



# **DIGITAL INFRASTRUCTURE UPDATE**

## **H1 2021**

Digital infrastructure broadly refers to the real assets that keep us all connected. The digital ecosystem includes multiple layers of infrastructure assets, equipment and technologies that all work together to provide us with the broadband coverage, capacity and computing power needed to live, work and play in today's virtual era. Data centers, cell towers, fiber optic networks and other essential digital infrastructure assets are the backbone of the internet, cloud computing, mobile broadband and much more.

**These are generally essential, highly resilient assets that provide potential for consistent cash flow, non-correlated returns and capital appreciation.**

We believe the sector is set for sustained and substantial growth, with market demand fundamentals intact and tailwinds created by the acceleration of digital transformation across the business world as a result of the pandemic. The impact of COVID-19 has highlighted the importance of these essential assets and the connectivity that we all depend on.

### **About Us**

Headquartered in Greenwich, CT with affiliated offices in Costa Mesa, CA, Strategic Capital Fund Management is an alternative investment manager focused on digital infrastructure and other technology-centric businesses. Its senior portfolio management executives have deep domain expertise in the digital infrastructure sector, with a combined 150+ years of experience and over \$160 billion in collective transactions and asset management experience.

This report utilizes public market trend and sector analysis. This is provided for illustration, educational and hypothetical purposes only.



## **STRATEGIC CAPITAL FUND MANAGEMENT ANNOUNCES FORMATION OF \$1.5+ BILLION DATA CENTER INVESTMENT PLATFORM<sup>1</sup>**

On September 8, 2021, Strategic Capital Fund Management announced the formation of a data center investment platform, Strategic Datasphere, LLC ("Datasphere"), in partnership with a seasoned management team led by Bryan Marsh, a senior industry executive formerly with Digital Realty Trust, Inc. (NYSE: DLR) and Head of Data Centers at Strategic Capital, and certain funds and accounts managed by a large, global institutional fixed income manager. Datasphere will be focused on the acquisition, development and management of fully and partially stabilized data center facilities, including through sale-leaseback transactions with leading technology, communications, cloud, enterprise and public sector tenants.

Datasphere will be led by Bryan Marsh, who has approximately 40 years of commercial real estate experience and previously served as Vice President and Portfolio Manager at Digital Realty Trust, Inc. (NYSE: DLR) with responsibility over approximately 8 million square feet of data center real estate valued at approximately \$5 billion across its U.S. Central Region. The Datasphere management team features more than 65 years of complex commercial and data center real estate experience across the full lifecycle of acquisitions, developments, leasing, operations and divestitures, which collectively reflect more than \$35 billion of assets transacted and managed.

Datasphere will seek to deploy capital strategically across North America and Europe to develop a diversified portfolio of high quality assets and tenants. Datasphere has received initial commitments of up to \$500 million of equity capital from its U.S. based investment partner, which is expected to support more than \$1.5 billion of data center investments, and may be supplemented with additional equity commitments over time.

---

1. Source: GlobeNewswire.com, "Strategic Capital Fund Management Announces Formation of \$1.5+ Billion Data Center Investment Platform", Sept. 8, 2021.

## **/ CONTENTS**

### **Executive Summary**

### **Secular Demand Drivers For Digital Infrastructure**

#### **Data Centers**

- » H1 2021 Data Center Market Trends
- » Market Commentary & Data
- » Data Center Leasing Activity
- » New Supply & Commissioned Power Growth
- » Outlook & Management Commentary

#### **Wireless Infrastructure**

- » H1 2021 Wireless Infrastructure Market Trends
- » Macro Demand Driver – Mobile Data Traffic Growth
- » Mobile Data Traffic Growth Forecast & Drivers
- » Wireless Infrastructure Sector Performance
- » High Tenant Retention Remains Steady
- » Carrier CapEx Ramping with 5G Deployment
- » New Entrants to Wireless Present Additional Tower Revenue Opportunities
- » Record Breaking Mid-Band Spectrum Auction
- » Outlook & Management Commentary

#### **Digital Infrastructure Valuations**

- » Cell Towers
- » Data Centers
- » Public Market Valuations – Implied Cap Rates Tightening
- » Public Market Valuations – Data Center & Tower REITs

#### **Notable Market Activity & Transactions**

- » Notable H1 2021 Transactions
- » Notable H1 2021 Market Activity

## **/ EXECUTIVE SUMMARY**

### **H1 2021 In Review**

#### **Digital Infrastructure – The Next Public Utility?**

Modern economies increasingly rely on digital infrastructure and connectivity, much like they do for water, gas and electricity. As the scale, depth and critical strategic nature of digital infrastructure grows, there is more evidence to view these assets as public utility-type assets. Particularly in light of the COVID-19 pandemic, digital infrastructure is increasingly being viewed as a national priority.<sup>1</sup>

#### **Accelerated Global Digital Transformation**

Demand continues to surge for digital services, driven by trends like remote work and off-premises computing, connected home entertainment, online learning, telemedicine, double-digit e-commerce growth and more.<sup>2</sup> Technology and innovation is changing how we live, work and interact at a faster pace than ever before.<sup>3</sup>

#### **5G Deployment & Other Advanced Technology Is Catalyzing Digital Infrastructure Growth**

The introduction, and continued deployment, of fifth generation mobile broadband ("5G") is catalyzing growth in the digital infrastructure market.<sup>4</sup> Faster speed, lower latency, higher bandwidth connectivity should continue to fuel growth in connected devices and other AI-powered applications, requiring more densification of digital infrastructure assets. Other technologies and hardware and software applications, like Wi-Fi 6,<sup>5</sup> deep learning, autonomous vehicles and growth in ARM/RISC-V processors and accelerators are also expected to continue to produce, store and process enormous amounts of data, paving the way for continued future growth in mission-critical digital infrastructure.<sup>6</sup>

#### **Surging Demand From Institutional Investors**

Increased capital allocations and widespread access to low-cost capital points to a favorable investment outlook for digital infrastructure. Infrastructure funds, sovereign wealth funds, and other institutional investors are increasing allocations to the digital infrastructure sector.<sup>7</sup>

