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Changes in REIT Investment Strategy Following COVID-19

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Abstract

This paper examines the effects of COVID-19 on the Real Estate Investment Trust market. Regarded as a historically reliable and profitable investment, the pandemic has shown REIT investors that many sectors of real estate are not suited to withstand social and physical distancing. Real estate sectors like retail, office space, and lodging all experienced heavy losses due to restrictions and fear of catching the disease. Combining these factors with increased levels of remote work and digitalization suggests medium to long-term changes in the demand for various real estate classes. Through the study of workplace analytics, online shopping trends, societal behavioral changes, and individual company finances, new strategies for real estate investment have been determined to ensure REIT investment remains a profitable and reliable industry. This broad-view analysis was used to determine four REIT sectors that show long-term promise in the post-COVID-19 era: data center, cell tower/infrastructure, warehouse, and healthcare REITs. These findings will be useful for designing new investment strategies in the REIT industry to help investors navigate the changing real estate trends.

1. Introduction

The impacts of COVID-19 on the real estate investment industry are of a degree that demands short and potentially long-term changes in investment strategy. The restaurants in which we eat, buildings in which we work, stores where we shop, movie theaters we attend, and cloud services that we purchase all require real estate to operate. Demand for many of these real estate types is unlikely to return to pre-COVID-19 levels due to the benefits of work-from-home and increasing prominence of online shopping. Real Estate Investment Trusts (REITs), which often own and operate these real estate establishments, will need to evolve their investment strategies accordingly, or else risk significant financial losses.

Lockdowns, stay-at-home orders, and distancing measures mean that businesses around the world are not allowed to operate and are therefore missing rent obligations, leading to widespread losses that are likely to last beyond the pandemic in specific markets. For example, an REIT out of Boston (kept anonymous for business security), which owns a large high-rise building, has only been receiving 17% of total rental income, despite many of their tenants being large, publicly traded corporations. As pharmaceutical companies such as Pfizer and Moderna begin distribution of COVID-19 vaccines and the global economy seems ready to return to normalcy, there is concern that the REIT industry will not recover in the same way due to changes in societal and workplace behavior.

With a market capitalization of $1.3 trillion in the US, and over $2 trillion globally as of 2019 (Statista Research Department, 2020) the REIT industry was historically considered to be a low risk and profitable investment with steady growth and returns. However, optimism in this market rapidly deteriorated in the first quarter of 2020 as COVID-19 spread to become a global threat. By the end of February, large REIT firms like SL Green Realty had experienced a 53% decrease in share price, while Manhattan's office leasing volume dropped 46.9% compared to its 10-year quarterly average (Putzier, 2020). The average return on the S&P 500 by May 2020 was -5.0%, but REIT returns averaged -15.3%, tripling the losses (Schnure, 2021). Returns in areas such as retail, office, lodging sectors were hit the hardest, with 2020 returns ranging between -25% and -18% (Schnure, 2021). Overall, the total market capitalization of the US REIT market decreased from $1.3 trillion in 2019, to $1.1 trillion by the end of 2020, a 15.4% decrease (Nareit, 2020).

These losses are a direct reflection of the concern and uncertainty facing the market, as investors fear persistent changes in shopping and workplace behavior. Despite these concerns, investors should not shy away from REIT investment, but rather adopt new strategies that are in-line with emerging societal patterns. For example, the increased need for cloud networks, data storage, and healthcare have spurred huge increases in these sectors; the market cap of Equinix, an REIT specializing in data storage centers, has soared from $49.79 billion in February 2020, to $63.06 billion in January 2021 (Market capitalization of Equinix (EQIX), 2021). Some will argue that these patterns are solely dependent on the status of the pandemic, but management decisions at many companies suggest medium to long-term changes in the way that many types of commercial real estate are used.

The inability for modern office spaces to function safely in a pandemic and the realization that remote work saves money has begun the acceleration of a transition to long-term remote work, while record-breaking quantities of online shopping signal accelerated consumer abandonment of brick-and-mortar shopping (Choudhury, 2020). Going forward, decreased demand for office spaces will be driven by the overhead cost savings and satisfaction benefits of mobile work, with employers realizing huge savings with each employee who works from home

full-time. These savings signal horror for many established investors and developers as concerns grow around the future of office-space demand, while providing an opportunity for new players to take advantage of the weakened market.

In order to determine the best course of action for new investors seeking to enter the REIT industry at record lows, it is essential to analyze the finances and historical practices of the industry in conjunction with long-term societal adjustments to the conceptualization of the workplace. With significant proportions of society transitioning away from historical work, life, and consumption patterns, there will need to be shifts in REIT strategy if investors hope to remain profitable. Increases in remote work and online shopping, and the subsequent drop in demand for office and retail space, will fuel depreciation of these assets, influencing the REIT industry to divest from them and move their capital into REITs containing healthcare, warehouse, data center and telephone tower assets. These trends could also result in the repurposing of traditional office spaces.

Section 2 of this paper highlights the historic growth and stability of REIT investments and the current strategies used. Section 3 examines the impact of COVID-19 on the REIT industry and the potential for long term changes in the way the workplace is used. Section 4 analyzes these investment strategies, as well as the impacts of COVID-19, in order to conduct informed speculations on likely changes in investment strategy. Section 5 summarizes key findings of the thesis.

2. REITs: How We Got Here

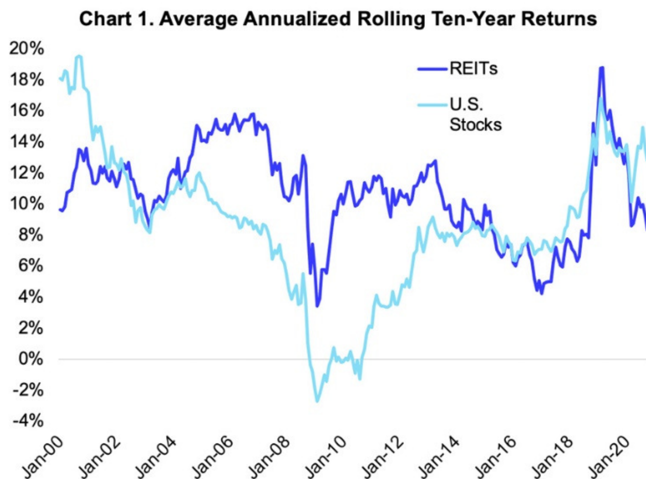
The REIT industry began under the Eisenhower administration in 1960 as a way for typical Americans to invest in commercial real estate. Prior to the creation of REITs, commercial real estate was unattainable to the average investor due to the high quantities of capital needed to finance ownership of these properties. Over the past 60 years, REITs have succeeded in making commercial real estate investment attainable to the American public, with over 43% of American households owning shares of REIT stocks, whether directly or indirectly (Nareit, 2021a). REIT investments typically have low correlation with the overall stock market and are often used as long-term investments that provide the investor with a steady source of monthly income. In fact, from 2003-2013, annual REIT returns never dropped lower than 3.43%, even during the 2008-2009 recession; while overall stocks (Russell 300), dropped into the negatives at -2.47% annualized returns (Case, 2016).

Following the success of the American REIT model, the use of and investment in REITs has spread outside of the United States. Today, a total of 36 countries have REIT legislation, allowing for investors to trade and invest in real estate on a global scale. Developing countries such as India, which passed REIT legislation in 2017, have given foreign investors, such as Canada's Brookfield Asset Management and American Private Equity firm Blackstone, opportunities to establish REITs in countries with high growth potential and demand for new commercial real estate (Sarkar, 2020). With India projected to be the most populous country by 2027, and one of the fastest growing GDPs of all economies, partially due to eased restrictions on foreign investment, there will be huge opportunity to capitalize on the real estate that will be needed to support their industrialization (Ritchie, 2019; Kedem, 2018). China is also currently piloting REIT investment by allowing the opportunity to buy into infrastructure and road projects. If this test-run is successful, China will provide huge opportunities for investors, with a projected potential REIT market capitalization of $3 trillion, nearly tripling the current market capitalization of US REITs (Bloomberg News, 2020).

