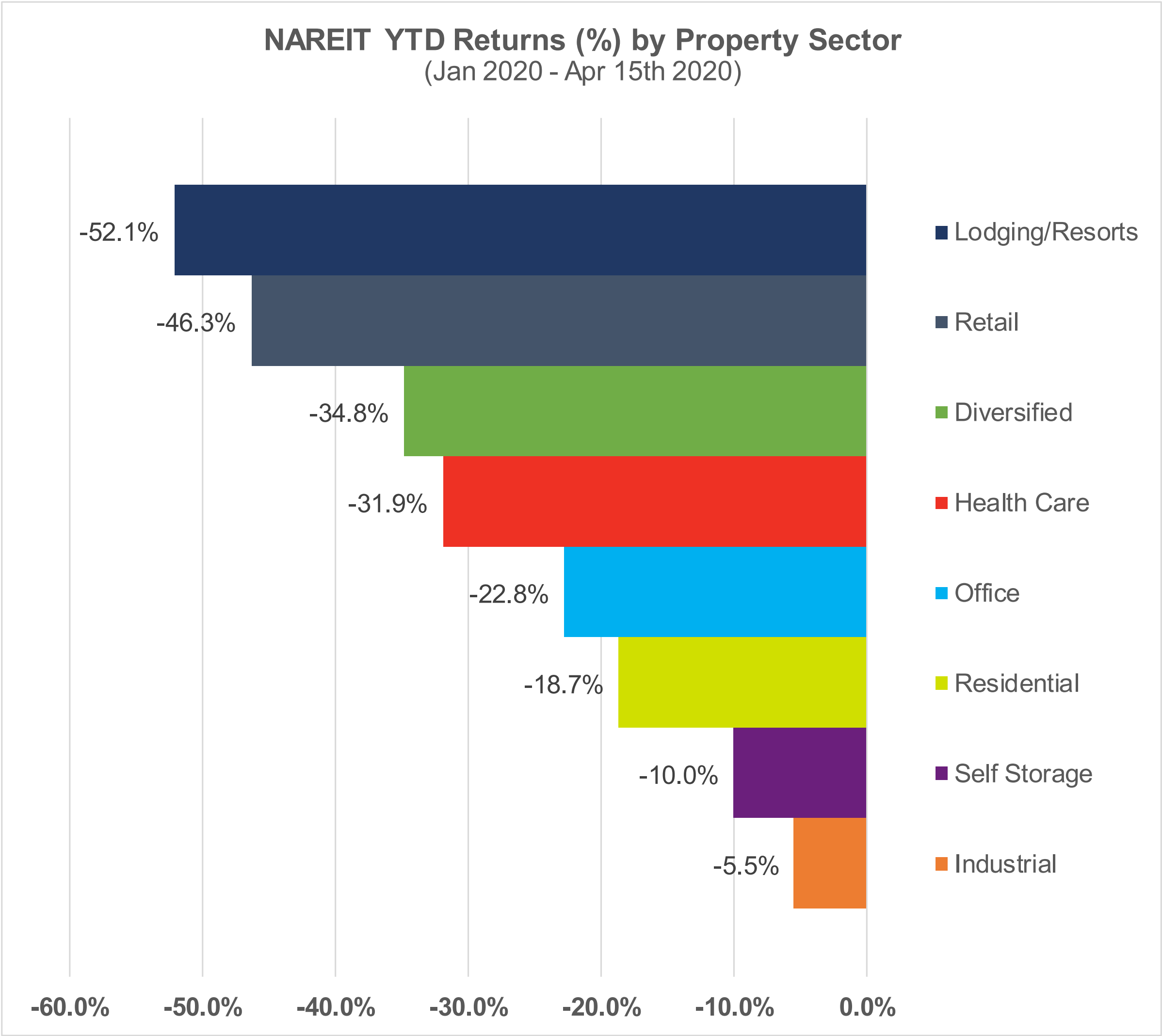
April 22, 2020 - Real Estate Market Impacts

Real Estate Stress Card - Illustrates risk levels by property type

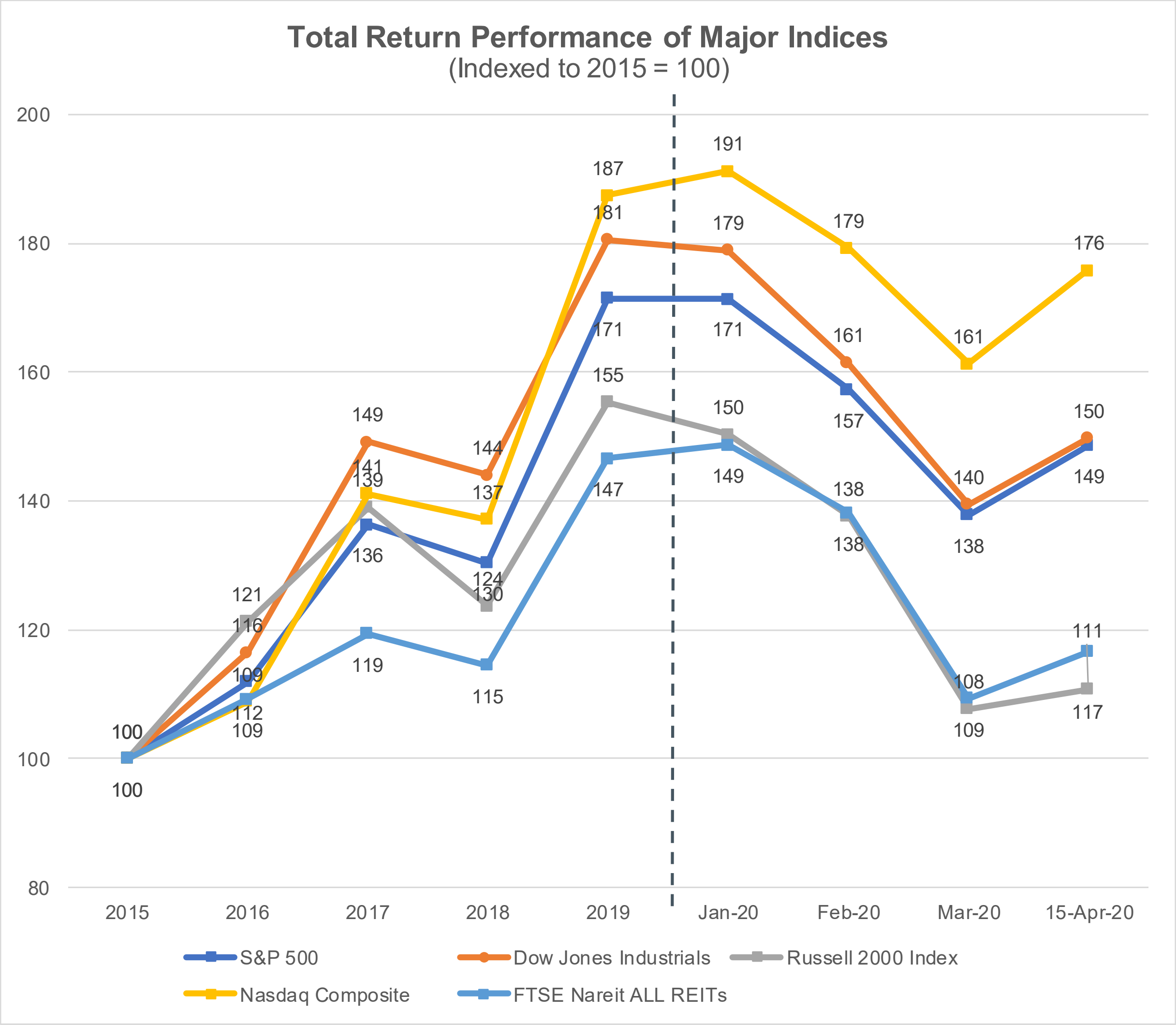
Propert Sectors	Leverage (5 is high)	Payout Ratio (5 is high)	Sector Risk (5 is high)	Stress Score
Manufactured Housing	1	1	2	4
Data Center	1	1	2	4
Cell Tower	1	2	1	4
Single Family Rentals	1	2	2	5
Office	2	2	3	7
Diversified	3	2	3	8
Net Lease	3	2	3	8
Multifamily	3	3	3	9
Healthcare	3	3	3	9
Shopping Center	1	3	5	9
Industrial	3	3	3	9
Prison	5	3	2	10
Mall	4	2	5	11
Billboard	4	4	4	12
Gaming	4	4	5	13
Lodging	5	5	5	15