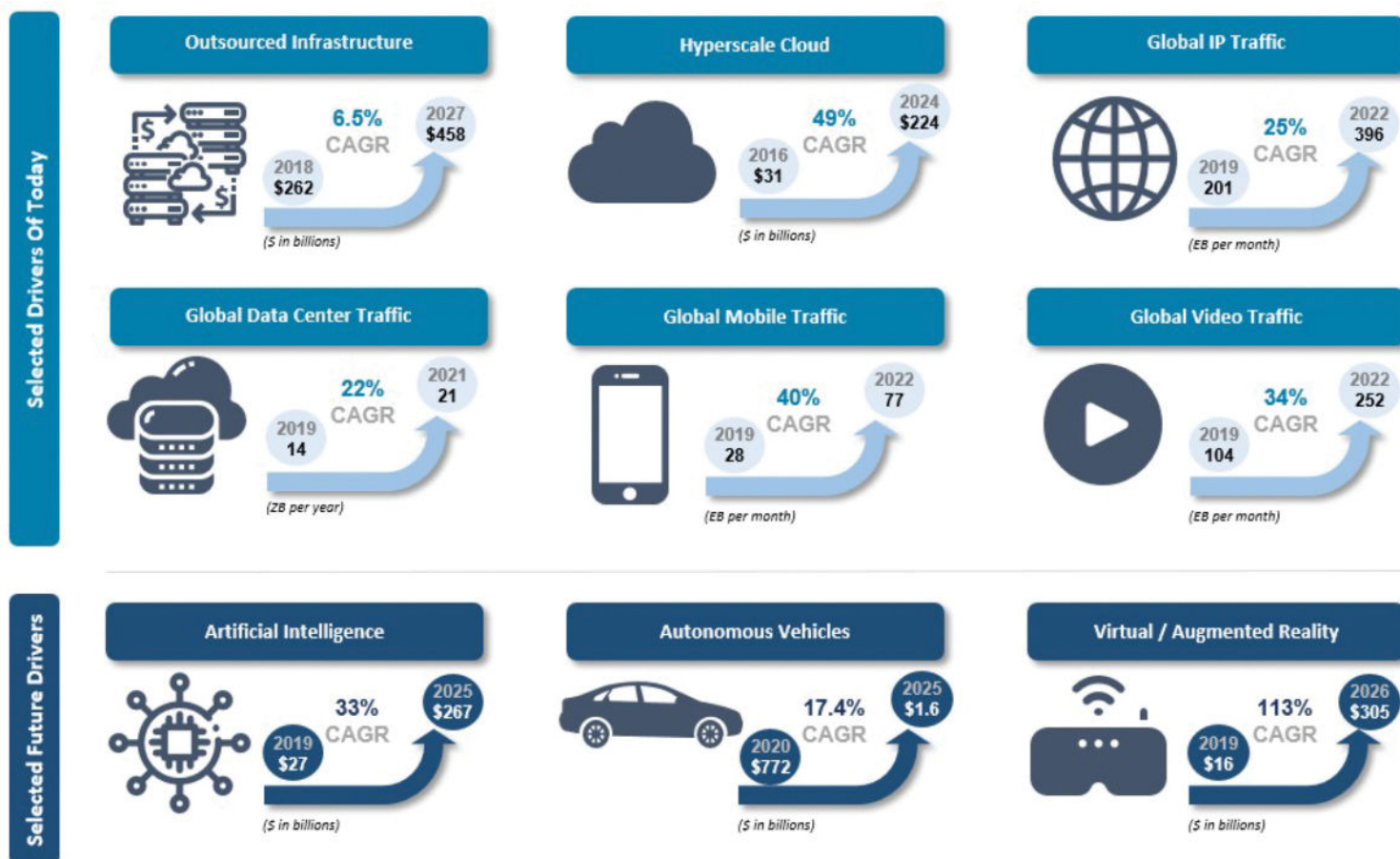
---

There is no guarantee that these trends will continue.

1. Barclays Equity Research, Sustainable & Thematic Investing, Green Data Centers: Beyond Net Zero.
2. GlobeNewswire.com, "Data Centers See Surge in Demand in Light of COVID-19 - Pandemic Could Accelerate the Move to Cloud Computing as Businesses Prepare for a World Where COVID-19 Could Re-Emerge", May 20, 2020.
3. McKinsey & Company, How COVID-19 has pushed companies over the technology tipping point—and transformed business forever, October 5, 2020.
4. Inside Towers Intelligence, Wireless Infrastructure Industry: Market Analysis Report, Q1 2021.
5. Barclays Equity Research, 650 Group.
6. ARK Investment Management LLC, Big Ideas 2021, January 26, 2021.
7. Data Center Frontier, "The Capital Deluge Continues for the Data Center Industry", August 25, 2021.

## / SECULAR DEMAND DRIVERS FOR DIGITAL INFRASTRUCTURE

The surge of new applications over the next few years is expected to complement several transformative drivers already in motion today that are creating an unprecedented demand for digital infrastructure services globally.



There is no guarantee that these trends will continue. Source: Outsourced Infrastructure: Absolute Market Insights (February 2021), Hyperscale Cloud: Structure Research, Global IP Traffic / Global Data Center Traffic / Global Mobile Traffic / Global Video Traffic: Cisco Indices, Artificial Intelligence: Fortune Business Insights (July 2020), Autonomous Vehicles: Research and Markets (December 2020), Virtual / Augmented Reality: Facts and Factors (February 2021).



# DATA CENTERS

*"The Powerplants of Computation"*

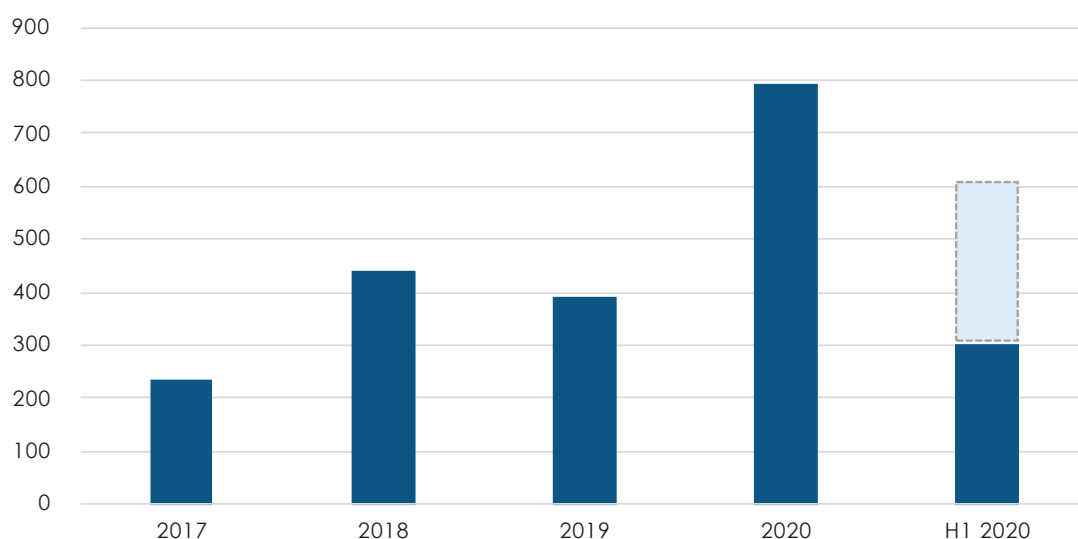
## // DATA CENTERS

### H1 2021 Data Center Market Trends

#### Market Commentary & Data

- » COVID-19 had profound tailwind effects on the North American data center market in 2020, with cloud computing, technology, social media companies and other enterprises driving demand to record levels.<sup>1</sup> Broadly, data centers have continued to perform, displaying resilience throughout the uncertainty of the commercial real estate markets since the onset of the global pandemic. In the first half of 2021, there has been a strong resurgence of enterprise-level data center demand as pandemic restrictions ease and companies are generally increasing their IT spend, with further growth anticipated.<sup>2</sup>
- » Note that the primary method of analyzing data center markets is measured in terms of megawatts ("MW"), not in terms of square feet. This is because data centers need critical power or "IT load" that is consumed and/or dedicated to IT equipment such as servers, storage equipment and communications switches and routers.
- » The data center market is on pace for another very strong year in 2021. While total H1 2021 leasing absorption is 7% lower, relative to H1 2020, it is still near all-time record levels.<sup>2</sup> JLL estimated total H1 2021 positive absorption at approximately 274 MW across the major primary data center markets in the U.S., compared to the previous year at 295 MW.<sup>1</sup> Data Center Hawk estimated a total of over 304 MW of absorption for North America in H1 2021.<sup>3</sup>

**Estimated total North American data center market absorption (MW)<sup>3</sup>**



1. JLL Research, Data Center Outlook 2021, September 8, 2021.

2. CBRE, North American Data Center Trends Report H1 2021, August 19, 2021.

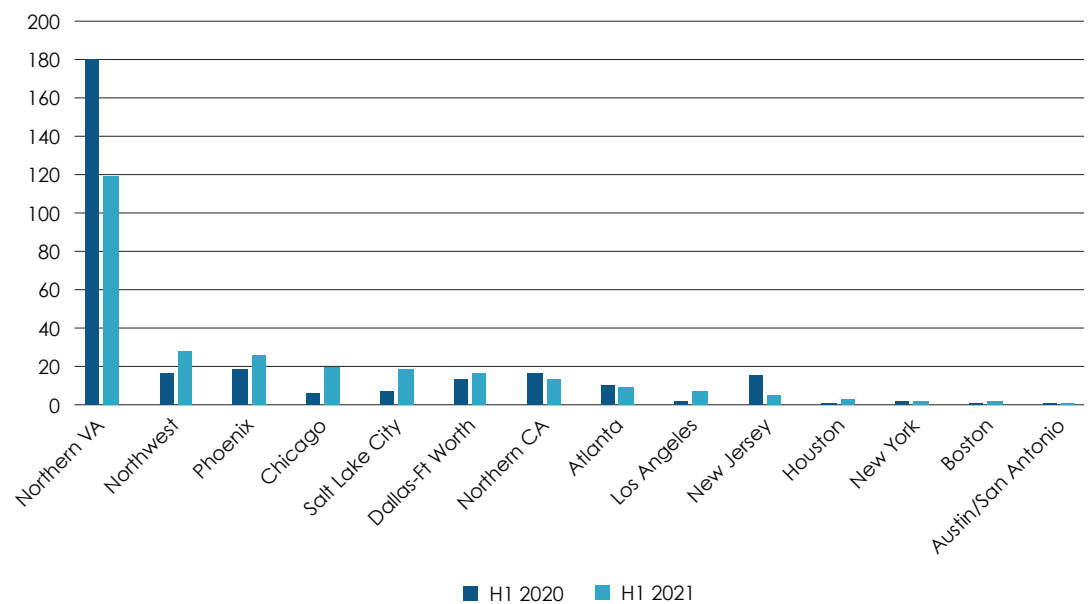
3. Data Center Hawk, 2Q 2021 Data Center Market Recap, September 2021, Strategic Capital Fund Management internal research.