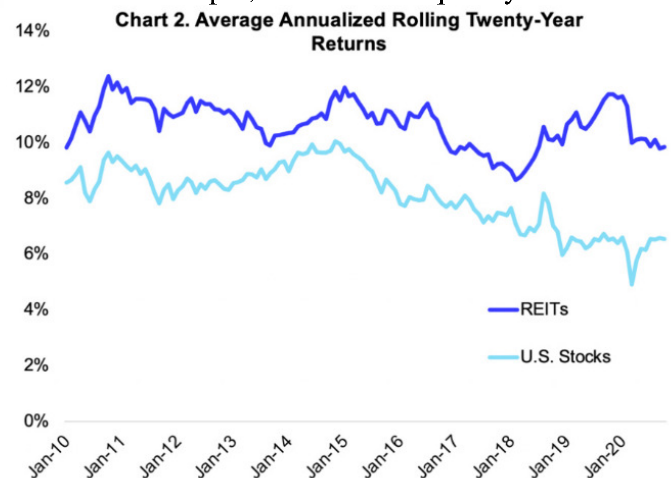
While there is the promise of huge new players in the global REIT industry, there are already many countries with growing markets. Australia, for example, has an established and thriving REIT market, with a capitalization of AUD 143.2 billion [$106.9 billion - July 2018] (Chong, 2019) and more resilience to COVID-19 impacts due to their relatively effective handling of the virus. Other countries like Japan, the United Kingdom, Singapore, France, Canada, Hong Kong, and Belgium all host growing REIT markets, with their combined market capitalizations totaling 24.7% of the global market (S&P Dow Jones Indices, 2021). The US currently accounts for 65.5% of the market alone, but foreign markets are increasing in popularity as investors see the long-term benefits (S&P Dow Jones Indices, 2021). However, it is important to be informed on the differences in taxation, management structure, and capital expenditure when investing in other countries. Although many foreign REIT markets have followed the model established by the United States, some markets have key differences in requirements that may impact investment decisions (Brown, 2019).

REIT investment has grown to be a $2 trillion (pre-COVID-19) industry thanks to low barriers to entry in the market, tax advantages, and a reputation of producing high and reliable dividend payments. Traditionally, real estate investment requires large quantities up upfront capital in order to secure an asset. Things like land, buildings, closing costs, and the buildouts required to make assets suitable for desired functions costs more than most Americans can afford. For example, as of November 2020, the average disposable income for Americans was $52,225 (U.S. Bureau of Economic Analysis, 2020). While this may often cover the basics of living for the average family, after financing vehicles, transportation, rent, food, phone bills, medical bills, and entertainment, there is little left for the average American to invest. The REIT industry has made real estate accessible to all investors because all they need to participate is enough money to cover the price of a share.

In order to qualify as an REIT, there are certain requirements laid out by the United States Internal Revenue Code that must be followed. First, REITs must invest greater than or equal to 75% of their total assets in real estate, cash, or U.S. Treasury bills, while at least 75% of their gross income must be earned through rents, mortgage interest, or real estate sales. Additionally, at least 90% of taxable income must be paid to shareholders in the form of dividends (Legal Information Institute, 2018). If these requirements are upheld, REITs only pay taxes on their retained earnings, while income passed on in the form of dividends is not taxed at the corporate level, only the individual level. REITs may often provide an individual with tax advantages as well: for example, some REITs qualify for

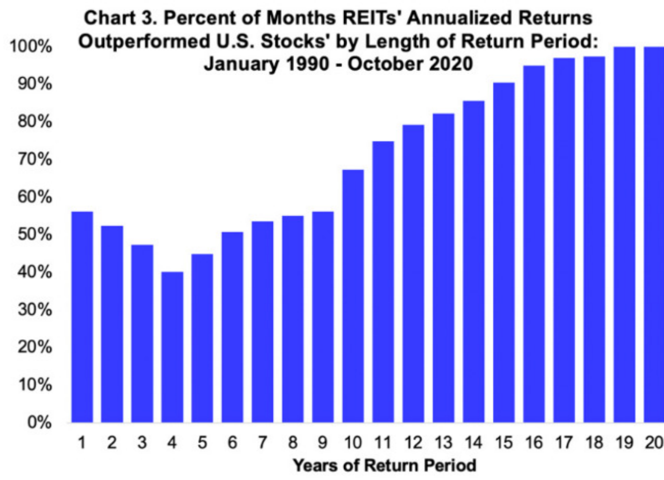


Source: Nareit analysis of Factset monthly returns from January 1990 through October 2020.



Source: Nareit analysis of Factset monthly returns from January 1990 through October 2020.

a tax deduction of 20% under the Tax Cuts and Jobs Act, providing a new and valuable opportunity for individual investors to save (United States Congress, 2017).



Combining the constant need for real estate in nearly all forms of societal life with tax advantages and dividend requirements create a recipe for reliable and relatively high returns over the long run. To illustrate this, it is helpful to compare the average annual REIT returns with the average returns on S&P 500, over 10- and 20-year periods. Chart 1 shows that although REIT 10-year REIT returns often outpace broad stock returns, it is not always the case, as seen in periods 2000-2002, 2014-2018, and 2020. However, when you look at REIT returns over a 20-year period in Chart 2, it is clear that REITs consis[...] averaged a standard deviati[...] Chart 3 further illustrates h[...] index returns when you increase the return-period t[...] investment so attractive to long term investors look[...] long periods. These returns have been historica[...] through the 2008 recession. The steady retur[...] real estate investors, with COVID-19 being thei[...] ndustry has been hit disproportionately hard by [...] ns for the benchmark S&P 500 clocked in around 16.2[...] ITs that produced earnings for the year (Schn[...] storage, timber, infrastructure, and data cen[...] essential despite environmental and econom[...] 12.73%, while the losing segments averaged -17.07[...] -23.60%, but these forms of real estate, along with re[...] ers begin to travel and eat out again. However, chang[...] ated uncertainty around the future of office and retail REITs, signaled by their respective returns of -18.44% and -25.18%. The deciding factor will likely be whether or not remote work and online shopping are temporary adaptations, or long term shifts in the way society functions. Unfortunately for many businesses, evidence shows these trends may be here to stay.

Table 1: REIT Returns 2020

REIT Sector	2020 % Return
Office	-18.44
Industrial	12.17
Retail	-25.18
Residential	-10.69
Diversified	-21.76
Health Care	-9.86
Lodging/Resorts	-23.6
Self Storage	12.91
Timber	10.33
Infrastructure	7.25
Data Centers	21
Specialty	-8.24
Mortgage	-18.77

Source: (Schnure, 2020)

3. COVID-19: Changing How We Work and Shop

Remote work refers to the ability to access company software and infrastructure from non-office locations and has become increasingly available to employees with the integration of technology into our daily routines and activities. Remote work provides many advantages, such as short commute time, increased flexibility, as well as cost savings. However, there are certain considerations and patterns that show remote work may not be a long-term solution for some companies. One such example is IBM, which was a pioneer in "telework," and used the program for over a decade. Despite reporting positive insights into the effectiveness and quantity of their remote workers, IBM began to recall the program in 2017, citing the need to improve collaboration and "accelerate the pace of work" (Simons, 2017). Despite the inefficiencies of remote work in highly collaborative projects, many companies are experiencing benefits and heightened employee satisfaction.

The most impactful benefit of remote work for corporations is the cost savings associated with leaving the office. According to Kate Lister, President of Global Workplace Analytics, an independent workplace consulting and analyst firm which analyzed over 4,000 studies, reports, and articles about remote work, "…a typical employer can save about $11,000/year for every person who works remotely half of the time" (Lister, 2020). These savings quickly add up and would allow companies to redirect those expenses to R&D, marketing, value chain management, and other investments to optimize growth of their companies. Table 2 details examples of real estate savings at large companies.

Table 2: Examples of Cost Savings through Reduction of Real Estate Use

IBM	Reduced real estate costs by $50 million annually
Nortel	Saves $100,000 per employee they do not have to relocate
Alpine Access	Remote agents close 30% more sales than in-person agents in the previous year, complaints decreased 90%, turnover decreased 88%
Sun Microsystems	Saves $68 million in annual real estate costs

Source: Global Workplace Analytics, 2020

From an employee perspective, cutting out the commute to office not only reduces expenses, but also saves time and fuel costs. In fact, a Texas A&M Transportation Institute report determined that the average American wastes 54 hours per year in traffic, with the number reaching as high as 83 hours in more congested cities (Schrank, Eisele, & Lomax, 2019). This time wasted not only leeches from hours of productivity, but also contributes to traffic and greenhouse emissions, further incentivizing environmentally conscious companies. With remote work, commute times are cut out completely, and employees have more ability to manage other complexities in life without having to call out. According to the American Management Association, organizations that utilize remote work recorded a 63% drop in unscheduled work absences as compared to in-person work (Global Workplace Analytics, 2020).