Source: IREIT

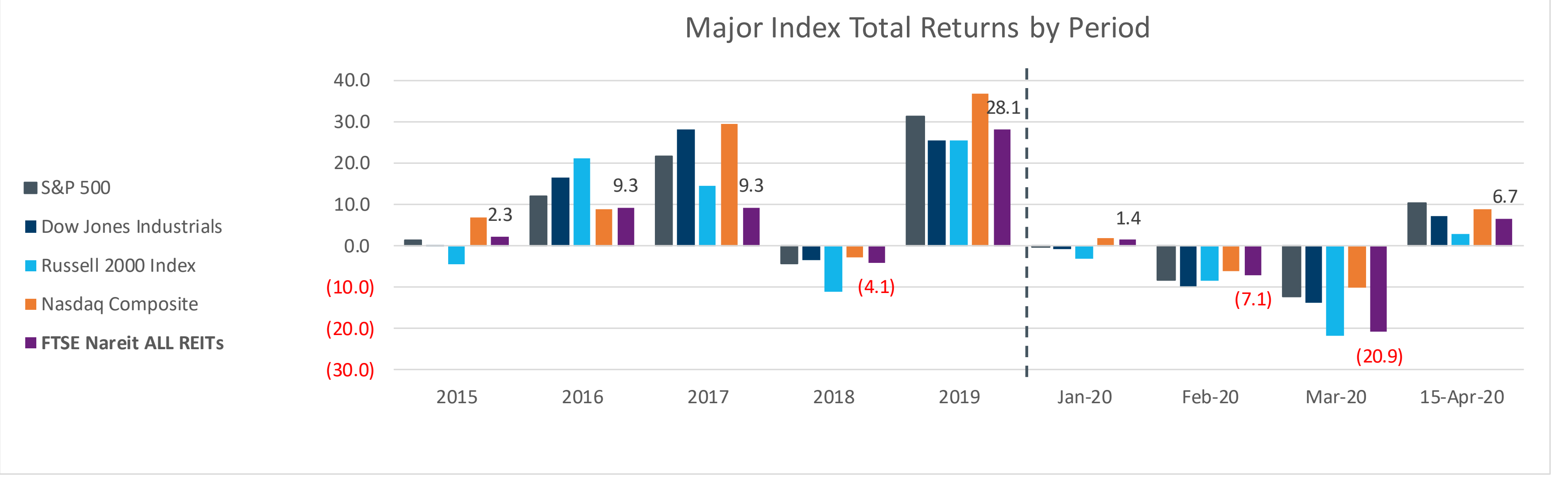
NAREIT Returns by Property



Total Return Compared to Other Indices



Total Returns by Period

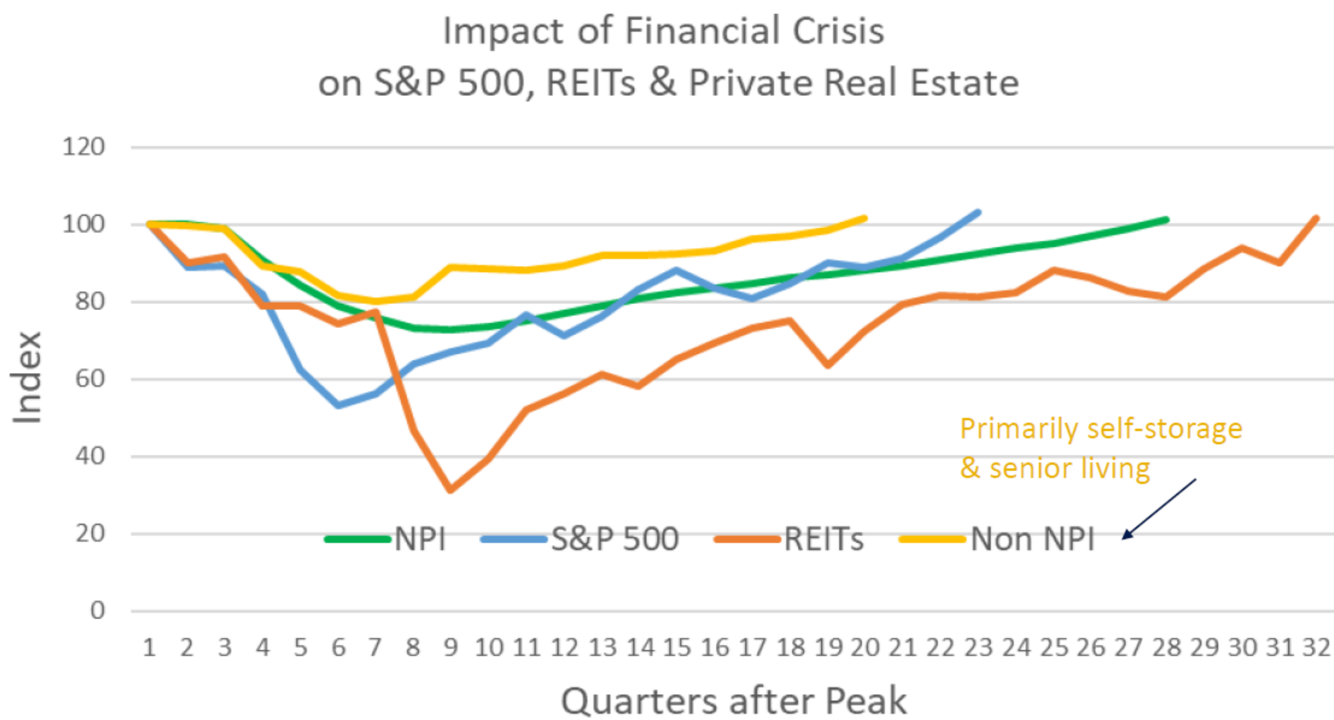


Implied Public REIT – Capitalization Rates

		Average		
		12/31/2019	4/9/2020	Change
	Public REIT Sector			
1	Office	6.4%	7.3%	0.9%
2	Retail	6.7%	9.0%	2.3%
3	Industrial	5.0%	5.6%	0.5%
4	Residential	4.9%	5.6%	0.8%
5	Diversified	5.9%	7.5%	1.6%
6	Healthcare	6.2%	7.3%	1.2%
8	Net Lease	6.1%	8.0%	1.8%
9	Self Storage	5.1%	5.4%	0.3%
10	Data Center	5.7%	5.5%	-0.2%
11	Hotel	8.1%	10.4%	2.3%

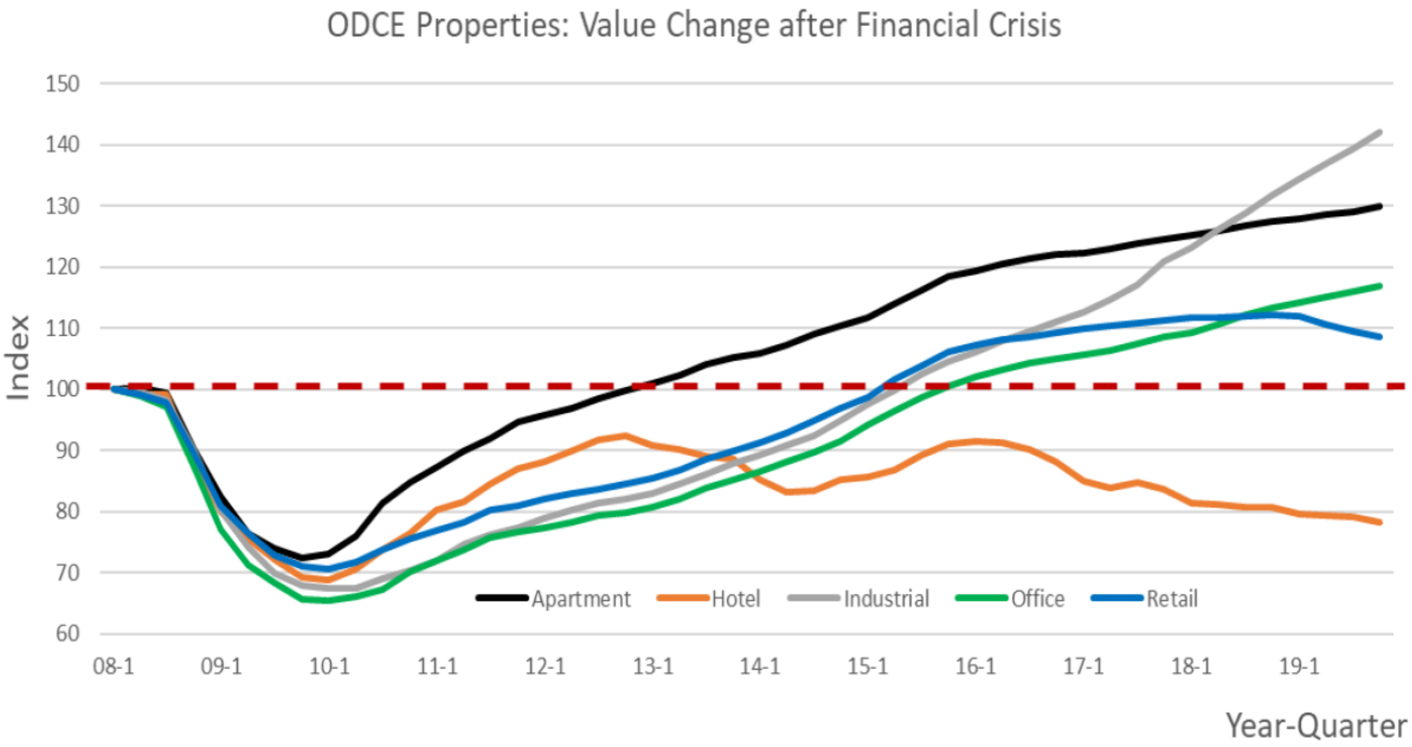
Note: Moment in Time Implied Cap Rates in Volatile Traded Market
Source: Robert A. Stanger & Co., Inc

Going Back to the Financial Crisis - Return Comparison S&P, REITs & Private Real Estate



Source: NCREIF Academy

ODCE Properties: Value Change After Financial Crisis



Source: NCREIF Academy

April 22,2020 – Real Estate Market Impacts

Difficult Valuation Questions

- How do you quantify the impact on private real estate investments?
- Do cash flow projections need to be updated, or can we just consider the current situation as temporary?
- Which real estate properties will be impacted most?
- How does market dislocation and the lack of transactions affect the overall market? What should we do?
- How should we think about "calibration" given current market conditions?

Section III

Property Type Impacts

Section III

Hospitality

Hospitality – Valuation Implications

- The hardest hit asset class
- Short-term – unless supporting first responders and healthcare workers, cash flow faucet is shut. 2020 becomes a lost year for revenues.
- Forecasts from economists and industry analysts suggest it will take all of 2021 to regain what was in place at the end of 2019. If ground lessor with participation, don't expect % rent in 2020 and perhaps not in 2021.
- Well capitalized hotel owners/operators are using downtime for cap ex improvement projects. Also keeping the lights on with skeleton crews while serving single digit occupancies.
- Tough times for those with high debt levels coming due in 2021 as a result of eroding values and no operating cash flow. Liquidity is critical.
- Economist and industry analysts indicate large short-term cap rate increases.
- Long term -- recovery discussed as ~~a~~ "U" shaped in a best case and for many hotels more of a flatter recovery upon reaching the market bottom. A lot will depend on the service level of the hotels and the challenges in bringing back/retraining employees. Limited service may recover quicker due to fewer logistical challenges.

Hospitality – Valuation Implications

Illustration of possible forecast:

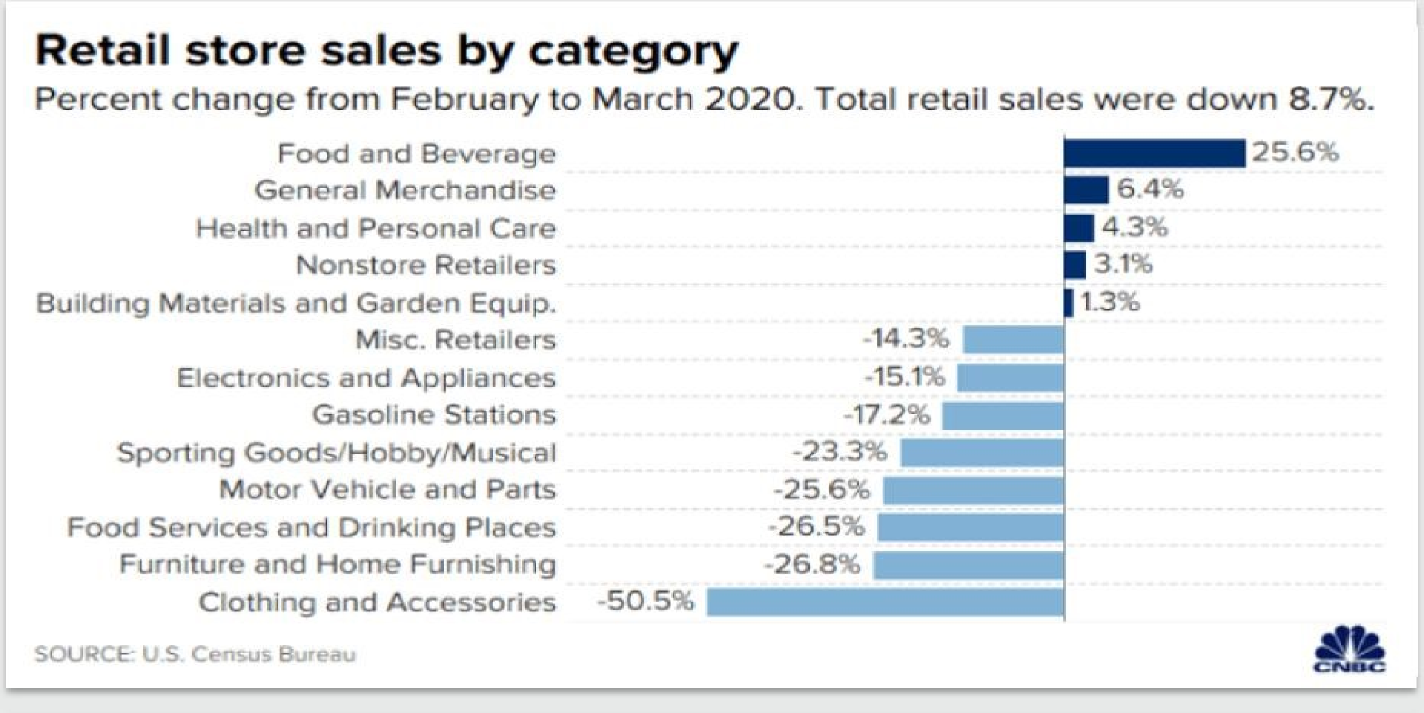
1. Q2 2020 0%/5% occupancy, limited or no cash flow
2. Q3 soft opening with full employee return and implementation of social distancing protocols
3. Q4 – opening with full services with business travel on a more national basis resulting in 25%/30% occupancies;
4. Q1 2021 – assumes limited CV19 reoccurrence and near-term antidote resulting in occupancy back to the mid-50's;
5. Q2 2021 – closer to where occupancy activity was in 2019
6. Q3 and Q4 2021 – ramp of occupancy, then ADR to more normalized/stable level

- Transactions? Near term, it will likely be tied to liquidation not fair value. Sale comparables will be less local if you can find any.
- Impacts on Valuations: Forecasts extremely subjective. Consider scenario approach in conjunction with Management input (base case, low, high), weighting probabilities.