Data Center Leasing Activity

- » The Northern Virginia data center market continues to lead the U.S. in terms of both size and total leasing absorption, but many secondary markets have also seen significant upticks in demand. Minneapolis, Houston, Austin-San Antonio, Southern California, Seattle and Denver all saw upticks in H1 2021.<sup>1</sup>
- » Hillsboro, OR specifically posted the largest net absorption of any secondary data center market, with nearly 15 MW of new wholesale colocation space filled during H1 2021.<sup>1</sup>

Absorption (MW) by market, year end 2020<sup>2</sup>

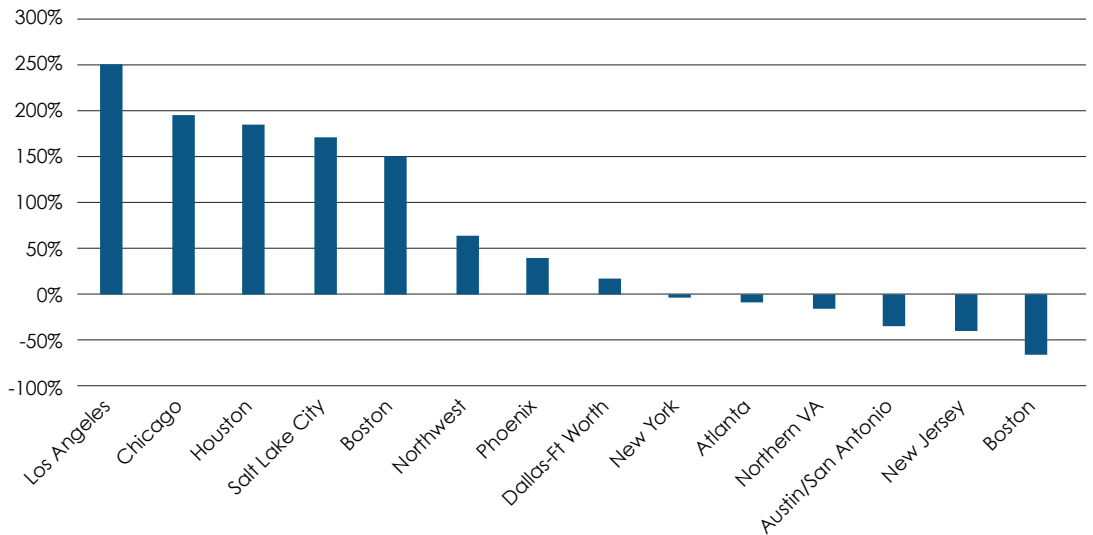


1. CBRE, North American Data Center Trends Report H1 2021, August 19, 2021.  
2. JLL Research, Data Center Outlook 2021, September 8, 2021.



- » Vacancy rates reached record lows in several markets, led by Silicon Valley with vacancy of only 1.7%.<sup>1</sup> At the end of 2020, total estimated vacancy in the North American data center market was at 7%.<sup>2</sup>
- » On a percentage basis, the largest data center absorption increases year-over-year occurred in the Southern California, Chicago, Houston, Salt Lake City, Boston, Northwest, Phoenix and Dallas/Fort Worth markets. However, note that total absorption on a nominal basis continues to be dominated by Northern Virginia, followed by the Northwest, Phoenix and Chicago.<sup>3</sup>

YoY change in absorption (%)<sup>3</sup>  
(H1 2021 compared to H1 2020)

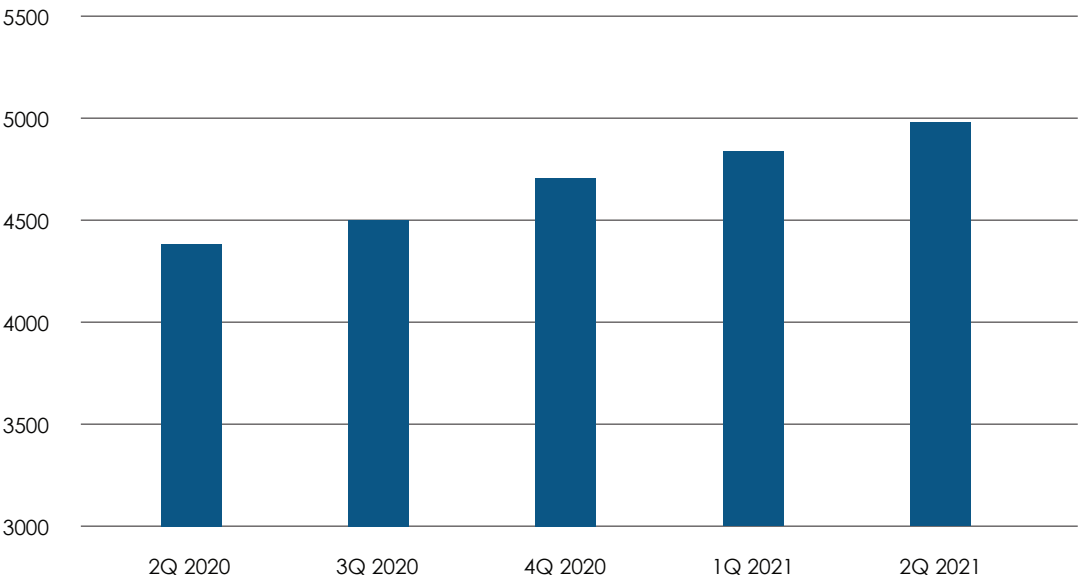


1. CBRE, North American Data Center Trends Report H1 2021, August 19, 2021.  
2. Data Center Hawk, 2Q 2021 Data Center Market Recap, September 2021, Strategic Capital Fund Management internal research.  
3. JLL Research, Data Center Outlook 2021, September 8, 2021.

New Supply & Commissioned Power Growth

- » New supply continued to grow at a healthy pace, increasing approximately 7% compared to last quarter according to CBRE.<sup>1</sup>
- » Construction ramped up from 611.8 MW at the end of 2020 to 680.8 MW in the first half of 2021 according to CBRE.<sup>1</sup>
- » Total commissioned power across the top 18 North American data center markets also continues to grow at a moderate pace, increasing 2.9% over last quarter, and 13.5% compared to 2Q 2020. Commissioned power figures include pre-leasing in order to more accurately reflect what data centers users look at in order to meet their deployment requirements.<sup>2</sup>

Commissioned power (MW) in top 18 North American markets<sup>2</sup>



1. CBRE, North American Data Center Trends Report H1 2021, August 19, 2021.  
2. Data Center Hawk, 2Q 2021 Data Center Market Recap, September 2021. Top 18 markets include: Atlanta, Chicago, Dallas/Fort Worth, Los Angeles, New York, Northern California, New Jersey, Northern Virginia, Phoenix, Seattle, Columbus, OH, Denver, Las Vegas, Montreal, Portland, OR, Salt Lake City, Toronto and Vancouver. Commissioned power figures include pre-leasing.