In addition to cost and time benefits, 66% of companies report increases in productivity following transitions to remote work. Table 3 gives notable examples of companies' productivity benefitting from remote work.
These increases in productivity and ability for employees to better manage personal lives means that 77% of the workforce now reports wanting to work from home at least weekly, regardless of

Table 3: Benefits of Remote Work Policies

Company	Benefit
Sun Microsystems	Employees spend 60% of the commuting time they save performing work for the company
AT&T	Remote workers work five more hours at home than their office workers.
JD Edwards	Remote workers are 20-25% more productive than their office counterparts
American Express	Remote workers produced 43% more than their office-based counterparts
Compaq	Increased productivity 15-45%

Source: Global Workplace Analytics, 2020

the pandemic (Global Workplace Analytics, 2020). It is estimated that 25-30% of the workforce will be working from home at least part time by the end of 2021 (Lister, 2020). Big name companies like Facebook, Twitter, Aetna, Microsoft, Nationwide Insurance, PayPal, and others are all planning to keep large amounts of their employees in remote work roles permanently (Courtney, 2020). This trend is not likely to go away, especially since COVID-19 has shown us how a contagious disease can render traditional office-spaces useless overnight. This is an issue because of the high costs of office-space, and the long-term leases that are typically required to reserve the spaces. Many corporations have had to abandon their office spaces indefinitely, while being stuck in pricey leases. While there have been moratoriums on residential rent, there has been less assistance to commercial lessees, leaving many companies to pay while not even operating or utilizing their real estate space. Combining these costs with the realized benefits and employee satisfaction of work from home, it is likely that more companies will transition to majority or part-time remote work. This is especially true as tech companies develop more sophisticated tools to facilitate collaboration via electronic communication (e.g., Microsoft Teams, Cisco Jabber, WebEx, Zoom, unique company interfaces). These trends have shown likely in many other developed countries, like Sweden, Australia, Norway, Canada, Netherlands, Switzerland, South Korea, who have all handled the remote work transition well and shown that they are capable of efficient remote work lifestyles (Chakravorti & Chaturvedi, 2020). On top of corporations transitioning to remote work, COVID-19 has created astounding growth in digital services, while dealing what could be a fatal blow to many brick-and-mortar retailers.

One company that has benefitted from lockdowns and pandemic fear is Amazon, with the company nearly tripling their profit over the course of the pandemic and their Web Services operating income increasing by 56% (Mattioli, 2020). Others like Facebook, Alphabet, and Microsoft all experienced massive growth in revenue; with the common thread being their web-based services. The transmission of COVID-19 has made popular shopping malls and stores an actual life-or-death risk for certain individuals, forcing even brick-and-mortar loyalists to opt for online delivery methods. This has resulted in many big-name retailers facing financial ruin. Corporations like J.C Penny, Ascena Retail (Lane Bryant, Ann Taylor), Brooks Brothers, Chuck E. Cheese, Century 21, GNC, Guitar Center, Lord & Taylor, Neiman Marcus, Pier 1, and others

have all filed for chapter 11 bankruptcy due to declines in revenue amid the pandemic (Markowitz, 2020). This is troubling news for real estate investors because it may serve as the "nail in the coffin" for many retailers, especially the highly leveraged shopping malls with billions in debt that scatter the country. Even before the pandemic brick-and-mortar retailers were facing struggles amid the rising prevalence of online shopping. 2017 marked a record-breaking number of retail closures at 8,000, only for this record to be broken in 2019 with 9,300 store closures (Conca, 2020). According to a survey of US shoppers by TopData, 73.5% of those surveyed reported that they are shopping online more than they did prior to COVID, and 88% of these people report that they will continue to shop more online even if there is a cure to the disease (Conca, 2020). The United States is not alone in this transition either, countries like China are also experiencing huge surges in online shopping, with the total number of online shoppers increasing by 17.3% from 2019-2020, as opposed to a 4.7% increase from 2018-2019 (Ma, 2020).

In order to compensate for the massive increases in digital work and shopping, there is higher demand than ever for data storage and cloud computing services. This has spurred huge growth in data center REITs, which generated the best returns for all REIT sectors in 2020. This growth generated many new competitors, causing a pullback in the market and subsequent price drops; however, the demand has been solidified and growth in the usage of cloud services will inevitably continue, signaling the potential for buy ins and long-term investment avenues as advances in driverless technology, artificial intelligence, and the internet of things fuel the need for more data centers. The combination of remote work advantages and the proliferation of online retail and services suggests heavy losses for companies and investors that have capital tied up in large office spaces and malls, while exposing opportunities in digital services. On the other hand, there is tough competition as supply rapidly grows, especially from giants like Amazon, Google, and Microsoft. This impacts pricing power of data center REITs and suggests growth may be slowed over the next few years (Seeking Alpha, 2020). However, this also signals buying opportunities for investors as the oversupply will increase buying power. Achieving success in the real estate market and the long-term stability that the REIT industry was once known for may very well depend on investors willingness to embrace digital service and related REITs.

4. Emerging Trends

COVID-19 has brought about challenges for real estate investors that have never been experienced before; with many established investors losing years' worth of portfolio progress. A personal source (kept anonymous for business security), who works in the Boston commercial real estate market, has frozen their real estate investment company and opted toward non-real estate advising for the time being due to the extreme losses they experienced. To illustrate the impact, I was given figures for a prominent high rise in Boston, managed by a well-known REIT, that leases to high-profile publicly traded companies. In February of 2020, this building clocked 13,000 unique visitors per day; a month later this number had dropped to 800 visitors per day, including large increases in staffing to clean the building. While physical occupancy ranged 8-13%, the building was only collecting 17% of rent. At first there was hope of rebound, but now that companies are saving money on rent and performing efficiently via remote work, investors "are going to have to figure out how to reconfigure and repurpose millions of otherwise un-utilized office and retail square footage."

There are many barriers to effectively repurposing office and retail space: the high cost of capital that is required to create the initial build-out of office spaces, the high cost of remodeling,

location and layout incompatibilities, and lower expected rent (Chung, 2020). In high demand markets (think New York, downtown D.C.), offices can rent at up to twice the rate of residential space on a per-square-foot basis (Chung, 2020). This is not to say it cannot be done, for example, in Baltimore City, 17 office conversions have replaced 2.8 million square feet of office space, while thousands in industrial-era cities across the country live in 19th century industrial lofts (Chung, 2020). However, these instances of repurposing commercial real estate are the exceptions, not the rule.

Typically, projects of this nature are usually done on outdated office buildings. Newer office buildings that would have stayed in operation despite COVID-19 have more freshly issued debt used to finance their buildouts, which can cost an additional 30-40% of the capital cost of the building, especially when contractors are unionized (Foster, 2020). This makes it nearly impossible for investors to gut these spaces to repurpose them for other uses because they are still paying off the debt from the original buildout. This has resulted in many established investors getting stuck in a difficult situation, facing steep losses if they abandon their real estate, but no efficient way to repurpose the space. This may drive future opportunities for new investors to acquire office and retail space for cheap prices as demands falls with remote work, but at the moment it is too up-in-the-air to judge. Due to this, it is recommended that real estate investors redirect their assets to REIT classes that support the rise in remote work and online shopping, specifically: data center REITs, cell tower REITs, warehouse REITs, and healthcare REITs. These asset classes are likely to give investors the best chance at achieving the long-term dividend stability that REITs have been historically known for.

Data Center REITs

COVID-19 has turned the benefits of condensed living models of cities into liabilities, making office spaces and retail undesirable, but also created a greater need for cloud capabilities, which rely on data centers to operate. Data center REITs have been a steadily growing investment class for years. An important factor of measuring REIT performance is their funds from operations, or FFO. This is a metric used to measure the cash flows for REITs and often replaces earnings per share measurements that are used for typical stocks. Essentially, if your FFO is increasing, it is an indicator of successful REIT performance (Chen, 2020). For example, Equinix, one of the largest data center REITs, has steadily increased its price per share from $386.47 per share in the last quarter of 2018, to $694.43 per share as of February 17 (NASDAQ:EQIX, 2021); while their FFO has grown from $1.2B in December 2012, to $3.492B in December 2019 (Finbox, 2021). These solid performance numbers are reflected in their average returns of 26.02% between 2011-2021 (Neticals, 2021), compared to an average return of 13.6% for the S&P 500 over the same time period (Schneid, 2020).