Section III

Retail

Retail Properties – Valuation Implications



Retail Properties – Valuation Implications

- Only grocery, medical or technology/communication functioning retail is open
- Essential retail properties have seen increased retail sales as consumers focus their purchasing power on these outlets for supplies
- Enclosed malls are all closed and are in negotiation on retail terms with virtually ALL of their tenants. Most mall owners are estimating reopening depending on geography as of July 1, 2020 or later.
- It is estimated that between 30-50% of retailers made their rent (plus cam/tax) payment for April and it is estimated that May will be worse. Landlords are estimating 3 months of nonpayment of rent starting in May. Rent relief vs. deferral will be the norm.
- Market rents are declining, leasing is non-existent. Between 10-15% of tenants will not return despite rent relief. 20-30% of restaurants may not return.
- NOI & Occupancy declines in ‘20 & ’21 are expected to exceed the global financial crisis.
- Adjustments for current valuation models will be to revenue in the short-term, with focus on capital market assumptions as well if situation is not expected to resolve quickly
- Single tenant net lease either doing very well (grocer/QSR/medical/telecom) or a complete disaster (casual dining/furniture//other)

Retail Properties – Valuation Implications

Complete a solid set of expected cash flows going forward as of the valuation date. Adjustments to income assumptions in years one and two projections will be considered for the following:

- Rent, Rent Growth & Expense Reimbursement's - Most In-Line Retailers are closed and have asked landlords for
  - Rent Relief – how much, how long and who?
  - Deferred Rent Payments (as well as cam and RE tax allocations)
  - Conversion of Rent to Percentage Rent Only
  - Rent Growth – Flat to declining
  - Renewal Probability – likely lower due to stores not having foot traffic

- Vacancy & Credit Loss
  - How do we practically calculate these?

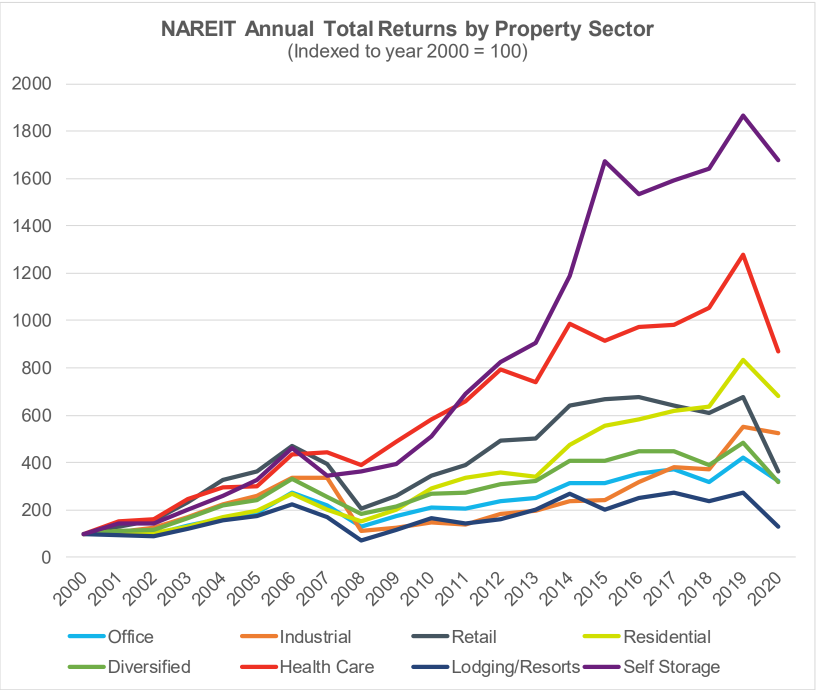
- Expenses
  - Increased Marketing/Advertising Expenses will be needed
  - Potential Successful Real Estate Tax Appeals lead to lower tax expense
  - Increased Incentives – Tenant Improvements, Rent Abatements

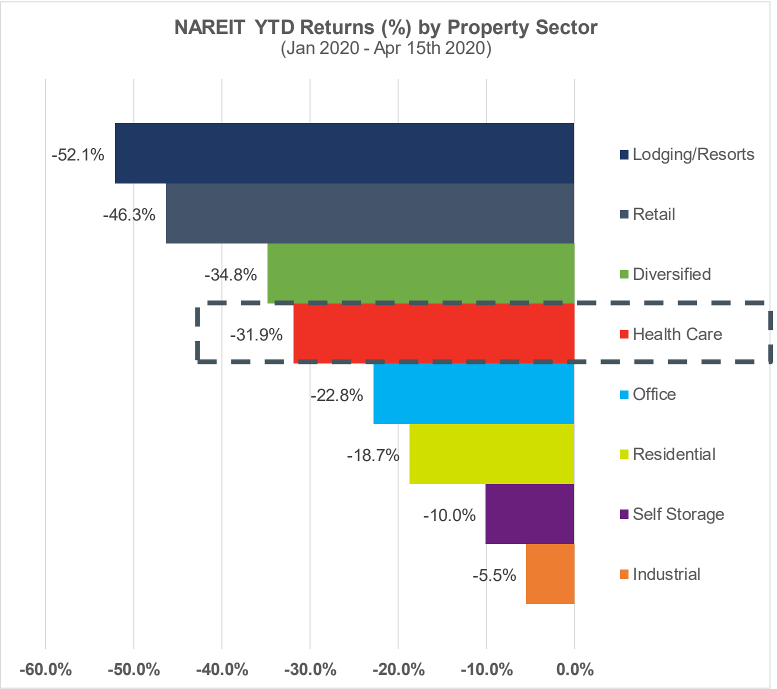
- Capital Market Assumptions
  - Increased Discount Rate to Cash Flow due to uncertainty
  - Overall and Terminal Capitalization Rates – No Sales – No Data but public REIT indicators – Should we adjust?

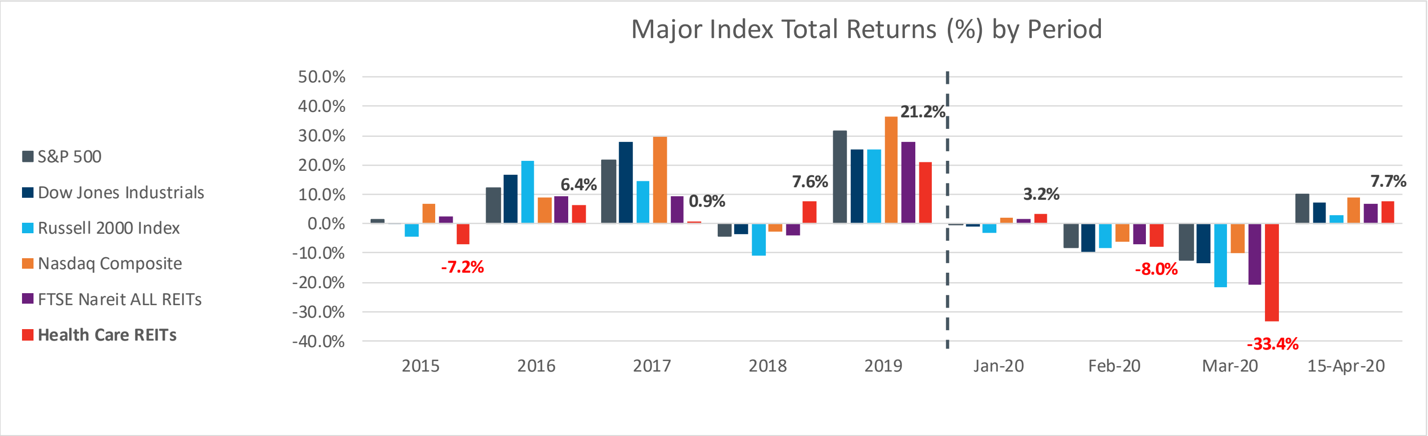
Section III

Healthcare

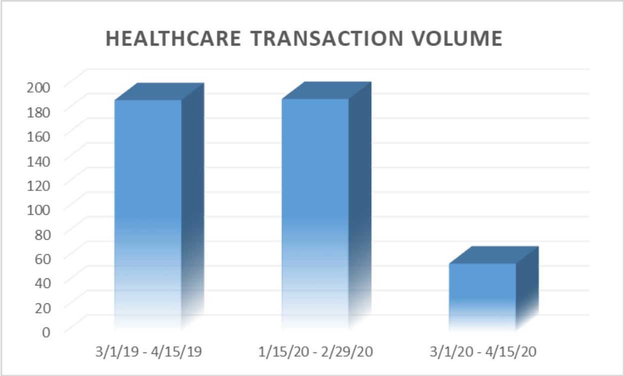
Healthcare – Overview of the Public Markets

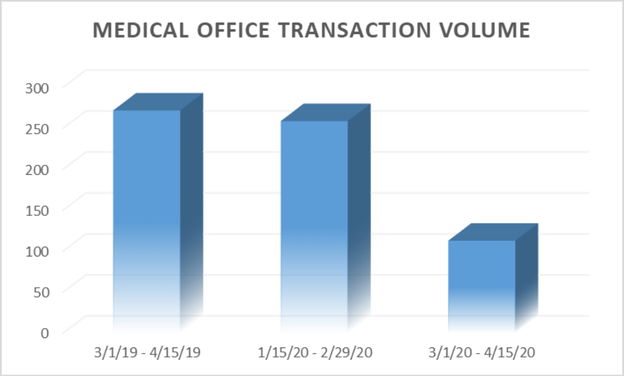






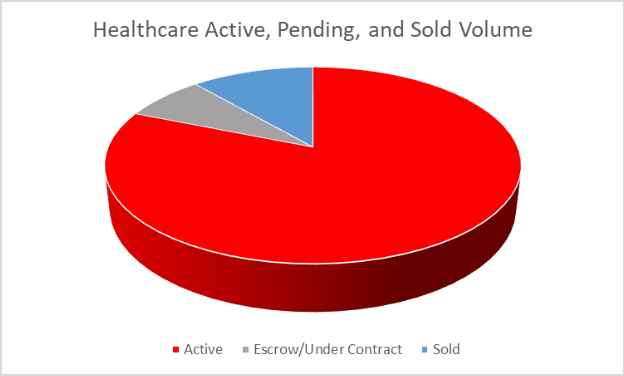
Healthcare – Valuation Implications

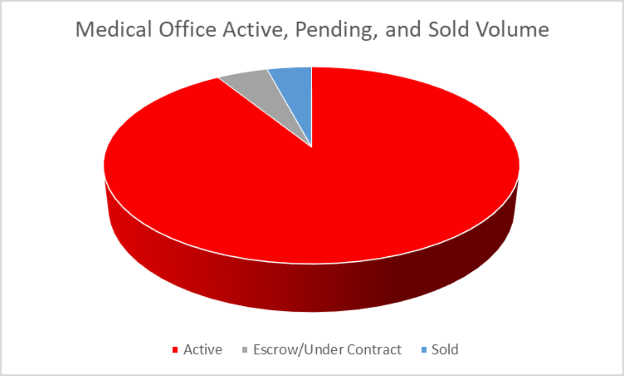




- 56 closed transactions since March 1, 2020
- 37 properties under contract
- 400 active listings
- Limited institutional buyer market
- Majority of transactions (53%) <$10,000,000
- Significant available inventory