## Outlook & Management Commentary

- » Edge computing demand is anticipated to grow, driven by new technology deployments relating to applications such as Artificial Intelligence ("AI"), 5G, and blockchain technology platforms.<sup>1</sup>
- » Sustainability remains top of mind for customers, providers and investors, with clear trends moving towards renewable power and increased water efficiency.<sup>1</sup>
- » This year's total data center market transaction volumes are expected to outpace 2020.<sup>1</sup>
- » Institutional investor appetite has significantly increased in the data center sector in the last two years. Low cost "patient capital" coming into the market has made large scale single-asset and portfolio transactions much more competitive. Pricing on these transactions is moving closer to wireless infrastructure valuation multiples.<sup>1,2,3</sup>
- » **Strategic Capital Fund Management remains very positive on the data center sector with a long term view. We believe the global-macro demand drivers of increasing data volumes and technological innovation, generally long-term nature of data center operating leases with high-quality tenants, high lease renewal rates, and healthy access to low cost capital, point to a favorable investment environment in digital infrastructure.<sup>3</sup>**

---

1. CBRE, North American Data Center Trends Report H1 2021, August 19, 2021.

2. Barclays Equity Research.

3. Information provided by Strategic Capital Fund Management.

# WIRELESS INFRASTRUCTURE

*"The 4th Public Utility"*





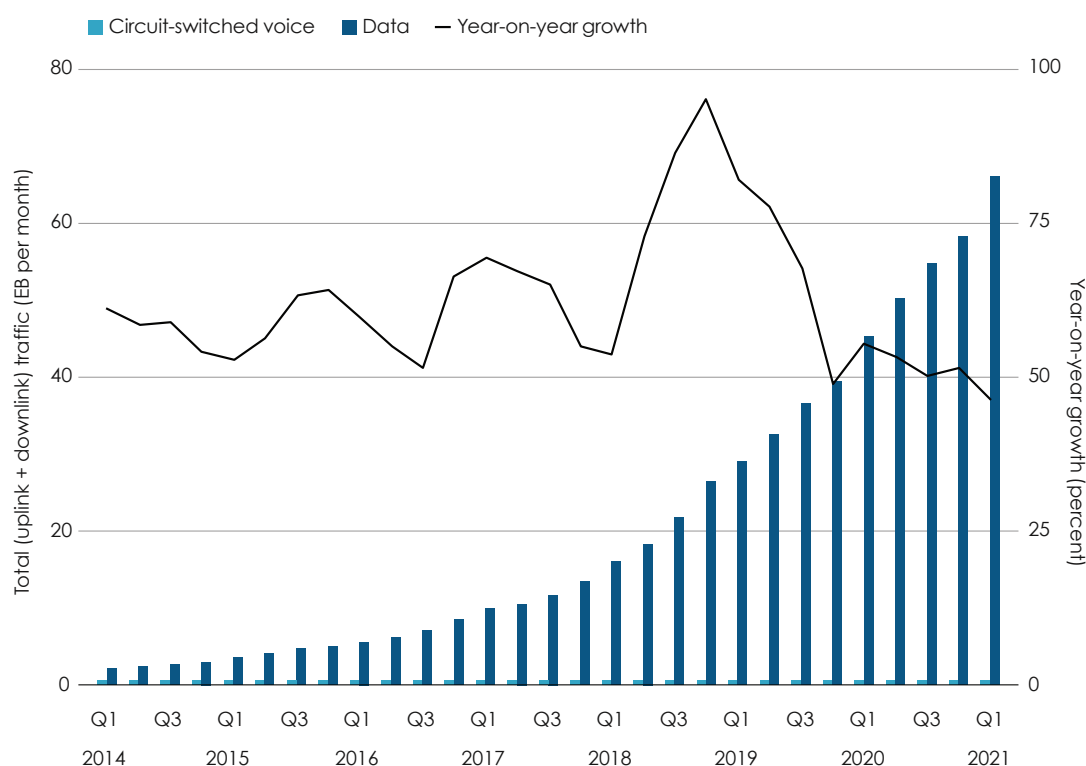
## / WIRELESS INFRASTRUCTURE

### H1 2021 Wireless Infrastructure Industry Trends

#### Macro Demand Driver – Mobile Data Traffic Growth

- » Wireless infrastructure is an essential component of the digital and communications ecosystem, often referred to as a “4th utility” given its critical role in connectivity for consumers, businesses, first responder networks and government agencies.<sup>1</sup>
- » One fundamental market driver is the measurement of mobile data traffic, which supports the need for continued densification of wireless infrastructure assets such as cell towers, fiber networks and other types of cell sites.<sup>1</sup>
- » Over the long term, mobile data traffic growth is driven by both the rising number of mobile device subscriptions and an increasing average data volume per subscription, fueled largely by growth in streaming of video content and other data-hungry applications. The figure below shows total global monthly network data and voice traffic from Q1 2014 to Q1 2021, along with the year-on-year percentage change for mobile network data traffic.<sup>2</sup>

#### Historical global mobile data traffic (EB per month)<sup>2</sup>



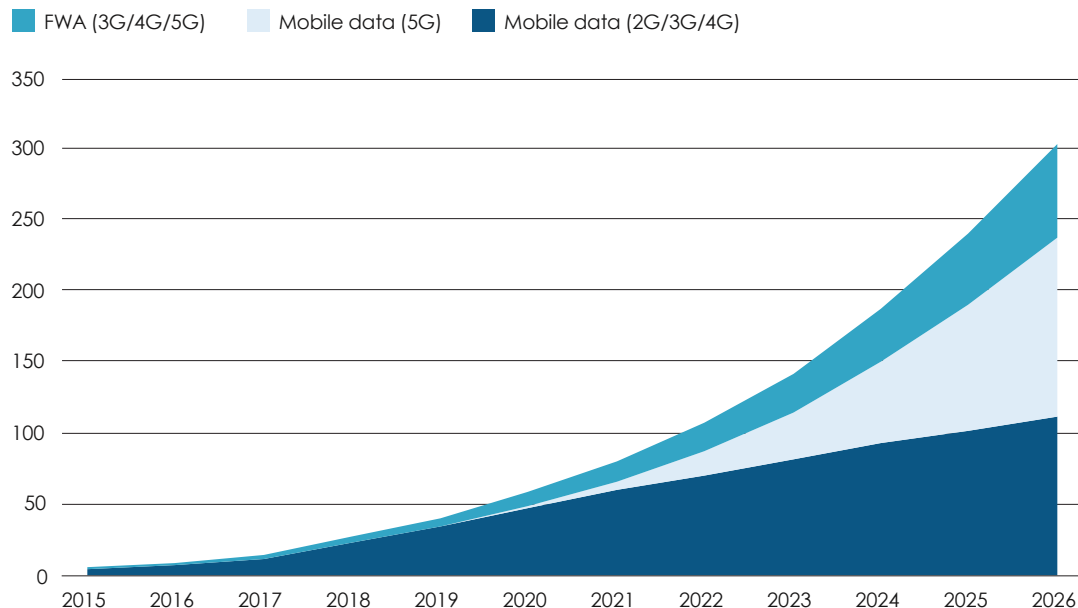
1. Information provided by Strategic Capital Fund Management.

2. Ericsson Mobility Report, June 2021. Traffic does not include DVB-H, Wi-Fi or Mobile WiMAX. VoIP is included. Note: Mobile network data traffic also includes traffic generated by fixed wireless access (FWA) services.

## Mobile Data Traffic Growth Forecast & Drivers

- » According to the June 2021 Ericsson Mobility Report, total global mobile data traffic – excluding traffic generated by fixed wireless access (FWA) – reached 49EB per month at the end of 2020 and is projected to grow nearly 5x to reach 237EB per month in 2026. By including FWA traffic, this took the total mobile network traffic to 58EB per month at the end of last year.<sup>1</sup>
- » The total mobile network traffic is forecasted to exceed 300EB per month in 2026. The monthly global average usage per smartphone now exceeds 10GB, and is forecasted to reach 35GB by the end of 2026, with smartphones accounting for about 95% of the total.
- » Populous markets that launch 5G early are likely to lead traffic growth over the forecast period. By 2026, it's expected that 5G networks will carry 53% of total mobile data traffic. Video traffic currently accounts for 66% of all mobile data traffic, a share that is forecasted to increase to 77% in 2026.
- » Growth in mobile data traffic per smartphone can be attributed to three main drivers:
  1. Improved device capabilities,
  2. Increase in data-intensive content, and
  3. Higher data consumption due to continued improvements in performance of deployed networks