These promising performance metrics that have been boosted by COVID-19 show how data centers REITs are a growing necessity to ensure that there is adequate infrastructure to handle the increased demand for cloud computing. An Equinix global survey of over 2,485 business tech leaders indicates that 71% of businesses plan to move more functions of their operations to the cloud over the next twelve months (Equinix, 2020). This trend signals sustained future demand for data center REITs and may provide many opportunities for investors to cash in on long-term dividend payments. While the price of Equinix shares is exorbitantly high for the average investor, there are a number of data center REITs that provide the opportunity to get in on the rush before growth renders them inaccessible to many. Table 4 contains a list of current data center REITs that are available to investors, as of February 17, 2021. As you can see, the majority of these stocks, aside from Iron Mountain, reporting promising growth numbers with an

average of 14.48% increase in price per share, just 1.78% below the average S&P 500 return of 16.26%. One thing to keep in mind is that many of these companies are attempting to expand, which will result in increased operating costs and expenses that may temporarily slow the growth in share price.

Many of these share prices have already come down from their 52-week highs that took place during the height of lockdown in June/July. This is likely a reflection of positive vaccine news, prompting investors to sell their shares at peak levels to cash in on the growth. Because these companies will be pressured to meet the demand for increasing amounts of data usage and services, their long-term outlook remains stable, meaning that the current dip in prices indicates a good opportunity to buy before prices begin to increase again.

Table 4: Data Center REIT Prices in 2020

	Price Per Share: Feb. 17, 2021	52 Week Low	52 Week High	Price: Dec 31, 2019	Price: Dec 31, 2020	2020 % Change	Market Capitalization: Feb 17, 2021
Equinix	$694.42	$477.87	$839.77	$583.70	$714.18	22.35%	$61.87B
Digital Realty	$138.28	$105.00	$165.49	$119.74	$139.51	16.51%	$38.74B
CyrusOne	$70.59	$43.72	$86.77	$65.43	$73.15	11.80%	$8.5B
CoreSite	$121.17	$90.07	$141.50	$112.12	$125.28	11.74%	$5.18B
QTS Realty	$62.80	$42.64	$72.60	$54.27	$61.88	14.02%	$4.05B
Iron Mountain	$32.74	$21.00	$41.32	$29.19	$29.48	0.99%	$9.43B
Switch Inc.	$18.36	$10.30	$19.99	$14.82	$16.37	10.46%	$4.42B

Source: (NASDAQ, 2021)

One data center REIT that sticks out as providing opportunity for lower-income investors is CyrusOne Inc., which currently operates 50 data centers across the globe (Locations, 2021). While it is a smaller company relative to REITs like Equinix and Digital Realty, CyrusOne has promising plans for future growth. In 2020 the company purchased 33 acres of land in London to support growth in the European data center market, while also beginning development projects in Frankfurt, Dublin, San Antonio, Iowa, Phoenix, and Northern Virginia (Rapport, 2021). On top of developing greater physical infrastructure to store data, CyrusOne began offering hybrid cloud services through Google Cloud Interconnect, allowing the company to link its data centers to public cloud services that will enable companies to have greater control over their private data, a key component in attracting large companies (Rapport, 2021). CyrusOne also provides their services to 200 companies listed in the Fortune 1000, including Microsoft. These companies make up 77% of the companies annualized rent, which would often indicate diversification risk, this actually may be an indicator of stability as these companies are stable customers that provide the company with steady income to fuel their growth (Alpha, Captain, 2020). Due to their emphasis on growth and relatively low current price per share, it is advised to get in on CyrusOne as soon as possible, and hold onto the stock as a long-term investment.

Cell Tower/Infrastructure REITs

Cell tower REITs, also known as infrastructure REITs, have emerged as another promising investment as demand for the cloud computing and 5G capabilities increases. In 2020,

the 5G infrastructure market stands at a valuation of $12.6 billion and is expected to grow to a $44.9 billion market by 2025 (Security, 2020). This growth is mainly fueled by the rise in sales of 5G smartphones, which according to Gartner research are expected to account for 35% of smartphone sales worldwide in 2021 (Goasduff, 2021). These numbers are even higher in developed markets such as the United States, South Korea, and China, which is on track to reach 59.5% in 2021 (Goasduff, 2021). While production has been slowed due to COVID-19 and trade disputes between the US and China (GlobalSMT, 2021), the rise of 5G is inevitable due to the industrial applications it will be needed for, specifically AI and automated cars. Companies across the world have been developing these technologies, but their implementation is reliant on the speeds provided by 5G. In exactly the way that 4G enabled applications like Uber, Snapchat, and FaceTime, 5G speeds and broadband will give us the needed capabilities to implement things like self-driving cars, artificial intelligence, and other innovations yet to be discovered (Micron, 2020). With the compound annual growth of mobile data traffic forecasted at 59% through 2025, and self-driving cars forecasted at 63.1% between 2020 and 2030, 5G is global and here to stay (DiLallo, 2019; Grand View Research, 2018).

Cell tower REITs were created in 2011, with American Tower as the first to enter the market (DiLallo, 2019). Between 2011 and 2019, American Tower produced a 35.5% total return, compared to the S&P 500's return of 15.5% in that same time period for their respective share prices (DiLallo, 2019). Additionally, Cell Tower REITs grew their returns by an average of 19.7% during 2020, compared to a 15.76% return for the S&P 500 (Chamria, 2020). These impressive returns and growth in returns have fueled by the growth in mobile data consumption, which, as mentioned, will only accelerate with the rise of 5G. However, this means that investors will need to act quick if they wish to buy in before pricing becomes too restrictive. There are currently three predominate Cell Tower REITs on the market: American Tower, Crown Castle International, and SBA Communications (Chamria, 2020). Table 5 provides a breakdown of their respective shares.

Table 5: Cell Tower REIT Prices

	Price Per Share: Feb 19, 2021	52 Week Low:	52 Week High:	Price: Dec. 31, 2019	Price: Dec. 31, 2020	2020 % Change	Market Capitalization
American Tower	$226.37	$174.32	$229.78	$229.82	$224.46	-2.33%	$100.56B
Crown Castle International	$138.28	$105.00	$165.49	$142.15	$159.19	11.99%	$38.74B
SBA Communications	$261.77	$205.20	328.37	$240.99	$282.13	17.07%	$8.50B
Uniti Group	$12.73	$4.86	$13.40	$7.63	$11.73	53.74%	$2.96B

Source: (NASDAQ, 2021)

Similar to data center REITs, these stocks have come down from their highest price per share, which spiked in June-July 2020, and may experience some short-term drops in price per share as countries continue to implement intense vaccine schedules, encouraging investors to sell off their shares to profit off the COVID-19 driven spike. As shown by Table 5, cell tower REITs recorded impressive growth in 2020. Although American Tower's share price decreased 2.33% over 2020, the company is a behemoth that greatly bolstered its portfolio in 2020, acquiring $1.85 billion in communication assets across Africa, $3.5 billion worth of communication sites in the U.S and Canada, as well as a new long-term deal with T-Mobile, an exciting development as the company just recently finished its acquisition of Sprint (DiLallo, 2020). If you can afford to purchase

shares in this company, it is recommended, as they will be a key player in the global development of 5G technology.