- 113 closed transactions since March 1, 2020
- 130 properties under contract
- 2,489 active listings
- Limited institutional buyer market
- Majority of transactions (61%) <$10,000,000
- Significant available inventory





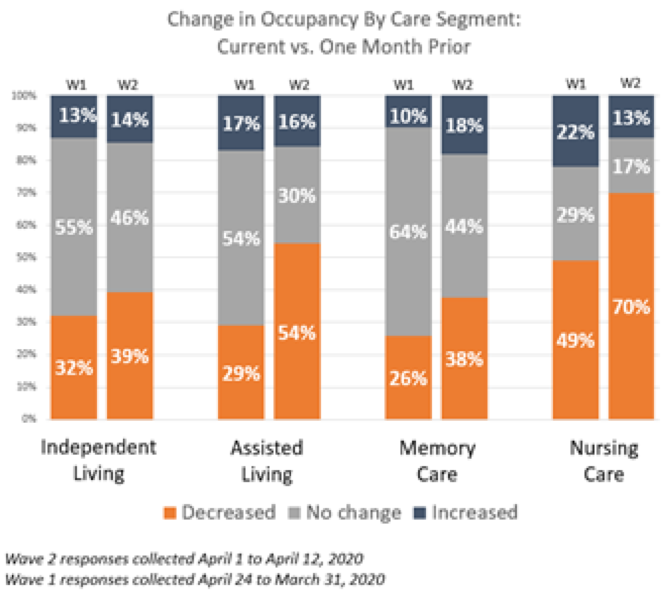
Source: CoStar comparable search of transactions over 10,000 square feet

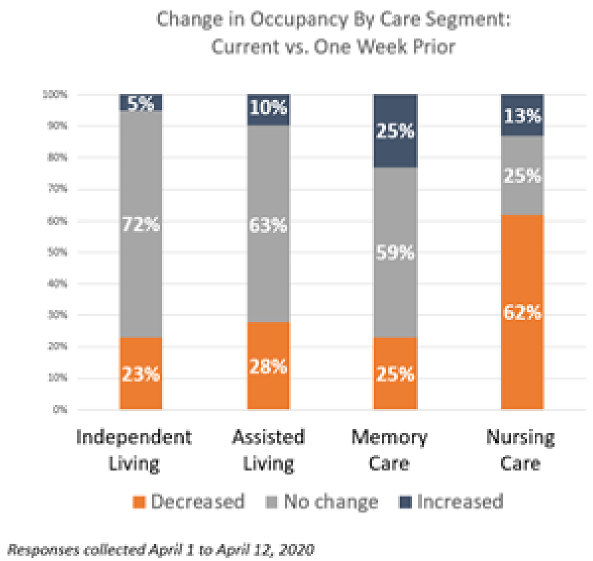
Healthcare – Valuation Implications

Seniors Housing – NIC Executive Survey Results

<u>NIC Executive Survey</u>
NIC has conducted two executive surveys, to date, of seniors housing and skilled nursing owners/operators nationwide.

1. Wave 1 (3/24 – 3/31) – 180 respondents
2. Wave 2 (4/01 – 4/12) – 146 respondents



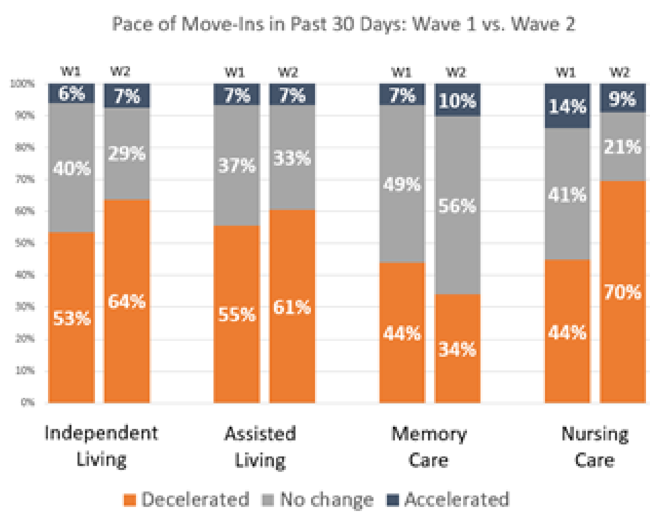


Generally, Wave 2 responses show declining occupancies across the sectors, with Nursing Care experiencing the most severe declines versus one week prior.

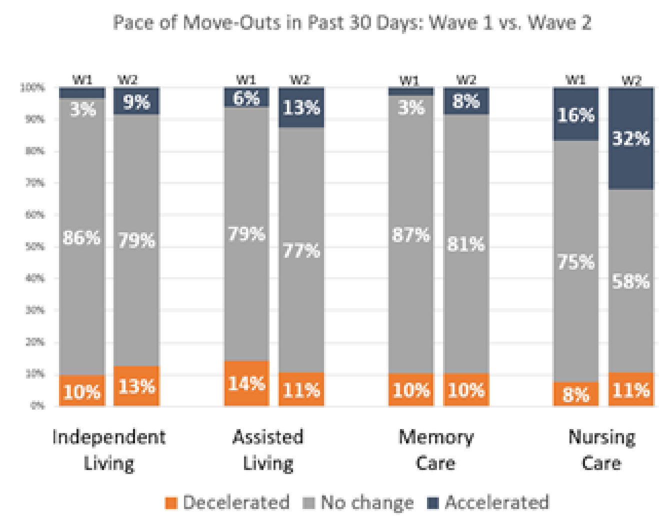
Healthcare – Valuation Implications

Seniors Housing – NIC Executive Survey Results

Pace of Move-Ins and Move-Outs



Wave 2 responses collected April 1 to April 12, 2020
Wave 1 responses collected April 24 to March 31, 2020



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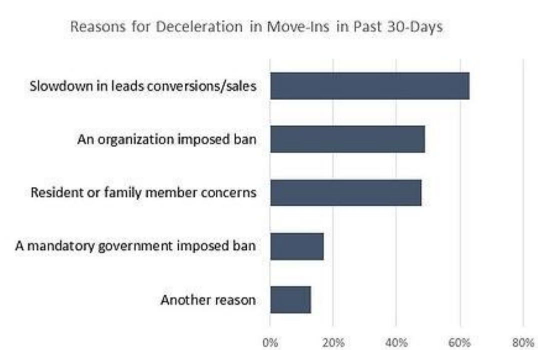


Healthcare – Valuation Implications

So What Do We Do?

There are two primary ways to impact a valuation—cash flow and capital market assumptions.

Due to the lack of transactional data available as a result of real estate market lags, appraisers must rely on market surveys such as the NIC Executive survey to assess the real-time impact on cash flow. Duff & Phelps has completed similar surveys to help understand the affect of Covid-19 on cash flow.

Revenue Considerations

Seniors: Declining occupancy with the main driver being the inability to show properties to prospective residents leading to unfavorable move-in and move-out trends. Potential impact to monthly rents, care charges, rent growth, vacancy and collection loss and entrance fee model.

MOB: Many tenants in need of rent relief, especially those practices that are deemed elective. MOB collections reportedly down 15% in April. Each tenant's risk profile should be reviewed and assessed. Potential short-term impact to vacancy and collection loss, with longer-term impact to rents and rent growth. Potential permanent impact from telemedicine gaining traction.

Expense/CapEx Considerations

Seniors and MOB: An increase in cleaning expense, insurance expense, supply costs (SH) and labor costs (SH) all factors. Potential short-term decreases in management fee and administrative/leasing expenses. CapEx projects are generally on hold with many ROI projects cancelled indefinitely and reserve requirements likely to increase.

Capital Markets Assumptions

Seniors and MOB: Not enough market data to assess the impact on cap and discount rates, however surveys have shown buyer and seller disconnect in underwriting assumptions. Important to consider the adjustments to cash flow before deciding whether cap/discount rate adjustments are warranted in order to avoid penalizing value conclusions unfairly. Important to weigh short-term versus long-term impacts when utilizing direct cap approach.

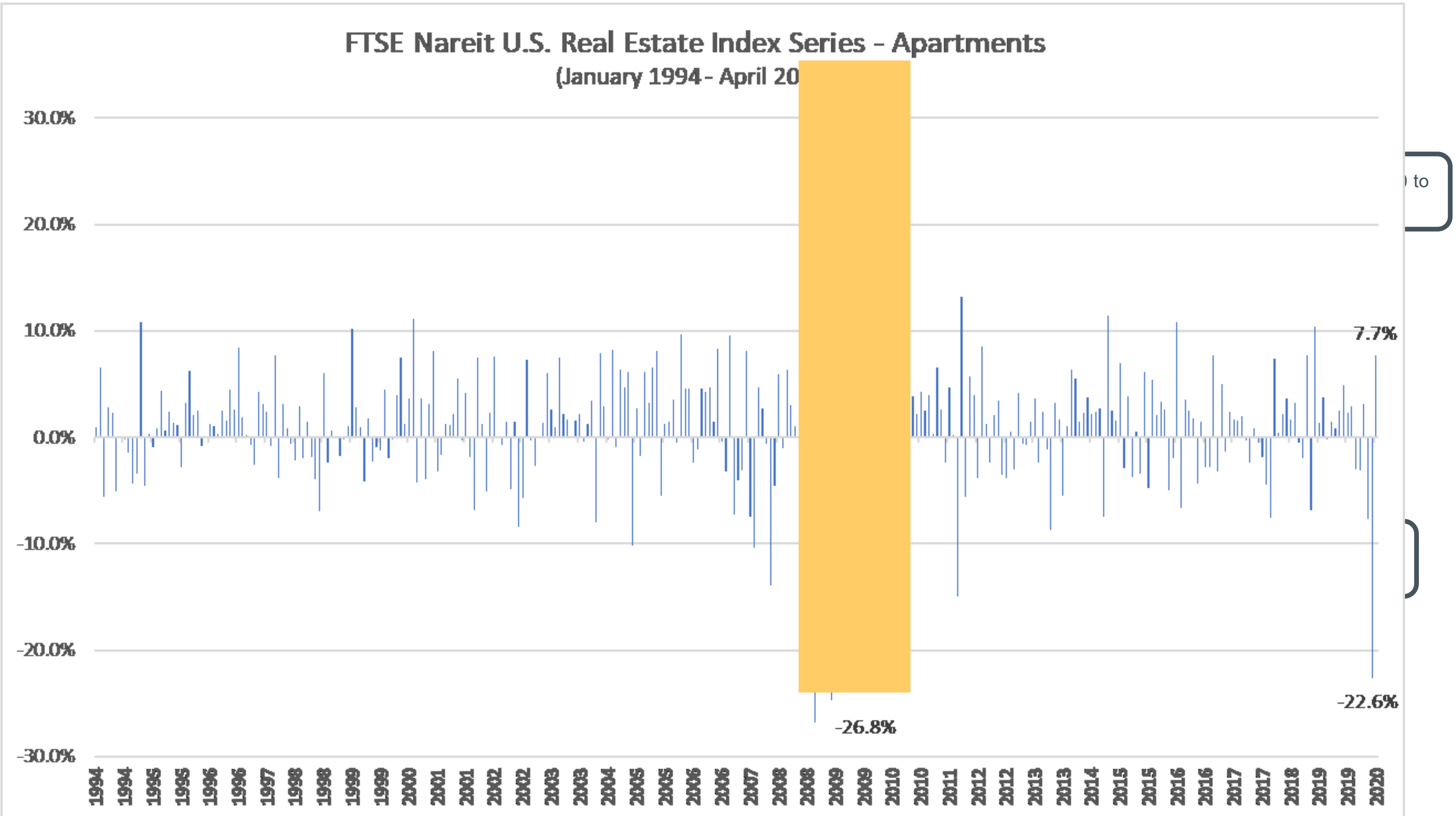
Triple Net Leased Assets not immune due to below market coverage (1.0x) in place. Significant rent deferrals and relief likely required.