### Forecasted global mobile network data traffic (EB per month)<sup>1</sup>



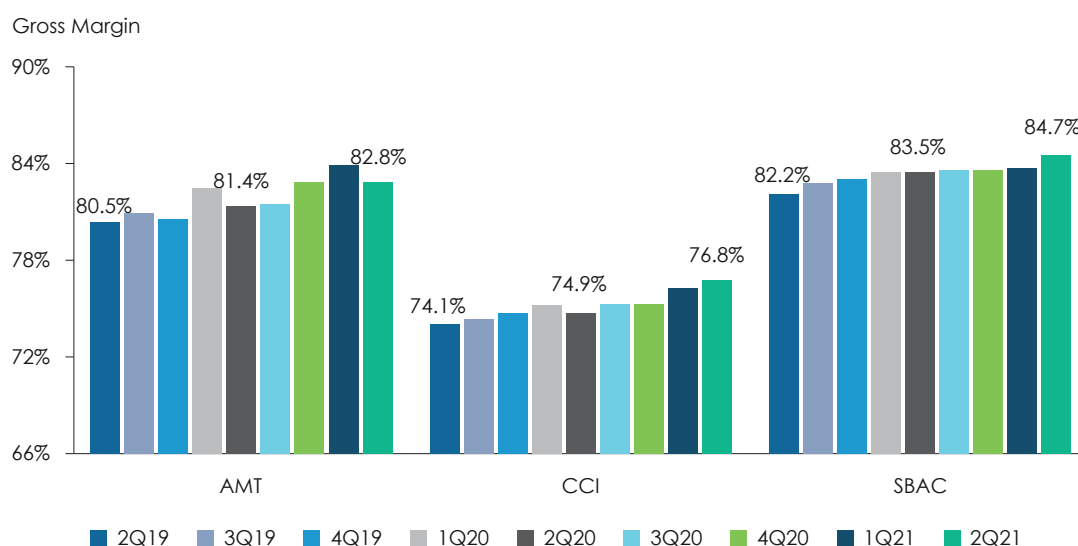
There is no guarantee that these trends will continue.

1. Ericsson Mobility Report, June 2021.

## Wireless Infrastructure Sector Performance

- » Measured by market capitalization, cell tower infrastructure REITs are the single-largest property sector represented in the public REIT markets. Just the top three tower REITs represent nearly 20% of the total public REIT market. We believe the reported metrics of the largest three public TowerCos are meaningful, as they collectively are estimated to control approximately 75% of all domestic towers and wireless infrastructure assets.<sup>1</sup>
- » As the top U.S. broadband carriers focus on aggressively deploying their nationwide 5G networks, infrastructure owners are generally reporting meaningful upticks in leasing activity, network service revenues and, ultimately, earnings performance. As broadband carriers, or Mobile Network Operators ("MNOs"), upgrade to 5G, this often requires new or additional networking equipment to be installed on existing cell sites. All three major TowerCos have reported strong H1 2021 performance, generally beating estimates and raising guidance for AFFO growth.<sup>2,3</sup>
- » New MNO equipment deployments are driving increased levels of lease modifications with tower and other wireless infrastructure owners, generally resulting in higher rental revenues. Given that the carrier tenants generally bear the expense of the new equipment and installation, minimal CapEx spend is required from tower owners. This ramp in activity has been directly increasing major TowerCo operating margins. Note that Crown Castle remains the lowest of the group, given their large exposure to more capital intensive small cell and fiber network assets.<sup>2,3</sup>

### Domestic tower site gross margins<sup>2</sup>



1. Hoya Capital Real Estate, "Cell Tower REITs: Space Race Risk", September 21, 2021.

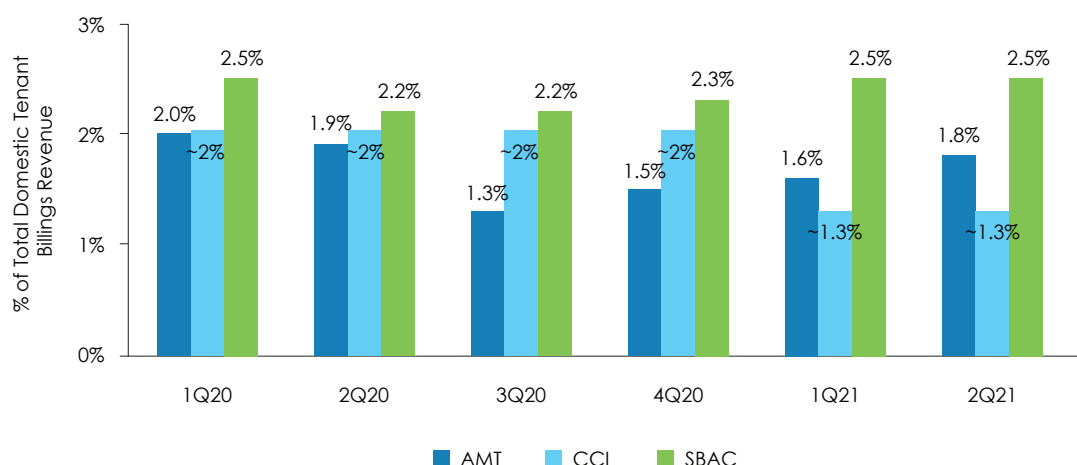
2. Barclays Equity Research, Global Communications, TowerCo Q2 State of the Industry, August 19, 2021.

3. Strategic Capital Fund Management internal research.

## High Tenant Retention Remains Steady

- » Anchor tenants for TowerCos are generally major MNOs like Verizon, AT&T, T-Mobile, US Cellular and others that typically sign long-term operating leases to rent space on cell towers and other wireless infrastructure assets. Tower companies also generally benefit from very high lease-renewal rates, typically between 96-98%. This is primarily due to several key factors, including the tenant's need to maintain, expand and improve network coverage and capacity, costs of relocation, and to avoid network interruption due to the honeycomb-like design of cell sites.<sup>1</sup>
- » In H1 2021, domestic tenant churn rates of the largest tower companies remained relatively steady, ranging from 1.3% to 2.5%. Note that American Tower and SBA Communications both expect a moderate short term elevation in churn rates beginning in late 2021 as a result of legacy Sprint leases terminating.<sup>2</sup>

### Domestic churn rates of top TowerCos<sup>2</sup>



1. Strategic Capital Fund Management internal research.

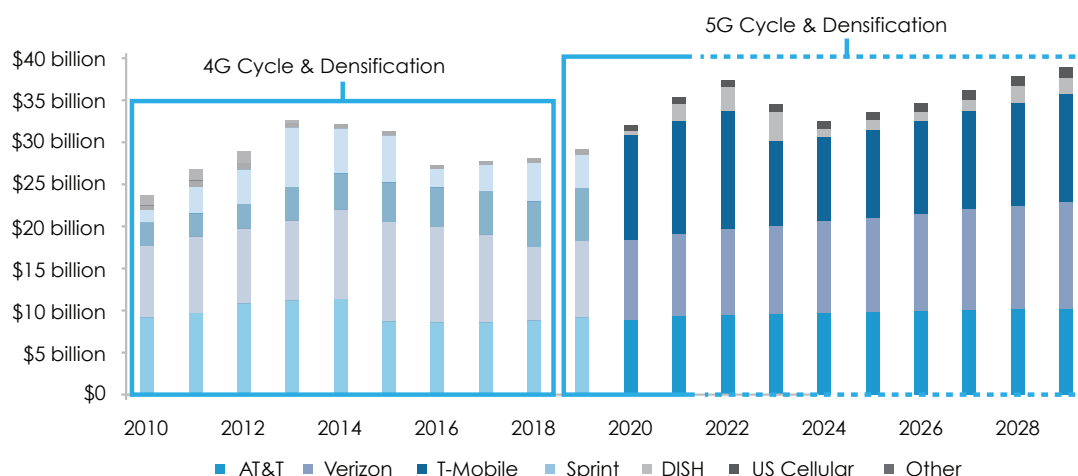
2. Barclays Equity Research, Global Communications, TowerCo Q2 State of the Industry, August 19, 2021.