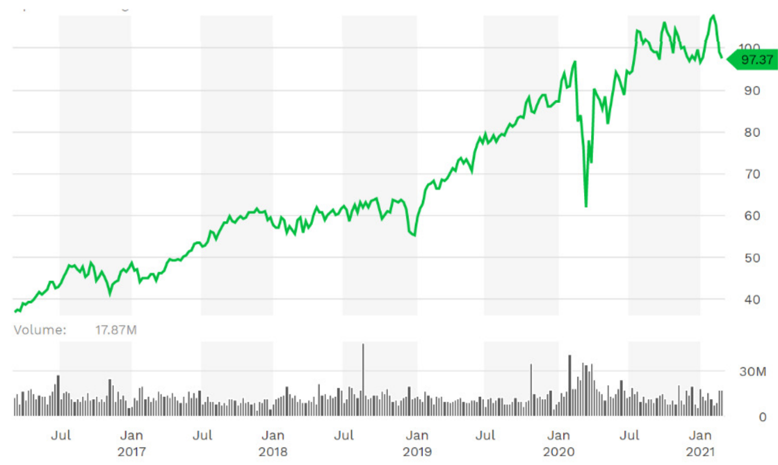
For the college-budget investor, Uniti Group, a company specializing in communications infrastructure (things like fiber optic cables and macro towers), shows promising signs of growth as well as high accessibility due to its low price per share. Their mix of long-haul and localized communications routes give Uniti the ability to serve a broad range of customers; business/enterprise, government, wireless communications, and tower companies (Bowler, 2021). Additionally, the company currently has established a five-year agreement with DISH, a national television provider. While TV providers have been struggling to keep up with streaming services like Netflix, Hulu, and Disney+, the agreement between DISH and Uniti is a signal of their strong capabilities as a communications infrastructure provider. Another advantage of Uniti is the current mispricing driven by the bankruptcy of one of their largest tenets, Windstream (Bowler, 2021). This had driven up the interest on Uniti's debt, but with Windstream emerging from bankruptcy with a relatively positive outlook, Uniti will have the opportunity to reissue its debt at market rates, saving the company up to $117.63 million, increasing its valuation (Bowler, 2021). Combining their improving debt position, subsequent mispricing, and anticipated increase in demand, shows that Uniti has a promising future outlook, which is backed by the substantial increase of 53.74% in their price per share. Because of this mispricing, it is recommended to purchase Uniti now as the price is expected to continue increasing.

Warehouse REITs

The rise of online shopping and subsequent fall in brick-and-mortar retail has also fueled demand for industrial real estate. The high demand for these spaces resulted in a total return of 12.17% in 2020, which is a positive sign of future performance given the devastation elsewhere in the REIT market (Nareit, 2021b). Things like warehouses, distribution centers, and manufacturing plants are all needed in increasing quantities in order to meet the growing amounts of online orders. From 2019-2020, leasing activity for industrial real estate rose 26.9%, with e-commerce being the main driver of the growth (JLL, 2021). The net absorption of these spaces, or amount of additional square footage being occupied, was a record-setting 273.5 million square feet (JLL, 2021), which is equivalent to 5,698 football fields of newly occupied space. This demand is not only for clothes and random Amazon purchases, but also grocery delivery; with the U.S. projected to need another 100 million square feet of cold storage to keep up with consumer demands (Thomas, 2020).

With the nation poised for the indefinite use of online retail, there are many options in the industrial segment. One company that stick out as providing opportunity for new REIT investors is Prologis (PLD), America's largest owner and operator of industrial facilities, as well as Amazon's largest property owner. With tenants like Home Depot, Walmart, UPS, and FedEx, Prologis is a global player with +620 million square feet of warehouse space in the United States alone (McBride, 2020). They manage massive warehouses, fulfillment, and distribution centers, with $2.1 trillion worth of goods passing through their over 500 warehouses (McBride, 2020). With a dividend return of 2.3%, there is ample room for the company to increase its yield, and it is likely to do so considering its rapid growth which will be permitted in the future thanks to Prologis' debt to equity ratio of 0.48 (Forbes, 2021). It is recommended that you purchase shares in this company now, and hold on to them, as growth is likely to continue. As you can see in Chart 4, ProLogis experienced a sudden drop in 2020 at the onset of Covid, but quickly rebounded, although it may face some volatility heading into 2021 due to business reopening and vaccine progress, ProLogis is predicted to maintain its upward trajectory.

Chart 4: ProLogis Five Year Growth in Price Per Share



Source: (Forbes, 2021)

Another source of industrial REIT success is the medicinal and recreational marijuana industry. Since marijuana is still federally illegal, it is often difficult for recreational and medicinal marijuana companies to secure funding from investors. However, one industrial REIT, Innovative Industrial Properties, has provided a solution to marijuana companies seeking funding by purchasing "vital assets from growers and then instantly leasing them back under long-term contracts" (Brewer, 2020). Most of their 67 marijuana-related properties are hydroponic grow houses; however, they also own multiple distribution and processing centers (Brewer, 2020). In 2020, the company earned an ROI of 19.61%, over 3% higher than the S&P 500 ROI of 16.26% (CSI Market, 2021). Since 2016, the company has steadily increased their annual dividend yield from $0.60 per share, to $5.19 in 2021 (Google Finance, 2021). Although the company did not meet its expectations for the fourth quarter of 2020, they remain a profitable marijuana-focused company, which is currently rare in the industry (Peters, 2021).

As of 2019, the legal marijuana market had a valuation of $17.7 billion, and is expected to reach $73.6 billion by 2027, with a compound annual growth rate of 18.1% during this period (Grand View Research, 2020). This growth will be fueled by the increase in legalization of marijuana at the state level, with New Jersey, Vermont, Arizona, Montana, and potentially South Dakota joining the legal weed industry (Gomez, 2020). While legalization at the federal level is currently unlikely, this may actually provide Innovative Industrial Realty an advantage in the market because it already has an established system to finance and operate industrial marijuana facilities, providing the opportunity to corral its own chunk of the industry. A potential threat may be realized if the SAFE Act is passed, which would provide additional protections to banks who do business with marijuana producers, lowering barriers to entry for more risk-averse investors (Peters, 2021). However, if Innovative Investment Properties is able to maintain its solid record of accomplishment, it could build of its reputation of being one of the first to market in the marijuana investment and real estate management field.

While COVID-19 is not a direct contributor to the success of the legal weed industry, it did show that legal marijuana is considered essential by many people, with many states increasing their sales by up to 20% at the onset of the pandemic (Alyssa, 2020). This ability for the marijuana industry to power through a global pandemic signals the stability and long-term investment potential that makes REIT investment so attractive. With this in mind, we recommend purchasing and holding Innovative Investment Properties for the long run. Currently, their share price is in a momentary low at $173.74, down from a late-February peak of $220.16, meaning that now would be a good time to buy (Google Finance, 2021).

Health Center REITs

Health center REITs are considered safe and defensive investments due to the low correlation with the overall stock market. No matter how the economy is fairing, or what is going on in the political arena, society needs health centers to manage ongoing care as well as emergency sickness and injuries. For example, while COVID-19 has decimated the demand for brick-and-mortar retail, hospitals and urgent care centers are in high demand and stretched to capacity. This stability of demand for healthcare providers carries over as stability for healthcare REITs because it allows for long term leases, often of 10 years or more, providing for reliable income and dividend yields (Frankel, 2021). Between 2000-2020, health center REITs have recorded average returns of 15.07%, compared to a 6.1% average return for the S&P 500 for the same period (Macro Trends, 2021). However, health center REITs are not invincible and infrequently experience years of losses; 2008 (-11.98%), 2013 (-7.06%), 2015 (-7.25%), and 2020 (-9.86%) (Macro Trends, 2021). While these losses are notable, the necessity of healthcare centers provides hopeful opportunities, especially as demand is predicted to increase.

Global demographic shifts will fuel the demand for more senior care and assisted living centers. As of 2021, the UN's average estimated life expectancy is 72.81 years, 6.61 years longer than the average of 66.20 years in 2000 (Macro Trends, 2021). With life expectancy increasing and nearly 40 million baby boomers entering the 65+ age group within the next 8 years, 1 in 5 US residents will be of retirement age by 2030 (United States Census Bureau, 2019). By 2034, those over 65 will outnumber children for the first time in US history (United States Census Bureau, 2019).

However, there are also challenges to growth in the healthcare sector. The 9.6% loss in 2020 for the REIT sector that was previously mentioned was a result of the high death rate experienced in nursing homes during COVID-19, increased operating costs associated with additional COVID-19 precautions, and decreased revenue from cancelled operations, all resulting in financial struggles for those in the healthcare sector (Jagielski, 2020). The combination of patient deaths and increased costs has especially led to turmoil for the operators of senior care facilities, with 77% reporting that it is "extremely important" that they receive federal funds in order to maintain their operations (Jagielski, 2020). So, while there are promising signs for the future of healthcare REITs, investors should be weary of healthcare REITs that focus solely on senior care facilities, and instead turn their attention to diversified healthcare REITs that own different types of healthcare facilities.

In terms of changes due to COVID-19, the pandemic has expedited a shift toward outpatient care that has been trending since 2005. Which means patients are more often utilizing things like urgent care centers, ambulatory surgery centers, and retail clinics (e.g., CVS/Walgreens), rather than costly hospital visits for treatment and procedures (LaPointe, 2019). This trend, combined with the 15% increase in medical school applications during COVID-19 (Murphy, 2021) and the Biden administrations plans to make healthcare more accessible through the Affordable Care Act (Pramuk, 2021) means there is huge potential for growth and new development in the healthcare REIT sector. This is not to say people will not go to hospitals anymore, but rather the overall increase in demand will fuel growth in new sectors.