Section III

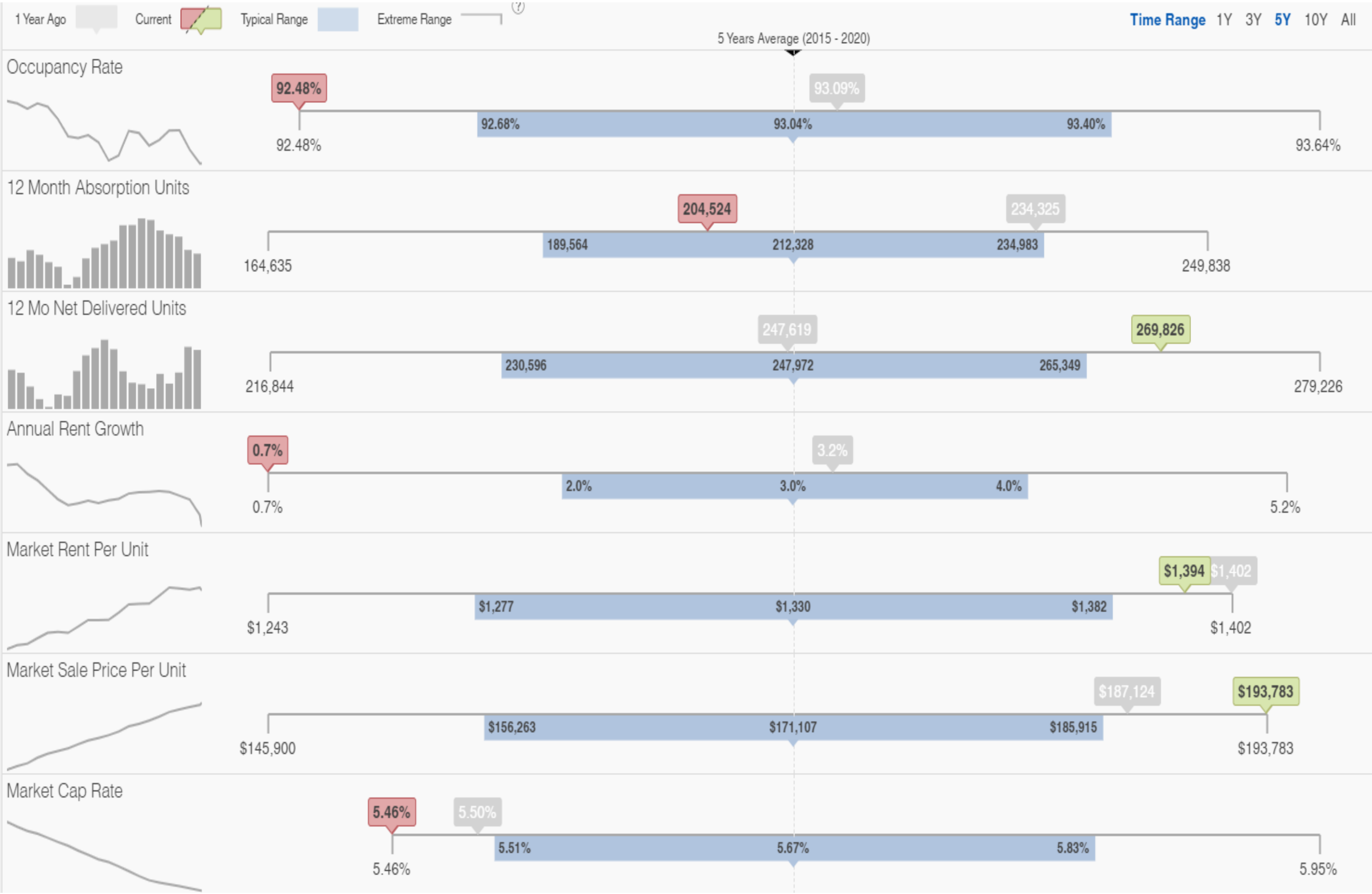
Multi-family

Multi-family – Valuation Indications

Overview of the Public Markets

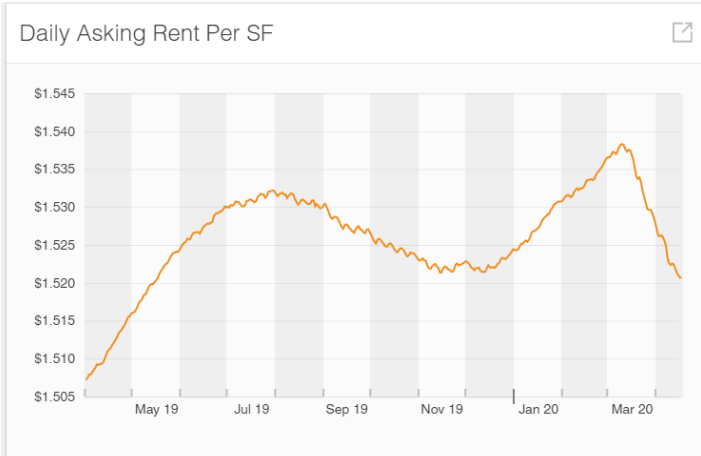


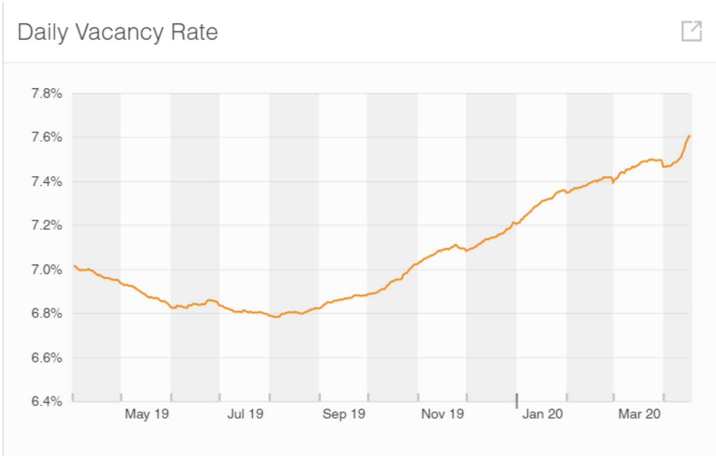
Multi-family – Key Performance Indicators

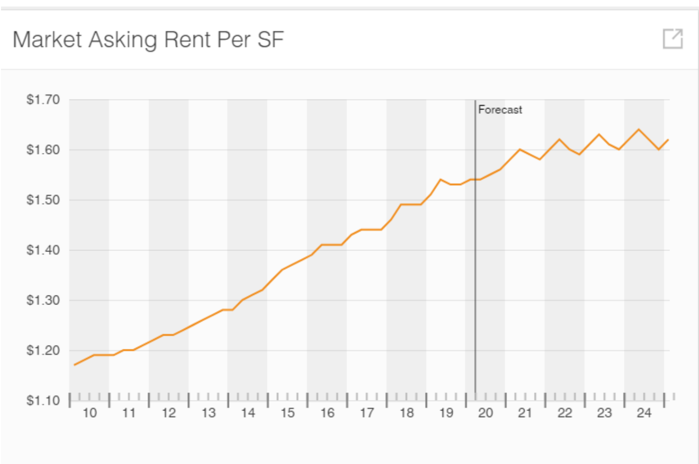


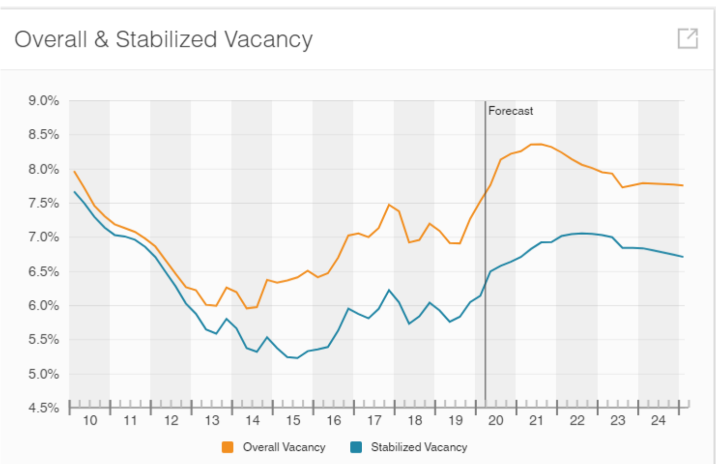
Source: Co-Star – National over 200 units

Multi-family – Key Performance Indicators









Source: Co-Star – National over 200 units

Multi-family – Valuation Indications

April Results

- 84% of units made full or partial payments by April 12th, which is an increase of 15% over April 5th
  - As compared to 91% in March 20
  - As compared to 90% in April 19
- 5%-10% of units have requested Covid-related relief
- Renewals are ~10% higher than historical averages
- Cash collections declined ~5% / 90% of units made a full or partial payment
- Asking rents have declined 1% - 3%
- Lease applications / foot traffic declines

Multi-family – Valuation Indications

Threats/Weaknesses

- Net loss of 10 – 20 million jobs
- Declines in net migration to high-growth, sunbelt states
- Markets/Submarkets heavily exposed to tourism, hospitality, energy, and retail
- Negative rent growth in 2020 and 2021
- Increases in vacancy, bad debt, and concessions. Declines in other income.
- Delayed construction projects / slower absorption
- Limited financing alternatives
  - New and lease up construction has dried up
  - Lower LTVs and higher cash reserves
  - Spreads have widened to 300-400 bps
- CARES Act – moratorium on evictions

Strengths/Opportunities

- Rebound in employment in 2020H2
- Rent will rebound by 2022 stabilizing at historical levels
- Multi-family will outperform retail, office, and hospitality sectors
- Suburban will outperform urban markets
- Rent vs Own favors rental market
- Long-term treasury rates will likely stay low, cap rates will decline when spreads revert back to mean
- Financing rates will be at or below 3%
- Pipeline projects will provide attractive returns to well capitalized sponsors

Section III

Office

Office – Valuation Implications

- Impacts will start primarily in 20202H, 2021+

- April cash collections vary widely across assets, asset classes, and markets
  - Asset by asset / tenant by tenant view
  - On average, rent collections were down 10% - 30%

- ~20-30% of tenants requested rent relief citing COVID-19:
  - Full or partial deferral of monthly rent with a payback (with or without interest) over some period during the remaining lease term.
  - Free rent today in exchange for a lease extension of varying durations.
  - If a tenant is entitled to free rent or an allowance in the future, some landlords have agreed to accelerate those benefits to the current time period.
  - Utilization of security deposit to fund rent with replenishing of security deposit at a later date.