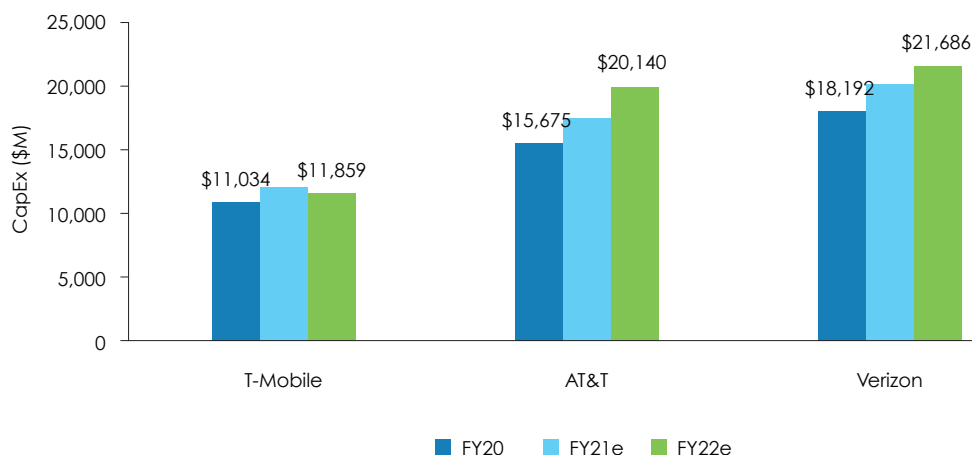
## Carrier CapEx Ramping with 5G Deployment

- » Carrier CapEx is expected to ramp substantially during the 5G network deployment cycle and longer-term as the companies continue to densify their networks over the coming years. Broadly, carrier CapEx for FY2021 is expected to eclipse 2020 figures and expected to continue to rise into 2022, and beyond, as the carriers put the newly acquired spectrum to use on tens of thousands of cell sites across the country. This trend is important to tower and wireless infrastructure companies as it may indicate future potential of lease modifications for equipment upgrades, new lease activity and service revenues.<sup>1,2,3</sup>

### Annual U.S. wireless infrastructure spending projections<sup>1</sup>



### 2020 carrier capex and projected FY2021-2022<sup>3</sup>



1. Credit Suisse Equity Research: 2021 Outlook, The Cloud Has Four Walls.  
 2. Inside Towers, Intelligence Report, Q2 2021, Wireless Infrastructure Industry: Market Analysis Report.  
 3. Barclays Equity Research, Global Communications, TowerCo Q2 State of the Industry, August 19, 2021.

## New Entrants to Wireless Present Additional Tower Revenue Opportunities

- » It's been a long time since a major new carrier entrant has come into the wireless space to compete meaningfully with the top MNOs. Largely as a result of the Sprint/T-Mobile merger in 2020 and the deal reached with the Department of Justice and Federal Communications Commission,<sup>1</sup> DISH Network has come into the wireless market through major acquisitions. Additionally, there are industry expectations that we will see more private networks by private enterprises. This is meaningful as these types of developments are further tailwinds for 5G growth and present an opportunity for new revenue sources to tower and infrastructure owners.<sup>2</sup>
- » **DISH Network Corporation (NASDAQ: DISH)**
  - » DISH Network has had aspirations in the wireless sector for some time, as they've been building a spectrum portfolio since 2008. To date, the company has invested, both directly and through non-controlling interests of wholly-owned subsidiaries, approximately \$22 billion in spectrum in low-, mid- and high-band frequencies.<sup>3,4</sup>
  - » In 2020, the company became a nationwide U.S. wireless carrier through the acquisition of Boost Mobile and other assets of Sprint's prepaid wireless business. Since then, DISH has moved quickly as they begin building out the nation's first cloud-native, Open RAN-based 5G broadband network, now in partnership with Amazon's AWS platform and others. The company has also made several acquisitions to strengthen its position, acquiring assets of Ting Mobile and Republic Wireless, and the planned acquisition of Gen Mobile. DISH Wireless closed 2Q 2021 with ~8.9 million retail wireless subscribers.<sup>4</sup>
  - » DISH has committed to covering 20% of the U.S. population with 5G, and to have deployed a core network, by June 2022. Additionally, DISH committed to covering 70% of U.S. population by mid 2023 and 75% coverage by mid 2025, with certain spectrum. Failure to meet the various commitments would require DISH to pay up to \$2.2 billion to the FCC and would subject certain licenses in the AWS-4, Lower 700 MHz E Block, and AWS H Block spectrum to forfeiture.<sup>4,5</sup>
  - » According to Barclays, the pace of DISH Network's build-out is one of the primary factors affecting incremental growth in the tower sector. DISH's initial roll-out has been broader and faster than originally anticipated, which should serve as a tailwind for the tower industry as site activity is expected to convert to increased leasing activity in 2022.<sup>6</sup>

1. T-Mobile.com, "T-Mobile Closes Deal with DISH to Divest Sprint Prepaid Business", July 1, 2020.

2. Information provided by Strategic Capital Fund Management.

3. Inside Towers, Intelligence Report, Q2 2021, Wireless Infrastructure Industry: Market Analysis Report.

4. DISH.com, "DISH Network reports second quarter 2021 financial results", August 9, 2021.

5. RCR Wireless, "Dish officially gets more time to build out its licenses — and only 5G will do", September 14, 2020.

6. Barclays Equity Research, U.S. Communications Infrastructure, 3Q21 Towers & Fiber Earnings Preview.

## Record Breaking Mid-Band Spectrum Auction

- » C-band spectrum is an important component of the next generation wireless networks. These mid-band frequency waves are anticipated to be a large part of the nationwide 5G deployment on towers and other cell sites across the country utilized by the nation's leading carriers.
- » In February 2021, the Federal Communications Commission ("FCC") announced the results of January's C-band auction, totaling bids of over \$81 billion. The top bids were led heavily by Verizon and AT&T, followed by T-Mobile. Verizon accounted for 56% of the total at over \$45 billion, awarded with 3,511 licenses in 406 Partial Economic Areas ("PEAs"). AT&T accounted for 29% at over \$23 billion, awarded with 1,621 licenses in 406 PEAs.<sup>1</sup>

### Amount Spent on C-band Bidding (\$billions)<sup>1</sup>

	Total C-band bids	% of total
VZ	\$45,455	56%
T	\$23,407	29%
TMUS	\$9,336	12%
DISH	\$3	0%
CHTR	\$0	0%
CMCSA	\$0	0%
COX	\$0	0%
Other Bidders	\$2,968	4%
<b>Total</b>	<b>\$81,169</b>	

## Outlook & Management Commentary

- » **Strategic Capital Fund Management remains very positive on the wireless infrastructure sector with a long term view. We believe the global-macro demand drivers, including increasing numbers of connected devices, growing data consumption per connected device, and ever-rising mobile data traffic, all support the need for existing wireless infrastructure and for future densification.<sup>2</sup>**
- » **Cell towers and other related infrastructure assets benefit from recurring revenues via long-term leases with high-quality tenants, low tenant churn, and are critical to modern communications, resulting in attractive cash flows and relative stability in the asset class. We also believe that nationwide 5G carrier deployments and new entrants into wireless are catalyzing revenue growth and value creation in the near- to mid-term.<sup>2</sup>**

1. Barclays Credit Research: C-Band Auction Results: Telcos Dominate As CableCos Shrug; Financing Next.

2. Information provided by Strategic Capital Fund Management.



# DIGITAL INFRASTRUCTURE VALUATIONS



## **/ DIGITAL INFRASTRUCTURE VALUATIONS**

### **Cell Towers**

- » Tower valuations are generally derived from Tower Cash Flow ("TCF") times a valuation multiplier. TCF is simply the total revenues, primarily from rental income, less operating expenses such as taxes, utilities, maintenance and insurance costs ("TUMI").<sup>1</sup>
- » The valuation multiples for a tower's valuation are dependent on many factors including, but not limited to:<sup>1,2</sup>
  - » Number of tenants and credit quality of tenants
  - » Remaining lease duration and the quality of the contracts
  - » Terms of the easement or ground lease associated with the site(s)
  - » Real estate taxes, if applicable
  - » Location, age, capacity and structural condition of the tower(s)
  - » Probability of lease-up
  - » Comparable recent market transactions
- » Tower revenues and margins can potentially grow quickly compared to traditional commercial real estate. Collocating additional tenants onto existing sites, as well as lease modifications for carrier upgrades, typically result in increased rental income, and often times extended lease durations. Both of these activities can increase tower cash flow and the valuation of the tower asset. Because of these factors, tower valuations are generally expressed in terms of TCF multiples rather than by a capitalization rate ("cap rate"), which is more common in traditional real estate terminology. For reference, a TCF multiple of 20x would equate to a 5% initial cap rate. Simply taking the valuation multiplier and dividing it into 1 provides you with an equivalent cap rate (i.e.  $1/20 = 5\%$ ).<sup>1</sup>
- » Tower valuation multiples can vary widely, but generally broadcast radio towers will trade at lower multiples than macro broadband cell towers, where cash flows tend to be higher in quality with carrier credit anchor tenants. We have generally seen acquisition multiples ranging from mid-teens to mid-upper 20x range.<sup>1</sup>
- » In general, aggregated portfolios of towers and related assets demand higher valuation multiples than single assets of similar quality. We believe this is due to increased diversification of cash flows and site locations, which can lower risk, and due to the scale of transaction, may attract more institutional or strategic buyers. We believe this thesis is supported by numerous examples of large-scale transactions trading north of 30x in 2021, as larger buyers with low cost-of-capital have been aggressive on bids.<sup>1</sup>