One healthcare REIT that shows signs of success is Medical Properties Trust (MPW), an international healthcare REIT that focuses on net-leasing hospitals, meaning it purchases properties and leases them back to healthcare operators with the condition that the operators maintains responsibility for all maintenance, utility, and tax costs (DiLallo, 2021). The company typically signs these leases for 10–20-year terms, and owns properties in the U.S., Germany,

U.K., Switzerland, Italy, Spain, Portugal, Australia, and Colombia (DiLallo, 2021). This has allowed the company to maintain its cashflows during the pandemic, collecting all of the rent billed in 2020, which in turn has allowed them to acquire over $3 billion in new hospital assets during the year, including 30 hospitals in the U.K., two in Utah, and one in California (DiLallo, 2021). The company is well diversified, it partners with 46 operating companies and no single property accounts for more than 3% of their total portfolio (DiLallo, 2021). The company's focus on hospital ownership has given them a competitive advantage in the segment. This is reflected through their dividend payments, which have been increased for seven consecutive years and is currently at 5.23%, while their funds from operations have been growing at a compound rate of 8% (DiLallo, 2021). As of March 23, the price per share is $21.38, lower than the 52-week high of $22.75 (NYSE:MPW, 2021), but the outlook is positive considering their recent expansions, as well as the increasing vaccination rates that will allow hospitals to return to performing surgeries and increase their revenue. The outlook on Medical Properties Trust would be to purchase now. They are well diversified, have an impressive record of dividend growth, and are actively acquiring new properties to grow their portfolio. At $21.38 per share, it is also accessible to beginning and low-budget investors (NYSE:MPW, 2021).

While Medical Properties Trust has hospital realty covered, investors may also want to invest in a company that is more involved in outpatient services. For this, Ventas Inc. may be a good choice. Ventas is a well-diversified healthcare REIT that invests in senior living facilities, outpatient clinics, health systems, research centers, and medical offices (Rapport, 2020). The majority of the company's assets are senior care facilities (30%), so COVID-19 caused Ventas considerable blowback at the start of the pandemic, with shares dropping from $62.99 in February 2020, to $22.52 at the beginning of April (NYSE:VTR, 2021). However, the company has rebounded to $53.76 per share after a series of dividend and personnel cuts, as well as lease restructuring with large tenets that has served to stabilize their cash flows. Additionally, the company has paid off their revolving debt and finished 2020 with $3 billion in liquidity (Ventas Inc., 2021). Amid these defensive strategies, Ventas has also "advanced ground-up development of four Research & Innovation ("R&I") properties containing nearly 1.5 million square feet and nearly 800 new units in two communities in Quebec" (Ventas Inc., 2021). The company has vaccinated roughly 90% of their senior housing residents as of February and is seeing demand begin to rise after the pandemic pull-back. They have also received numerous awards, like the 2020 NAREIT Health Care "Leader in the Light," 2020 Dow Jones Sustainability World Index, and Bloomberg Gender-Equality Index (Ventas Inc., 2021). With current dividend yields at 3.35%, and funds from operations dropping 13.8% over 2020, Ventas still has some recovering to do, but given their COVID-19 response strategy and recognition for their Environmental, Social, Governance management practices, there is a positive outlook for the future of Ventas; and with current share prices still lower than they were pre-COVID-19, there is still opportunity to secure shares for the long-run.

5. Conclusions

While COVID-19 inevitably caused harm for many REIT investors, it has also provided an opportunity to learn and capitalize on future developments in the market. The pandemic provided valuable insights into the ways in which real estate is used and affected by global trends. With the end now in sight, investors have a new understanding of what REIT industries are vulnerable to things like lockdowns and social distancing, as well as sectors that provide opportunity for profit with the proliferation of online work and shopping. Real estate is connected to all that we

do, whether it be our homes, schools, work, shopping centers, or vacation spots; this means that while microeconomics are undeniably important when making individual investment decisions, successful real estate investment also relies on an in depth understanding of the macro trends in the market that provide clues to the changing ways real estate is being used. Further, the dependence of society on the use of real estate means that although the real estate market may go through cycles, it is not at risk of being phased out like other markets, such as petroleum-fueled cars. In effect, the heavy losses experienced by many REIT investors are not indicative of the REIT industry no longer being profitable, but rather that macrotrends are changing the sectors in which investment is profitable and relatively reliable. Based on this perspective, it would benefit investors most to buy into the REIT market now, before prices rebound to pre-pandemic levels and higher; and also, for investors to take advantage of emerging societal trends that will generate huge growth in data center, cell tower, warehouse, and healthcare REIT sectors.

References

Alpha, Captain. (2020, November 25). *CyrusOne: Recovery Around The Corner And A Compelling Valuation*. Retrieved from Seeking Alpha: https://seekingalpha.com/article/4391538-cyrusone-recovery-around-corner-and-compelling-valuation

Alyssa. (2020, September 1). *Coronavirus & Marijuana: The Rise in Marijuana During Coronavirus*. Retrieved from Banyan Mass: https://www.banyanmass.com/2020/09/01/the-rise-in-marijuana-during-coronavirus/

Ashworth, W. (2020, August 31). *5 Types of REITs and How to Invest in Them.* Retrieved from Investopedia: https://www.investopedia.com/articles/mortgages-real-estate/10/real-estate-investment-trust-reit.asp

Bloomberg News. (2020, June 2). *China Takes First Steps Toward $3 Trillion REIT Market*. Retrieved from Bloomberg: https://www.bloomberg.com/news/articles/2020-06-02/china-takes-first-steps-toward-launching-3-trillion-reit-market

Bowler, D. (2021, January 13). *Uniti Group Is Now A Full-Blown Growth Company*. Retrieved from Seeking Alpha: https://seekingalpha.com/article/4398823-uniti-group-is-now-full-blown-growth-company

Brewer, R. G. (2020, July 9). *3 Industrial REITs to Buy Now*. Retrieved from Motley Fool: https://www.fool.com/millionacres/real-estate-investing/reits/industrial-reits-to-buy/

Brewer, R. G. (2020, February 28). *Is Physicians Realty Trust Stock a Buy?* Retrieved from Motley Fool: https://www.fool.com/investing/2020/02/28/is-physicians-realty-trust-stock-a-buy.aspx

Brown, J. (2019, March 15). *The REIT Footprint Expands Globally.* Retrieved from Green Street: https://www.greenstreet.com/insights/blog/the-reit-footprint-expands-globally-2#:~:text=REIT%20markets%20around%20the%20globe,least%20one%20actively%20traded%20REIT.

Case, B. (2016, April 20). *Comparing Average REIT Returns and Stocks Over Long Periods.* Retrieved from Nareit: https://www.reit.com/news/blog/market-commentary/comparing-average-reit-returns-and-stocks-over-long-periods#:~:text=In%20particular%2C%20total%20returns%20of,and%2011.1%20percent%20per%20year.

Chakravorti, B., & Chaturvedi, R. S. (2020, April 29). *Which Countries Were (And Weren't) Ready for Remote Work?* Retrieved from Harvard Business Review: https://hbr.org/2020/04/which-countries-were-and-werent-ready-for-remote-work

Chamria, D. (2020, July 9). *3 Cell Tower REITs in Focus as Demand for 5G Accelerates.* Retrieved from Nasdaq: https://www.nasdaq.com/articles/3-cell-tower-reits-in-focus-as-demand-for-5g-accelerates-2020-07-09

Chen, J. (2020, August 19). *Funds From Operations (FFO).* Retrieved from Investopedia: https://www.cengage.com/dashboard#/my-dashboard/authenticated?page=

Chong, F. (2019, October). *Australian REITs: Going up, down under*. Retrieved from IPE Real Assets: https://realassets.ipe.com/australian-reits-going-up-down-under/10033304.article#:~:text=Total%20market%20cap%20of%20the,A%24143.2bn%20in%20July.