- Expectation that values will decline 5%-20% in the short-term
- Little price discovery in leasing or transactions
- Coworking, shared workspace environments may no longer be viable alternatives
- Remote work will reshape the landscape, but how?
  - Fast track of remote work strategies and investment in collaboration technologies
  - Office densification, collaboration/shared space becomes a health risk

"We've proven we can operate with no footprint,"
- James Gorman, CEO of Morgan Stanley

Office – Valuation Implications

Threats/Weaknesses

- Net loss of 10 – 20 million jobs
- Assets/markets heavily exposed to tourism, hospitality, energy, and retail
- Buildings with short-term lease exposure
- Negative rent growth in 2020 - 21
- Increases in vacancy, concessions, and leasing costs
- High cap ex spend
- Increased cleaning and janitorial costs
- Financing (neutral demand)
- Falling office utilization rates
- Nail in the coffin for flex office operators?

Strengths/Opportunities

- Rebound in employment in 2020H2
- Long average lease terms delay impact
- Net interest rates will remain low
- Supply growth remains modest
- West Coast and Sun Belt markets
- Office fairly priced
- Rent relief tied to more disclosure of tenant financial information
- Reversal of densification trends and activity-based working

Section III

Industrial

Industrial – Valuation Implications

- As activity returns, industrial may be a beneficiary
- Short term –
  - need to look at rent growth and likely flatten;
  - extend lease up time;
  - factor in end of term extensions for those tenants receiving rent relief and allow for eventual collection of delayed rental payments
- Small business tenants supporting certain sectors definitely hurting and slow/delayed payments should be expected. Impacted more in short term.
- National brands experiencing shelter-in-place benefits today and likely into the long term.
- Benefits to Landlords that may result:
  - more ecommerce (especially related to food delivery and age groups not traditionally ecommerce active – creating excess demand in long term;
  - more bulk storage and inventory (previously Just in Time – now OK to have larger inventories);
  - On-shoring – bringing more manufacturing and redundancy back home.

Industrial – Valuation Implications

- Core vs Value Add:
  - core assets remain stable; once activity returns, looking at comps on a regional or national basis for awhile may be the best proxy;
  - value add – wider spread expected by buyers today due to acceptance of risk; although a good number of investors have stepped back to let the dust settle, the health of the industrial sector going into CV19 is expected to offset the short-term impact of the economic shut down.
- Transactions Activity: Expected to be limited the next few quarters. No reason to sell unless liquidation or redemption event is forced/required of the seller. Thus regional and national metrics become a potential benchmark. Flight to quality but also value add opportunities may become more attractive if discounted or land banking.
- Impact on Valuations:
  - direct dialogue on forecasted changes with Management;
  - heavy reliance on DCF due to choppy cash flows;
  - be wary of double dipping – impacting cash flows materially and then penalizing properties with major discount and/or terminal rate changes without market transaction support; and
  - have closing dialogue with the Client so all parties, although likely not in full agreement, have a clear picture of the valuation conclusions and how they were reached.

Section IV

Lease Accounting Implications

Lease Accounting Implications

- Rent Concessions
  - Many tenants, particularly in retail, are seeking and receiving rent concessions.
  - If the possibility of rent concessions was not explicitly stated in lease agreements, this would result in a lease modification and remeasurement. However, under new guidance from the FASB, lessees may elect to not consider rent concessions as a lease modification given the current COVID-19 environment.

- Discount Rates
  - As the Fed has cut interest rates significantly since the outbreak, lessees incremental borrowing rate could decline resulting in higher Lease Liabilities and Right of Use Assets on new leases.

- Fair Values
  - Lease classification (operating vs financing) is in part based on the likelihood that a purchase option would be executed. If values decline, there could be a change in the likelihood that a purchase option would be executed.

Lease Accounting Implications

- Impairment
  - If lessee performance declines (in retail for example), there could be Indicators of Impairment (Step 1). Once identified, the lessee would evaluate the Recoverability (Step 2) and if necessary a Measurement of Impairment (Step 3).

- Partial/Full Terminations
  - Some lessees may be seeking either partial reductions in their space or full reductions. In either case, adjustments to the lease liability and right of use asset will be required.

- Reassessments
  - Lessees may need to reevaluate key assumptions based on market conditions. For instance, the likelihood of renewing a lease or executing a purchase option.

Section V

Federal Tax Implications

Federal Tax Implications – Cost Segregation

What is Cost Segregation?

- Cost segregation is an analysis of building construction or building acquisition costs to identify and quantify shorter-lived property embedded in the building value that may be depreciated over shorter lives than the rest of the building structure. The end result is an increase in tax depreciation, and decrease in taxable income.
- Examples of shorter lived property include electrical, plumbing and mechanical equipment in place to service equipment used in a trade or business rather than the operation & maintenance of the building. Decorative items as well as site improvements will also qualify as shorter lived components.

Tax Reform & Cost Segregation

- The Tax Cuts and Jobs Act ("TCJA") passed in December of 2017 had several profound impacts on cost segregation
- Shorter-lived property with a life of 20-years or less became eligible for 100% bonus deprecation. This included newly constructed as well as acquired property that had previously not been eligible for bonus depreciation.
- TCJA also eliminated Qualified Interior Improvements, Qualified Retail Improvements and Qualified Restaurant Improvements and established a new Qualified Improvement Property("QIP") that would have a 15-year life with the intent of it being 100% bonus eligible.
- In the rush to push through TCJA, language in the bill was incorrectly drafted and QIP was not 100% bonus eligible and had to be treated as 39-year property.

Federal Tax Implications – Cost Segregation

Coronavirus Aid, Relief, and Economic Security Act (CARES)

- The CARES Act corrects the “glitch” from the TCJA and allows QIP to be treated as 15-year property and thus, qualified for 100% deprecation
- The 15-year treatment of QIP is retroactive for any improvements placed in service since January 1, 2018.
- Changes may be made by filling a 3115 with your current tax return or amending pervious returns

Benefits of Cost Segregation for REITs and other taxable entities

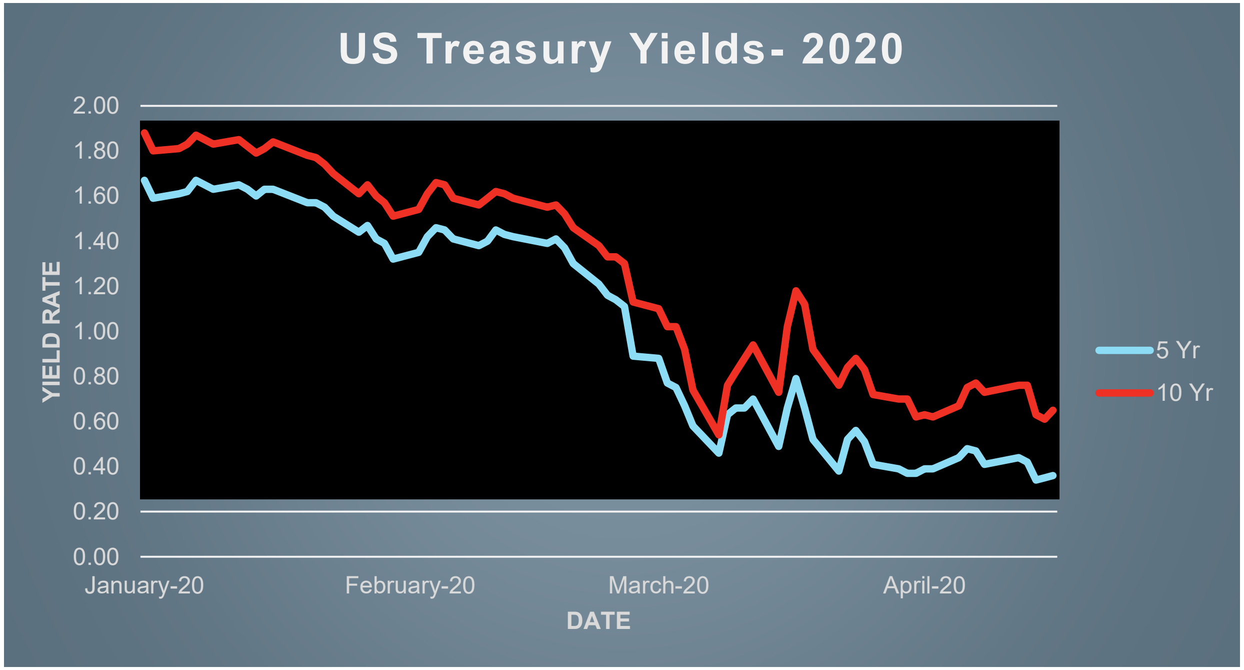
- For most taxpayers, for every $100,000 of QIP moved to 15-year / 100% bonus eligible property, the net present value is approximately $17,000 to $20,000
- Many public REITs (traded and NTRs) have suspended their dividend or are satisfying their distribution by changing to stock distribution as opposed to cash
- Cost Segregation increases depreciation on the income statement and results in less cash flow to distribute

Section VI

Impact on Real Estate Financing

Benchmark Rate Fluctuation:

- There have been significant swings in yield benchmarks since the COVID-19 outbreak, with the rate plunge beginning on February 21, 2020.



- Yields have fallen approximately 200 basis points from a year ago and approximately 120 basis points since January.
- Typically, this would result in lower overall interest rates for real estate; however interest rate spreads have widened at a greater pace.

Interest Rate Spread Movement:

- While benchmark yields have fallen approximately 120 basis points since January, average spreads (as evidenced by CMBS Pricing) have widened by 130 to 250 basis points.

CMBS SPREADS			
	Today	**One Month**	**January 1, 2020**
US Treasury			
10 Yr AAA	310	235	230
Bps Δ from Previous		**75**	**80**
AA	425	310	295
Bps Δ from Previous		**115**	**130**
A	575	420	400
Bps Δ from Previous		**155**	**175**
BBB-	845	565	560
Bps Δ from Previous		**280**	**285**

- As a result, overall interest rates have increased 4.00 to 4.50 percent. Interest rate floors were put in place in early March, but market-pricing has quickly caught up with those floors as of mid-April.

- The interest rate spreads have widened due in part to the pricing difficulties associated with the current real estate risk environment. This has caused bid-ask spreads to widen, with significant swings in the riskier tranches.

Liquidity Considerations:

- The Fed has made available a significant amount of capital to purchase high-yield corporate debt and commercial paper. This has provided liquidity to the overall bond and debt markets.
- There has been a noticeable tightening in commercial real estate lending since early March.
- Lenders have taken stock of their asset allocations when considering origination levels for the remainder of 2020.
- **CMBS Market**
  - The CMBS Market had a relative "freeze" in late March and early April, but this is showing signs of recovery in certain asset classes.
  - Volatility has made it extremely difficult to price deals, especially at the riskiest tranches.
  - Pricing will begin to become more clear as property-level cash flows are reported.
  - Pipeline remains strong, but the issuers are remaining cautious.

Liquidity Considerations:

- **Life Insurance Companies**
  - Life Insurance Companies have tightened their underwriting, but have remained open for business, especially with their best customers.
  - They are being selective with credit profile as real estate debt placement is competing with corporate debt placement internally (yields are converging)
  - Conservative LTVs will be matched with competitive pricing.
- **Bank Lenders**
  - Bank Lenders have pulled back significantly as their origination teams have focused on the SBA PPP program.
  - Bank syndications have slowed considerably due to pricing difficulty and the lack of availability for physical due diligence requirements.
  - Underwriting standards are tightening considerably. Lenders are focusing on their current customer base.
  - Construction lending is mainly on pause, with some exceptions depending on property-type (Industrial, single-tenant leased).