1. Strategic Capital Fund Management internal research.

2. Inside Towers, Intelligence Report, Q2 2021, Wireless Infrastructure Industry: Market Analysis Report.

## Data Centers

- » Data center valuations are more similar to traditional real estate, typically expressed either in terms of an initial capitalization rate or as a multiple of net operating income ("NOI"). A capitalization rate is generally calculated by taking the year one expected NOI of the asset, divided by its initial purchase price (i.e. \$1M NOI / \$20M purchase price = 5% cap rate).<sup>1</sup>
- » The valuation of a data center is determined by many factors including, but not limited to:
  - » Credit quality of tenants
  - » Remaining lease duration and probability of tenant lease renewal
  - » Location, age, size, power capacity (to deliver "IT Load" requirements of the tenants) and structural condition of the data center – broadly, the fiber connectivity, power and physical security components of the asset
  - » Age and condition of the uninterruptable power systems ("UPS"), mechanical systems, generators and other infrastructure of the building
  - » Expected CapEx requirements and replacement costs
  - » Evaluation of Service Level Agreements ("SLAs") and associated responsibilities and/or liability
  - » Comparable recent market transactions
- » In general, aggregated portfolios of data centers have been demanding higher valuation multiples than single assets of similar quality. Similar to the wireless infrastructure market, we believe this is due to increased diversification of cash flows, tenant mix and geography, which can lower risk, and due to the scale of the transaction, may attract more institutional or strategic buyers. There are a number of 2021 transactions, and pending transactions, that support this thesis. As institutional capital has flooded into the data center market, large-scale portfolio transaction values have become very competitive, with exit cap rates often in the mid 4% to low 5% cap rates. Some premium, Tier 1 quality transactions have traded in the mid-3% in H1 2021.<sup>1,2</sup>
- » We continue to see attractive opportunities in private real estate, particularly in growing secondary data center markets where there is generally less acquisition and leasing competition, higher cap rates, higher rental rates, and the opportunity to acquire certain data centers below replacement costs.<sup>1</sup>

---

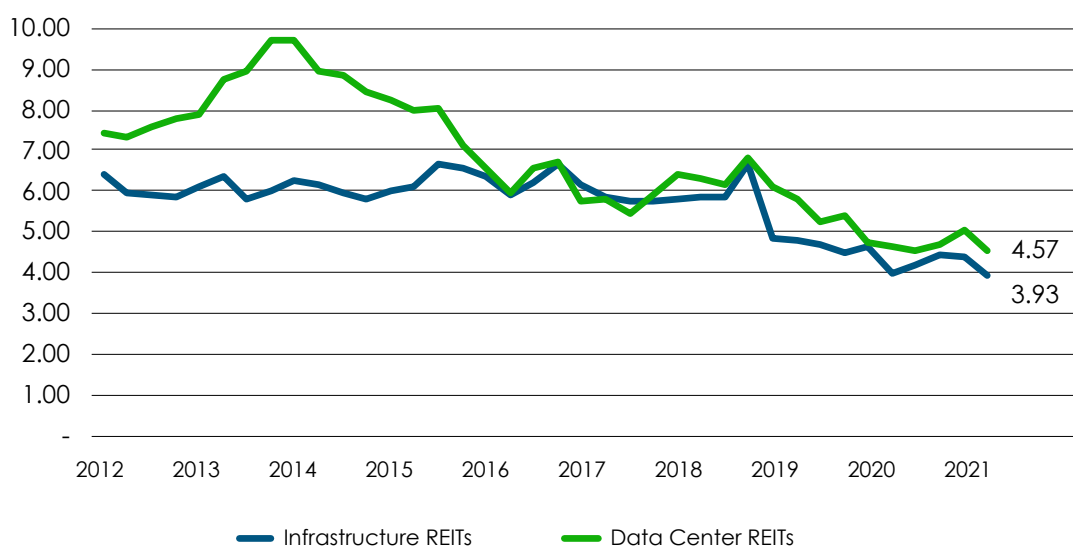
1. Strategic Capital Fund Management internal research.

2. CBRE, North American Data Center Trends Report H1 2021, August 19, 2021.

## Public Market Valuations – Implied Cap Rates Tightening

- » Large publicly traded data center and cell tower REITs continue to reflect near all-time high fundamental valuations, when measured by their price to Adjusted Funds From Operations ("AFFO"), as well as by implied capitalization rates.
- » NAREIT T-Tracker data shows implied cap rates for these sectors have generally been trending downward since 2014, particularly for data center REITs, which are moving closer to infrastructure REIT valuations. Generally, when implied cap rates are trending downward, asset valuations are rising.<sup>1, 2</sup>

**Data center and infrastructure REIT implied cap rates (%)<sup>1</sup>**  
Years 2012-Q2 2021



The information from this chart focuses on public REITs and is used for educational purposes only and to illustrate the current performance in these sectors. Private funds have different dynamics compared to publicly traded funds. These include expenses, access to capital, liquidity and others. There may be no correlation between the performance of public REITs or other funds and these investments.

1. NAREIT T-Tracker Data, Strategic Capital Fund Management internal research.

2. Strategic Capital Fund Management internal research.

## Public Market Valuations – Data Center & Tower REITs

- » As of October 10, 2021, the largest data center REITs traded at an average of 23.6x their expected full year 2021 AFFO, with an average implied cap rate of 4.3%. The top three tower REITs traded at an average of 27.7x their expected full year 2021 AFFO, with an average implied cap rate of 3.8%.<sup>1</sup>
- » Also, data center REIT average dividend yields were approximately 2.8% and tower REITs averaged approximately 1.9%. Given the relatively low dividend yields offered by these public REITs, we continue to see value in private markets where same-sector assets may provide meaningfully higher yields than traded alternatives.<sup>1,2</sup>
- » We recognize that public and private vehicles may have meaningfully different levels of risk, diversification, scale, liquidity, and business strategy, among other considerations, that must be taken into account.

Data Center REITs				
Company	Ticker	Price/2021E AFFO	Implied Cap Rate (%)	Dividend Yield (%)
Equinix Inc.	EQIX	27.4x	4.0%	1.5%
Digital Realty Trust, Inc.	DLR	22.3x	4.3%	3.2%
CyrusOne, Inc.	CONE	18.4x	4.6%	2.7%
CoreSite Realty Corporation	COR	26.3x	4.1%	3.6%
<b>Sample Group Average</b>		<b>23.6x</b>	<b>4.3%</b>	<b>2.8%</b>

Tower REITs				
Company	Ticker	Price/2021E AFFO	Implied Cap Rate (%)	Dividend Yield (%)
American Tower REIT, Inc.	AMT	27.3x	3.9%	1.9%
Crown Castle International	CCI	24.9x	4.1%	3.1%
SBA Communications Corp.	SBAC	31.1x	3.3%	0.7%
<b>Sample Group Average</b>		<b>27.7x</b>	<b>3.8%</b>	<b>1.9%</b>

The information from this chart focuses on public REITs and is used for educational purposes only and to illustrate the current performance in these sectors. Private funds have different dynamics compared to publicly traded funds. These include expenses, access to capital, liquidity and others. There may be no correlation between the performance of public REITs or other funds and these investments.