Choudhury, S. R. (2020, December 14). *More people are doing their holiday shopping online and this trend is here to stay.* Retrieved from CNBC:

https://www.cnbc.com/2020/12/15/coronavirus-pandemic-has-pushed-shoppers-to-e-commerce-sites.html

Chung, P. (2020, July 19). *Not every obsolete office building is cut out to become apartments.* Retrieved from Greater Greater Washingoton: https://ggwash.org/view/78585/not-every-obsolete-office-building-is-cut-out-to-become-apartments-2

Conca, J. (2020, August 21). *The Coronavirus Accelerates Online's Destruction Of Brick & Mortar Shopping*. Retrieved from Forbes: https://www.forbes.com/sites/jamesconca/2020/08/21/the-coronavirus-accelerates-onlines-destruction-of-brick--mortar-shopping/?sh=625a5edb4734

Courtney, E. (2020, September 8). *27 Companies That Have Switched to Long-Term Remote Work.* Retrieved from Flex Jobs: https://www.flexjobs.com/blog/post/companies-switching-remote-work-long-term/

CSI Market. (2021). *Innovative Industrial Properties inc (IIPR)*. Retrieved from CSI Market: https://csimarket.com/stocks/IIPR-Return-on-Investment-ROI.html

DiLallo, M. (2019, December 29). *Why Cell Tower REITs Stand Above the Rest.* Retrieved from Motley Fool: https://www.fool.com/millionacres/real-estate-investing/articles/why-cell-tower-reits-stand-above-rest/

DiLallo, M. (2020, December 26). *American Tower Corporation: What You Need to Know*. Retrieved from Motley Fool: https://www.fool.com/millionacres/real-estate-investing/reits/american-tower-corporation-what-you-need-to-know/

DiLallo, M. (2021, January 17). *Medical Properties Trust: What You Need to Know.* Retrieved from Motley Fool: https://www.fool.com/millionacres/real-estate-investing/reits/medical-properties-trust-what-you-need-to-know/

Equinix. (2020). *EQUINIX 2019-20 TECH TRENDS SURVEY.* Equinix.

Family Assets. (2018, March 8). *The Difference Between Skilled Nursing and Nursing Home Care*. Retrieved from Family Assets: https://www.familyassets.com/nursing-homes/resources/skilled-nursing-vs-nursing-home

Finbox. (2021). *American Tower Corporation (REIT).*

Forbes. (2021, March 5). *ProLogis (PLD)*. Retrieved from Forbes: https://www.forbes.com/companies/prologis/?sh=42f4e8703bc0

Foster, J. (2020). Effects of COVID-19 on Real Estate Performance. (P. Ciarcia, Interviewer)

Frankel, M. (2021, February 4). *Healthcare REITs*. Retrieved from Motley Fool: https://www.fool.com/millionacres/real-estate-investing/reits/health-care-reits/

Funari, N. (2020, November 5). *REIT Average & Historical Returns Vs. U.S. Stocks (S&P 500).* Retrieved from Nareit: https://www.reit.com/news/blog/market-commentary/reit-average--historical-returns-vs-us-stocks-sp-500

Global Workplace Analytics. (2020). *Costs And Benefits.* Retrieved from Global Workplace Analytics: https://globalworkplaceanalytics.com/resources/costs-benefits

GlobalSMT. (2021, January 6). *5G to fuel semiconductor demand.* Retrieved from GlobalSMT: https://globalsmt.net/5g-to-fuel-semiconductor-demand/

Goasduff, L. (2021, February 3). *Gartner Says Worldwide Smartphone Sales to Grow 11% in 2021.* Retrieved from Gartner: https://www.gartner.com/en/newsroom/press-releases/2021-02-03-gartner-says-worldwide-smartphone-sales-to-grow-11-percent-in-2021#:~:text=5G%20Is%20the%20Next%20Frontier%20of%20Growth%20for%20Smartphones&text=Gartner%20forecasts%20sales%20of%205G,year%20(s

Gomez, S. (2020, November 12). *The Growing Popularity Of Legalized Marijuana* . Retrieved from Addiction Center: https://www.addictioncenter.com/news/2020/11/states-legalized-marijuana/

Google Finance. (2021, March 5). *Innovative Industrial Properties Inc*. Retrieved from Google: https://www.google.com/finance/quote/IIPR:NYSE?sa=X&ved=2ahUKEwipuN-coprvAhVqZN8KHez2D5AQ3ecFMAB6BAgYEBo

Grand View Research. (2018, June). *elf driving Cars and Trucks Market Size, Share & Trends Analysis Report By Application (Transportation, Defense), By Region (NA, Europe, APAC, South America, MEA), And Segment Forecasts, 2020 - 2030.* Retrieved from Grand View Research: https://www.grandviewresearch.com/industry-analysis/driverless-cars-market#:~:text=The%20global%20self%E2%80%91driving%20cars,innovation%20in%20the%20automotive%20industry.

Grand View Research. (2020, February). *Legal Marijuana Market Size Worth $73.6 Billion By 2027 | CAGR 18.1%*. Retrieved from Grand View Research: https://www.grandviewresearch.com/press-release/global-legal-marijuana-market#:~:text=Legal%20Marijuana%20Market%20Size%20Worth%20%2473.6%20Billion%20By%202027%20%7C%20CAGR%2018.1%25&text=Based%20on%20product%20type%2C%20the,USD%209.1%20billion%20in%20201

Jagielski, D. (2020, October 3). *Are Healthcare REITs in Trouble?* Retrieved from Motley Fool: https://www.fool.com/investing/2020/10/03/are-healthcare-reits-in-trouble/

JLL. (2021, February 4). *United States Industrial Outlook - Q4 2020*. Retrieved from JLL: https://www.us.jll.com/en/trends-and-insights/research/industrial-market-statistics-trends

Kedem, S. (2018, April 5). *How India became the world's fastest growing economy.* Retrieved from Verdict: https://www.verdict.co.uk/how-india-became-the-worlds-fastest-growing-economy/#:~:text=The%20government%20said%20the%20growth,of%20restrictions%20of%20foreign%20investment.

LaPointe, J. (2019, June 28). *Healthcare Consumerism Driving Growth in Outpatient Services*. Retrieved from Revcycle Intelligence: https://revcycleintelligence.com/news/healthcare-consumerism-driving-growth-in-outpatient-services

Legal Information Institute. (2018). *26 U.S. Code § 856 - Definition of real estate investment trust.* Retrieved from Cornell Law: https://www.law.cornell.edu/uscode/text/26/856

Lister, K. (2020). *Work-At-Home After Covid-19—Our Forecast.* Retrieved from Global Workplace Analytics: https://globalworkplaceanalytics.com/work-at-home-after-covid-19-our-forecast

Locations. (2021). Retrieved from CyrusOne: https://cyrusone.com/#locations_section

Ma, Y. (2020, September 30). *Number of online shoppers in China 2009-2020*. Retrieved from Statista: https://www.statista.com/statistics/277391/number-of-online-buyers-in-china/

Macro Trends. (2021, March 5). *S&P 500 Historical Annual Returns*. Retrieved from Macro Trends: https://www.macrotrends.net/2526/sp-500-historical-annual-returns

Macro Trends. (2021). *World Life Expectancy 1950-2021*. Retrieved from Macro Trends: https://www.macrotrends.net/countries/WLD/world/life-expectancy

Market capitalization of Equinix (EQIX). (2021). Retrieved from Companies Market Capitalization: https://companiesmarketcap.com/equinix/marketcap/

Markowitz, A. (2020, November 23). *13 Iconic Retailers That Have Fallen Into Bankruptcy*. Retrieved from AARP: https://www.aarp.org/money/credit-loans-debt/info-2020/bankrupt-retail-chain-store-list-is-growing.html

Mattioli, D. (2020, October 29). *Big Tech Companies Reap Gains as Covid-19 Fuels Shift in Demand*. Retrieved from Wall Street Journal: https://www.wsj.com/articles/amazon-sales-surge-amid-pandemic-driven-online-shopping-11604003107

McBride, S. (2020, May 12). *"Amazon's Landlord" Is The Hidden Coronavirus Winner*. Retrieved from Forbes: https://www.forbes.com/sites/stephenmcbride1/2020/05/12/amazons-landlord-is-the-hidden-coronavirus-winner/?sh=7ec156487eda

Micron. (2020). *5G, AI, and the Coming Mobile Revolution.* Retrieved from Micron: https://www.micron.com/insight/5g-ai-and-the-coming-mobile-revolution

Murphy, B. (2021, January 12). *How the pandemic has spiked stress for many med school applicants*. Retrieved from American Medical Association: https://www.ama-assn.org/residents-students/preparing-medical-school/how-pandemic-has-spiked-stress-many-med-school#:~:text=There%20has%20been%20application%20surge,more%20applications%20mean%20more%20competition.