Liquidity Considerations:

- **Agency Multi-Family**
  - Agency Lending has been a bright spot, with significant liquidity and attractive pricing available, though there is limited appetite for seniors or student housing.
  - Surge in volume has occurred as life companies have slowed their overall lending in multi-family.
  - Mortgage forbearance is being offered if property owners suspend evictions during the length of the crisis.
- **Debt Funds & Mortgage REITs**
  - Lenders in this space are underwriting more conservative LTVs and reducing loan proceeds for deals in their pipeline.
  - Margin Call Risk has dramatically increased, especially in the hospitality space.
  - Mortgage REIT share price performance can be correlated to the % of loans tied to hospitality properties.

Capital Markets Implications by Property Type:

- Specific effects of the capital market disruption will vary by property type.
  - **Hotels** will be affected the most due to the lack of long-term leases and the immediate hit to their monthly cash flows. Debt will be generally unavailable to hotel owners in the near future.
  - **Big Box Retail** will also be significantly affected due to the increasingly low rent payrate for big box tenants (reportedly less than 25%). These properties will be placed on asset management watch-lists and there will be a general lack of available debt in this sector.
  - **Seniors Housing** will also experience a lack of debt availability due to restrictions in obtaining new tenants until the crisis has subsided.
  - **Office** is expected to hold up moderately, and will be highly dependent on the quality of the asset and its location.
  - **Multi-Family** will have significant debt capital available due to the influence of Fannie and Freddie.
  - **Industrial** will be actively pursued by lenders in the bank space, and there is expected to be significant debt liquidity due to structural shifts in consumer demand.
  - **Grocery-Anchored Retail** will also hold up well during this crisis, due to the increased demand for grocery products. That said, in-line and pad tenants are looking for rent relief, which will moderate pricing and debt availability in this space.
  - **QSR and Single-Tenant Leased** properties will also hold up well, due to the length of overall lease terms and their recession resistant tenancy (in many cases). Due to the small size of these loans, some lender focus will be pulled toward the SBA PPP program, but a strong pipeline of deals is expected for the second half of 2020.

Section VII

Practical Recommendations

Practical Recommendations

Investment companies and other investors required to measure real estate investments at fair value at the measurement date will need to evaluate their portfolio by putting investments into four buckets as follows.

1) Properties not affected at all - for example, a distribution facility bound to a long-term lease to Amazon. Likely discount rate cap rate changes are not to be severe. May be affected in later valuation dates when investor data more prevalent

2) Properties that will likely recover quickly after Covid-19 affects diminish - Clearly need to look at cash flows and reforecast for the rest of 2020. Will likely need to adjust capital markets assumptions based on specific facts and circumstances

3) Properties that were not doing well prior to Covid-19 that will likely not recover these should be looked at as vacant and will need income projection as well as capital markets changes

4) Properties that were vacant prior to Covid-19 – these will now take longer to be leased and capital market assumptions also will likely need to be adjusted for greater risk

Buckets three and four may require more intense focus

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Thank you for attending!

Questions?

Addendum A

Duff & Phelps Real Estate Advisory Group

Real Estate Advisory Group

The Duff & Phelps Real Estate Advisory Group (REAG) provides comprehensive support in connection with commercial real estate investments and transactions, asset and portfolio management and optimization, financing and debt advisory. Our services help our clients maximize the value of their real estate holdings, and make important business decisions with confidence.

GLOBAL PRACTICE

With over 275 employees in 10 countries we have the scale and local market expertise to meet our clients' needs anywhere in the world.

INDUSTRY EXPERTISE

Our professionals have the requisite credentials, such as MAI, MRICS, FRICS and ASA, and are experts in different industry segments including alternative funds, REITs, hedge funds, pension funds, structured finance, CMBS securitization, banking and corporate real estate institutions. All of our work is performed in accordance with regulatory requirements and local financial reporting standards.

INDEPENDENCE

We offer truly independent valuation and consulting services to our clients in accordance with professional and ethical standards, and ensure that we are not subject to conflicts of interest in performing our work.

COMPETITIVE ADVANTAGE

Duff & Phelps is unique in offering our clients a range of real estate advisory services which leverage our expertise in valuation, corporate finance, accounting and taxation. We can value any type of asset, liability or equity interest associated with a real estate investment or transaction across all sectors and geographies, providing our clients with the transparency they require.

Real Estate Advisory Group Overview

Duff & Phelps
Real Estate Advisory Group

OVER
$100M
REVENUES

275+
DEDICATED
REAL ESTATE PROFESSIONALS

OVER
1,300+
CLIENTS

SERVE
70% OF **TOP 25 LARGEST HEDGE FUNDS** AND **PRIVATE EQUITY FIRMS**

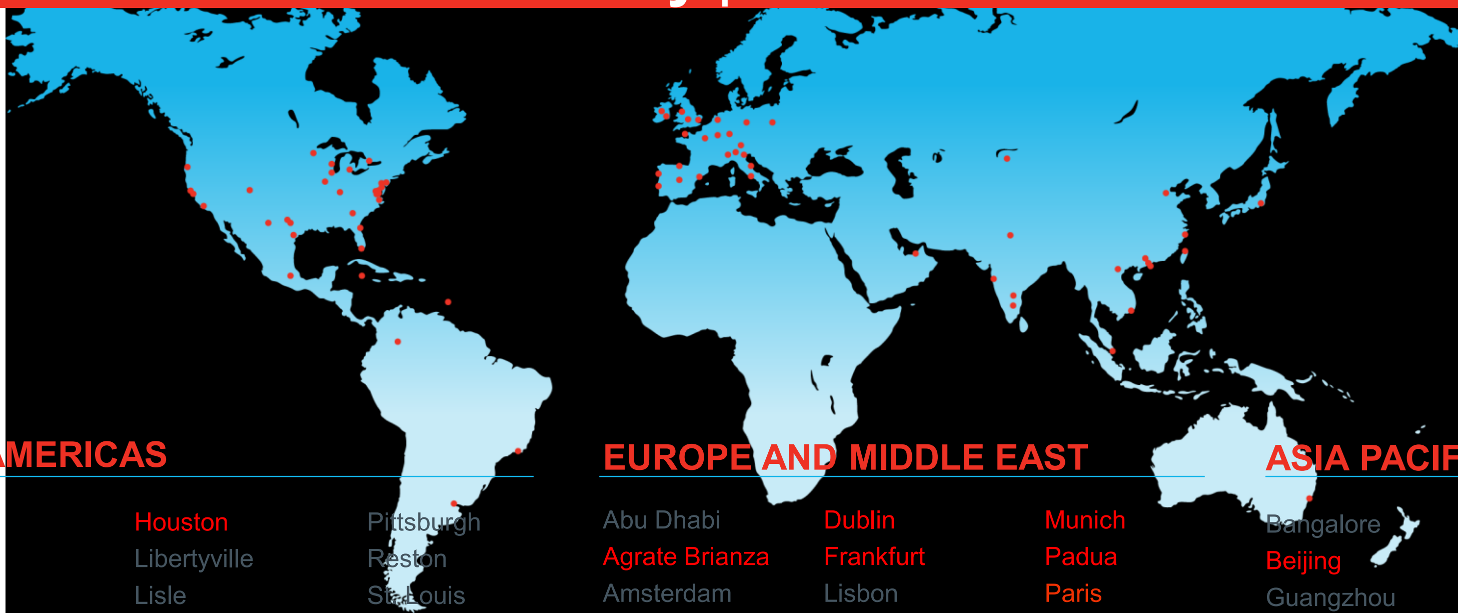
SERVE
48%
OF **TOP 100 U.S. REITS**

Helping clients maximize the value of their real estate

One Company

DUFF & PHELPS
Real Estate Advisory Group

Duff & Phelps has offices in **28 COUNTRIES** worldwide with **Real Estate Advisory** professionals in **11** of them



THE AMERICAS

Addison
Atlanta
Austin
Bogota
Boston
Buenos Aires
Cayman Islands
Chicago
Dallas
Denver
Detroit
Grenada
Houston
Libertyville
Lisle
Los Angeles
Mexico City
Miami
Milwaukee
Minneapolis
Morristown
Nashville
New York
Philadelphia
Pittsburgh
Reston
St. Louis
San Francisco
São Paulo
Seattle
Secaucus
Silicon Valley
Stamford
Toronto
Washington, DC

EUROPE AND MIDDLE EAST

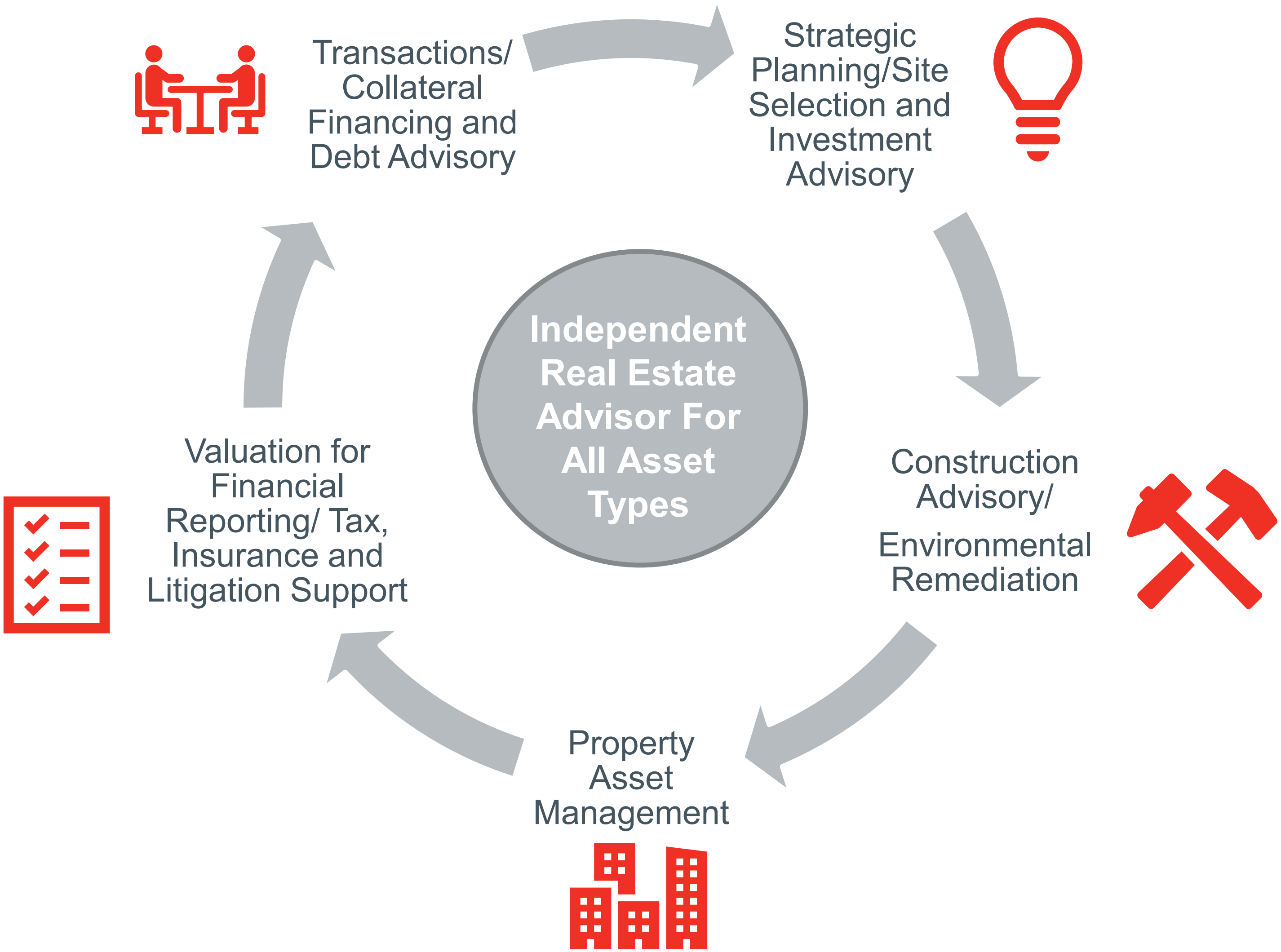
Abu Dhabi
Agrate Brianza
Amsterdam
Athens
Barcelona
Berlin
Bilbao
Birmingham
Channel Islands
Dubai
Dublin
Frankfurt
Lisbon
London
Longford
Luxembourg
Madrid
Manchester
Milan
Moscow
Munich
Padua
Paris
Pesaro
Porto
Rome
Turin
Warsaw