Nareit. (2020). *FTSE Nareit Real Estate Index Historical Market Capitalization, 1972 - 2019*. Retrieved from Nareit: https://www.reit.com/data-research/reit-market-data/us-reit-industry-equity-market-cap

Nareit. (2021a). *History of REITs & Real Estate Investing.* Retrieved from REIT: https://www.reit.com/what-reit/history-reits

Nareit. (2021b, February 28). *Industrial REITs*. Retrieved from Nareit: https://www.reit.com/about-reits/reit-sectors/industrial-reits

NASDAQ. (2021). Retrieved from Google: https://www.google.com/search?q=NASDAQ&rlz=1C1EJFA_enUS762US762&sxsrf=ALeKk02--L3PklixnKIMNZ50R9zorrUw2w%3A1618968989255&ei=nYF_YOyTD9SqtQa4-KSQDA&oq=NASDAQ&gs_lcp=Cgdnd3Mtd2l6EAMyCggAELEDEIMBEEMyCggAELEDEIMBEEMyCAgAEJECEIsDMg0IABCxAxCDARBDEIsDMgoIABCxAxC

NASDAQ:EQIX. (2021). Retrieved from Google: https://www.google.com/search?q=equinix+stock&rlz=1C1EJFA_enUS762US762&oq=equinix+stock&aqs=chrome.0.69i59j0l6j69i61.3520j1j7&sourceid=chrome&ie=UTF-8

Neticals. (2021, February 6). *Equinix Inc Stock 10 Year History*. Retrieved from Neticals: https://www.netcials.com/stock-10-year-history/EQIX-Equinix-Inc/#firstlist

NYSE:MPW. (2021). Retrieved from Google: https://www.google.com/search?q=medical+properties+trust+stock&rlz=1C1EJFA_enUS762US762&sxsrf=ALeKk0248-K7eb5BebFZq-mdaJ5GD4iDTw%3A1618969277765&ei=vYJ_YLaeLoLRtQac3KWIAQ&oq=medical+p&gs_lcp=Cgdnd3Mtd2l6EAMYATIECCMQJzIECCMQJzIECCMQJzIICAAQkQIQiwMyCwgAELED

NYSE:VTR. (2021). Retrieved from Google: https://www.google.com/search?q=ventas+stock&rlz=1C1EJFA_enUS762US762&sxsrf=ALeKk01Raz4S_uZVdxdD4EBYDsg7oifJoA%3A1618969166745&ei=ToJ_YOaJLc6F9

PwPru6QsAE&oq=ventas+s&gs_lcp=Cgdnd3Mtd2l6EAMYADIMCCMQJxCdAhBGEPoBMgcIABCHAhAUMgUIABCLAzIFCAAQiwMyBQgAEIsDMgUIAB
Owens, B. (2020, December 31). *21 REITs For 2021: What To Buy, Hold And Sell*. Retrieved from Forbes: https://www.forbes.com/sites/brettowens/2021/12/31/21-reits-for-2021-what-to-buy-hold-and-sell/?sh=7bd7b56447aa
Peters, B. (2021, Februaru 24). *Marijuana Stocks: Innovative Industrial Properties Results Miss After Breakout*. Retrieved from Investors: https://www.investors.com/news/marijuana-stocks-iipr-stock-innovative-industrial-properties-earnings/
Pramuk, J. (2021, February 2019). *Senate Democrats push for public option as Biden weighs health-care reform plans*. Retrieved from CNBC: https://www.cnbc.com/2021/02/19/democrats-kaine-and-bennet-introduce-health-care-public-option-bill.html
Putzier, K. (2020, April 7). *Investors Saw Office Buildings as Safe. Not During This Pandemic.* Retrieved from Wall Street Journal: https://www.wsj.com/articles/investors-saw-office-buildings-as-safe-not-during-this-pandemic-11586260800
Rapport, M. (2020, October 9). *Is Ventas a Buy?* Retrieved from Motley Fool: https://www.fool.com/millionacres/real-estate-investing/articles/is-ventas-a-buy-2020/
Rapport, M. (2021, February 3). *CyrusOne: What You Need to Know*. Retrieved from Motley Fool: https://www.fool.com/millionacres/real-estate-investing/reits/cyrusone-what-you-need-to-know/
Ritchie, H. (2019, April 16). *India will soon overtake China to become the most populous country in the world.* Retrieved from Our World in Data: https://ourworldindata.org/india-will-soon-overtake-china-to-become-the-most-populous-country-in-the-world
S&P Dow Jones Indices. (2021, March). *S&P Global REIT.* Retrieved from S&P Global: https://www.spglobal.com/spdji/en/indices/equity/sp-global-reit/#data
Sarkar, P. (2020, November 24). *Should you invest in REITs?* Retrieved from Forbes: https://www.forbesindia.com/article/take-one-big-story-of-the-day/should-you-invest-in-reits/64451/1
Schneid, B. (2020, July 15). *S&P 500 returns to halve in coming decade – Goldman Sachs*. Retrieved from SP Global: https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/s-p-500-returns-to-halve-in-coming-decade-8211-goldman-sachs-59439981
Schnure, C. (2020, May 22). *The Outlook for REITs During the COVID-19 Crisis.* Retrieved from Nareit: https://www.reit.com/news/blog/market-commentary/the-outlook-for-reits-during-the-covid-19-crisis
Schnure, C. (2021, January 6). *Past as Prologue: 2020 and REIT Performance in 2021.* Retrieved from Nareit: https://www.reit.com/news/blog/market-commentary/past-as-prologue-2020-and-reit-performance-in-2021
Schrank, D., Eisele, B., & Lomax, T. (2019). *Urban Mobility Report 2019.* The Texas A&M Institute.
Security, H. N. (2020, May 4). *5G infrastructure market estimated to reach $44.9 billion by 2025.* Retrieved from Help Net Security: https://www.helpnetsecurity.com/2020/05/04/5g-infrastructure-market-growth/
Seeking Alpha. (2020, December 11). *Data Center REITs: Cloud Is Getting Crowded.* Retrieved from Seeking Alpha: https://seekingalpha.com/article/4394230-data-center-reits-cloud-is-getting-crowded

Simons, J. (2017, May 18). *IBM, a Pioneer of Remote Work, Calls Workers Back to the Office.* Retrieved from Wall Street Journal: https://www.wsj.com/articles/ibm-a-pioneer-of-remote-work-calls-workers-back-to-the-office-1495108802?mg=id-wsj

Statista Research Department. (2020, December 16). *Market cap of REITs in the U.S. 1975-2019.* Retrieved from Statista: https://www.statista.com/statistics/916665/market-cap-reits-usa/#:~:text=Market%20cap%20of%20REITs%20in%20the%20U.S.%201975%2D2019&text=In%202019%2C%20real%20estate%20investment,real%20estate%20to%20generate%20income.

Thomas, L. (2020, July 9). *U.S. may need another 1 billion square feet of warehouse space by 2025 as e-commerce booms*. Retrieved from NBC: https://www.cnbc.com/2020/07/09/us-may-need-another-1-billion-square-feet-of-warehouse-space-by-2025.html

Trust, P. R. (2021, February 25). *Physicians Realty Trust Reports Fourth Quarter 2020 Financial Results*. Retrieved from Physicians Realty Trust: https://investors.docreit.com/news-events-market-data/press-releases/news-details/2021/Physicians-Realty-Trust-Reports-Fourth-Quarter-2020-Financial-Results/default.aspx

U.S. Bureau of Economic Analysis. (2020, December 23). *Disposable Personal Income: Per capita: Current dollars.* Retrieved from FRED: St. Louis Fed: https://fred.stlouisfed.org/series/A229RC0

United States Census Bureau. (2019, October 8). *Older People Projected to Outnumber Children for First Time in U.S. History*. Retrieved from Census: https://www.census.gov/newsroom/press-releases/2018/cb18-41-population-projections.html

United States Congress. (2017, January 3). Tax Cuts and Jobs Act. Washington.

Ventas Inc. (2021, February 18). *Management's Discussion & Analysis of Financial Condition and Results of Operations"*. Retrieved from Business Wire: https://www.businesswire.com/news/home/20210218005536/en/Ventas-Reports-2020-Fourth-Quarter-and-Full-Year-Results