ASIA PACIFIC

Bangalore
Beijing
Guangzhou
Hanoi
Ho Chi Minh City
Hong Kong
Hyderabad
Mumbai
New Delhi
Shanghai
Shenzhen
Singapore
Sydney
Taipei
Tokyo

Note: Cities in red include Real Estate Advisory professionals.

Serving All Real Estate Needs



Services

Credentials

Our professionals include real estate valuation and consulting experts, real estate investment bankers, chartered surveyors, architects, engineers, and geologists. Certifications and memberships include MAI, RICS, CRE, ASA, HypZert, LEED and BREEAM, among others. Our appraisals are USPAP, IVS and RICS compliant.

Quality, Health and Safety, Environmental Management System - ISO 9001:2008 – OHSAS 18001:2007 – ISO 14001:2004

Royal Institution of Chartered Surveyors

Green Building Council Italia

LEED

Apprisal Institute

BREEAM

Serving Clients Across Real Estate Sectors

				
REITS	Funds	Banks	Hospitality, Leisure and Tourism	Retail

Addendum B

Duff & Phelps Overview

Duff & Phelps
Dedicated to Delivering Value

DUFF & PHELPS
Real Estate Advisory Group

Valuation and Corporate Finance Advisors

- More than 7,500 engagements performed in 2014
- 3,000 clients including more than 40% of the S&P 500

2,000+ Employees in more than 70 offices globally

Advisory Capability

- Valuation Advisory
- Dispute and Legal Management Consulting
- M&A Advisory
- Transaction Opinions
- Restructuring Advisory
- Alternative Asset Advisory
- Compliance and Regulatory Consulting
- Tax Services

HISTORY

1932-1994
Duff & Phelps founded and evolves into diversified financial services firm

1994
Credit ratings business spun-off

2005
Acquired Corporate Value Consulting (CVC) from Standard & Poor's

2007-2012
Listed on the NYSE

Financial advisor to examiner in Lehman Brothers bankruptcy

Engaged by the Congressional Oversight Panel on the Troubled Asset Relief Program

Acquired 14 complementary businesses to expand our service offering

2013
Taken private by The Carlyle Group, Stone Point Capital, Pictet & Cie, Edmond de Rothschild Group and Duff & Phelps Management Team

2015
Acquired Kinetic Partners and launched Compliance and Regulatory Consulting practice

Acquired American Appraisal, significantly enhancing our global Valuation practice

Global Presence

The Americas

Atlanta	Houston	Princeton
Austin	Jacksonville	San Francisco
Boston	Los Angeles	São Paulo
Calgary	Miami	Seattle
Cayman Islands	Milwaukee	Silicon Valley
Chicago	Montreal	Toronto
Dallas	Morristown	Vancouver
Denver	New York	Washington, DC
Detroit	Newport Beach	
Fredericton	Philadelphia	

Europe and Middle East

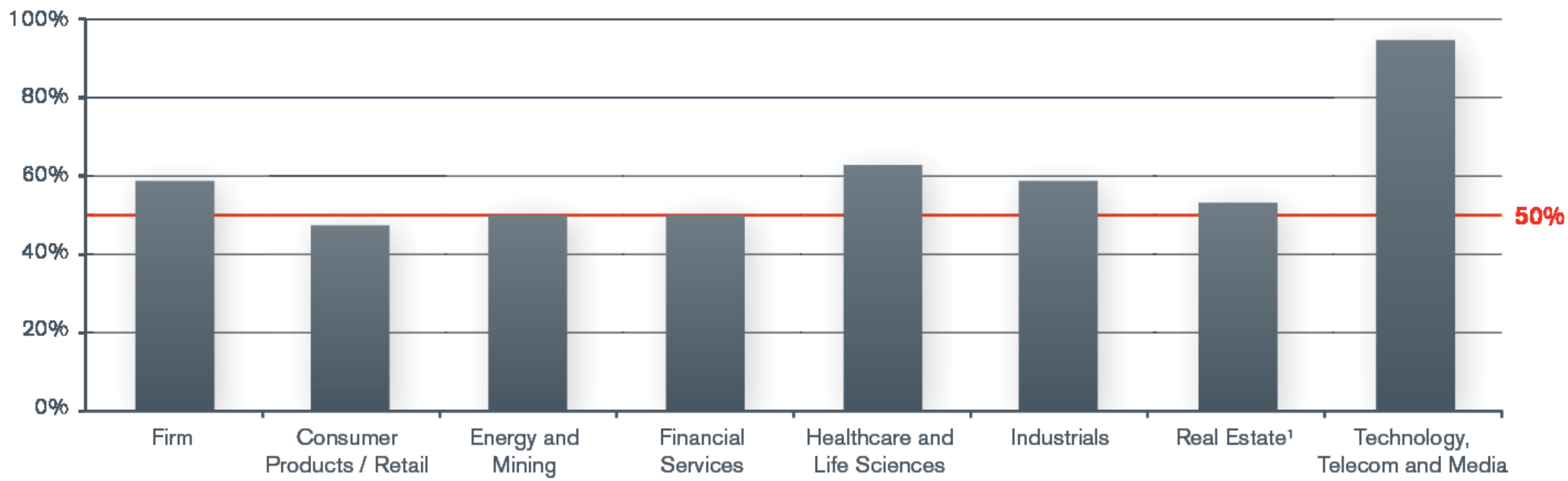
Abu Dhabi	Dublin	Munich
Amsterdam	Frankfurt	Padua
Athens	Leeds	Paris
Barcelona	Lisbon	Pesaro
Berlin	London	Porto
Bilbao	Longford	Prague
Birmingham	Luxembourg	Rome
Bologna	Madrid	Rotterdam
Budapest	Manchester	Turin
Channel Islands	Milan	Warsaw

Asia-Pacific

Almaty	Moscow
Bangalore	New Delhi
Bangkok	Shanghai
Beijing	Shenzhen
Guangzhou	Singapore
Hong Kong	St. Petersburg
Kiev	Taipei
Mumbai	Tokyo

Industry Expertise
Serving Nearly 60% of Fortune 100 Companies

Fortune 100 Market Share



1. Real Estate market share reflects share of Fortune 500 as there are no real estate companies in Fortune 100.

Enhancing Value Across a Range of Expertise

VALUATION ADVISORY

Valuation and consulting for financial reporting, tax, investment and risk management purposes

- Valuation Services
- Alternative Asset Advisory
- Real Estate Advisory
- Tax Services
- Transfer Pricing
- Fixed Asset Management and Insurance Solutions

CORPORATE FINANCE

Objective guidance to management teams and stakeholders throughout restructuring, financing and M&A transactions, including independent fairness and solvency opinions

- M&A Advisory
- Fairness Opinions
- Solvency Opinions
- Transaction Advisory
- ESOP and ERISA Advisory
- Commercially Reasonable Debt Opinions
- Distressed M&A and Special Situations

GOVERNANCE, RISK, INVESTIGATIONS AND DISPUTES

Combined Duff & Phelps and Kroll risk management and mitigation, disputes and other advisory services

- Business Intelligence and Investigations
- Disputes
- Cross-Border Restructuring
- Cyber Risk
- Legal Management Consulting
- Security Risk Management
- Compliance Risk and Diligence
- Compliance and Regulatory Consulting

PRIME CLERK

Provides bankruptcy and class action claims administration through its proprietary software and industry leading management team.

- Chapter 11
- Strategic Communications
- Contract Review
- Corporate Actions
- Class Action

Duff & Phelps Alternative Asset Advisory

*Duff & Phelps assists clients with **design and implementation of best-in-class valuation policies and processes**, including on-going review of valuation procedures and conclusions to ensure best practices.*

Market Leader

» Our client base consists of **400 alternative asset** fund managers and investors in the **U.S. and globally**

» We perform in-depth valuation analyses of all asset types for clients across the spectrum of banks, hedge funds and private equity firms globally:
  - **70% of the top 25** largest Hedge Funds
  - **70% of the top 25** largest Private Equity Funds
  - **50% of the top 25** largest publicly traded Hedge Fund platforms (business development companies or "BDCs")
  - Our client base includes **20 BDCs**
  - **Private debt funds** and **mid-market private equity funds** are the fastest growing segment of our client base

» We review or value over **10,000 investment positions** on a quarterly basis, including derivatives and structured products

» We have **12 full-time Managing Directors** and draw from D&P's pool of over 1,000 valuation professionals with wide ranging sector and asset class expertise across the spectrum

Thought Leader

» We are at the forefront of the industry's leading committees on valuation processes, guidelines, and regulations:

  – **IPEV** – Board Member
  – **ILPA** – Special Advisor
  – **AICPA PE/VC Valuation Guide Task Force** – Member
  – **FASB Valuation Resource Group** – Member
  – **Managed Funds Association** – Sustaining Member

» Leadership on drafting IPEV and PEIGG private equity valuation guidelines

» Development of Duff & Phelps Created Value Attribution Framework.

Duff & Phelps' Portfolio Valuation practice enables alternative investment managers to enhance their valuation process with the *independence and objectivity* that investors require.

Professional Affiliations

Duff & Phelps Managing Directors provide input to regulators and standard-setters, and actively contribute to the development of valuation industry best practices.

U.S. Securities and Exchange Commission MCMXXXIV

International Accounting Standards Board

FASB

Appraisal Institute™
Professionals Providing Real Estate Solutions

AICPA®

IVSC

The Appraisal Foundation

ima®

iapp

CREST.

IPEV
International Private Equity and Venture Capital Valuation Guidelines

AIMA

OECD

ASA
American Society of Appraisers
Providing Value Worldwide

Protect, Restore and Maximize Value

For more information about our global locations and services, please visit:

www.duffandphelps.com

About Duff & Phelps

Duff & Phelps is the global advisor that protects, restores and maximizes value for clients in the areas of valuation, corporate finance, disputes and investigations, cyber security, claims administration and regulatory issues. We work with clients across diverse sectors on matters of good governance and transparency. With Kroll, the leading global provider of risk solutions, and Prime Clerk, the leader in complex business services and claims administration, our firm has nearly 4,000 professionals in 25 countries around the world. For more information, visit .

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