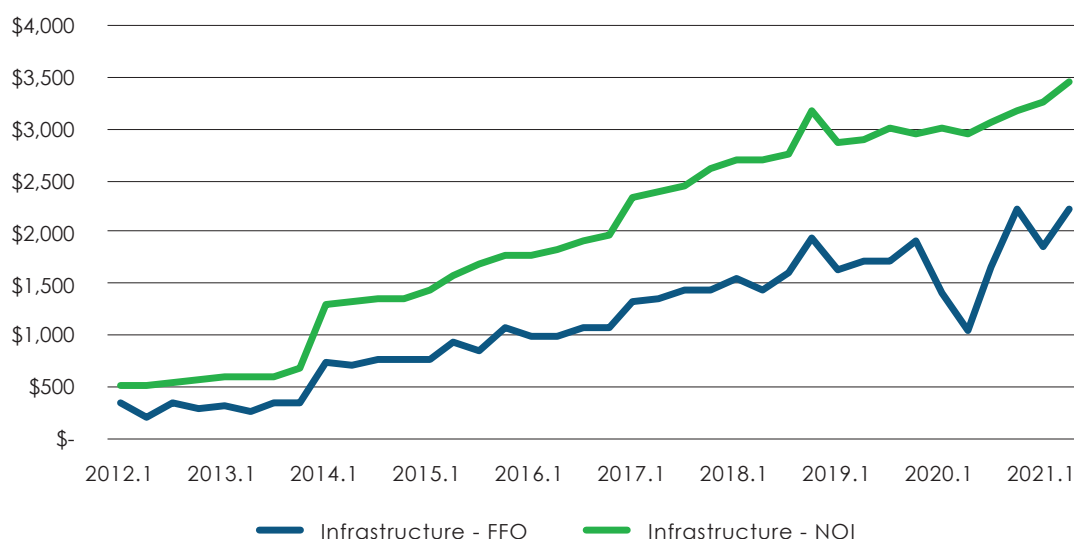
1. Wells Fargo Equity Research, Communications Infrastructure & Telecom Services, From the Ground Up: Comm Infra Weekly, October 10, 2021.
2. Strategic Capital Fund Management internal research.



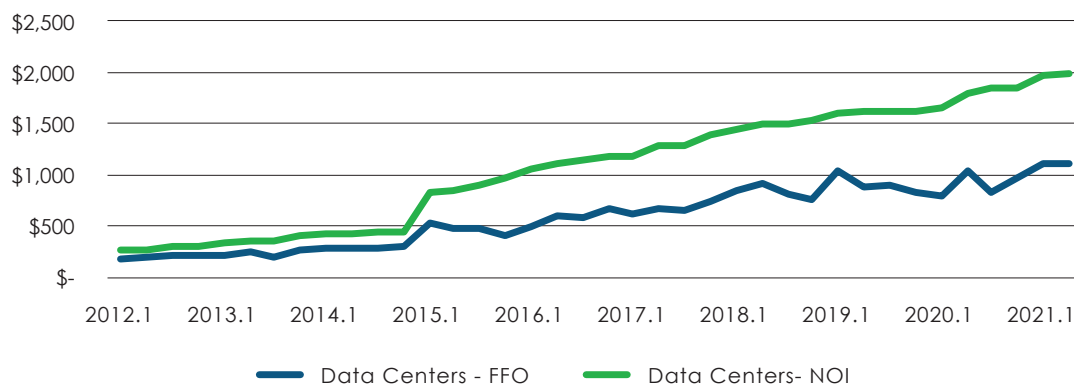
## Public Market Growth – Data Center & Tower REITs

- » Broadly, public infrastructure and data center REIT sectors continue to grow and the underlying assets have generally been performing very well throughout the COVID-19 pandemic.
- » Generally, total Funds From Operations (“FFO”) and Net Operating Income (“NOI”) levels have been growing at a relatively steady pace in both market segments. Mission critical operations and asset occupancy levels have not been materially impacted, which has been a significant differentiator of digital infrastructure asset classes throughout the pandemic.<sup>1</sup>

**Quarterly infrastructure REIT FFO & NOI (\$ millions)<sup>1</sup>**  
(1Q 2012 – 2Q 2021)



**Quarterly data center REIT FFO & NOI (\$ millions)<sup>1</sup>**  
(1Q 2012 – 2Q 2021)



The information from this chart focuses on public REITs and is used for educational purposes only and to illustrate the current performance in these sectors. Private funds have different dynamics compared to publicly traded funds. These include expenses, access to capital, liquidity and others. There may be no correlation between the performance of public REITs or other funds and these investments.

1. NAREIT T-Tracker Data, Strategic Capital Fund Management internal research.

# NOTABLE MARKET ACTIVITY & TRANSACTIONS

## NOTABLE H1 2021 TRANSACTIONS

Notable Market Transactions						
Month	Year	Sector	Buyer	Seller	Description of Infrastructure Related Transaction	Approximate Total Transaction Size (USD)
September	2021	Data Center	Menlo Equities	Digital Realty Trust/Prudential Real Estate Investors JV	Menlo Equities to acquire 9 data center properties in Silicon Valley, Northern Virginia and Dallas/Forth Worth regions.	Est \$400 M+
August	2021	Wireless Infrastructure	Apollo Global Management	Lumen Technologies	Lumen Technologies to sell a portion of its incumbent local exchange carrier (ILEC) operations to Apollo Global Management. Lumen will retain the CenturyLink-branded assets in 16 states and 687,000 fiber subscribers, while Apollo will obtain assets in 20 states, mostly in the U.S. Midwest and Southeast, and 59,000 fiber subscribers.	\$7.5 B
August	2021	Data Center	Blackstone	QTS Realty	Affiliates of Blackstone Infrastructure Partners, Blackstone Real Estate Income Trust, Inc., and Blackstone Property Partners acquired QTS Realty Trust for approximately \$10 billion, including debt. QTS' common stock, Series A preferred stock and Series B preferred stock will no longer be listed on any public market.	~\$10 B
July	2021	Wireless Infrastructure	Brookfield Infrastructure Partners, Alecia	Telia Company	Telia Company to sell 49% of its tower business in Finland and Norway to Brookfield and Alecia, including ~4,700 towers.	\$852 M
July	2021	Wireless Infrastructure	Cellnex	Cyfrowy Pulsat Group	Cyfrowy Pulsat Group sale of its telecommunications infrastructure, Polkomtel Infrastruktura, to Cellnex. This included~ 7,000 towers and sites, 37,000 base stations, and 11,300 route km of fiber backbone and fiber-to-the-tower backhaul, and a national network of microwave radiolinks.	~\$1.9 B
July	2021	Digital Infrastructure	Stonepeak	Lumen Technologies	Fiber and undersea cable assets, 18 data centers	\$2.7 B
July	2021	Data Center	Digital Bridge Group	PCCW	9 data centers (7 Hong Kong, 1 mainland China, 1 Malaysia)	\$750 M
July	2021	Data Center	Mapletree Industrial Trust (Singapore)	Sila Realty Trust	Sila Realty Trust sells 29-property data center portfolio to wholly owned subsidiaries of Mapletree Industrial Trust ("MIT"), a real estate investment trust listed on the Singapore Exchange. The original aggregate acquisition cost of the portfolio was approximately \$965.2 M.	\$1.32 B
July	2021	Data Center	Starboard Value Acquisition (SPAC)	Cyxtera Technologies	Cyxtera went public via SPAC merger. Combined company will be third-largest publicly held global provider of retail colocation and interconnection services, with 61 data centers in 29 markets around the world, serving more than 2,300 leading enterprises, service providers, and government agencies.	\$3.4 B

Information provided for educational purposes only. No conclusions or extrapolations with certitude can be drawn regarding this data and any particular investment.



## NOTABLE H1 2021 TRANSACTIONS (CONTINUED)

June	2021	Digital Infrastructure	Digital Colony	Landmark Dividend	Affiliates of Digital Colony Management, LLC acquired Landmark Dividend LLC, including infrastructure assets (data centers, easements, other). Landmark Dividend owns, among other things, 100% of the membership interests in the general partner of Landmark Infrastructure Partners LP (NASDAQ: LMRK) and 13.2% of the common units representing limited partner interests in LMRK. Landmark Dividend was a portfolio company of American Infrastructure Funds, Brock Capital Group and AVG Holdings.	\$972 M
June	2021	Wireless Infrastructure	SBA Communications, Paradigm Infrastructure	Airtel Tanzania	SBA Communications and Paradigm Infrastructure JV to acquire the tower portfolio of Airtel Tanzania, including ~1,400 towers, which form part of the Group's wireless telecommunications infrastructure network.	\$175 M
June	2021	Wireless Infrastructure	Bai Communications	Mobilitie	BAI Communications (BAI), a global communications infrastructure provider, to acquire Mobilitie, a large privately held telecommunications infrastructure company in the U.S. The acquisition will also add Mobilitie's broader portfolio of 220 venues across 39 states, 10,000 small cells across 45 states, and 300 tower sites across 14 states to BAI's operations.	NA
May	2021	Wireless Infrastructure	Diamond Communications/ Sculptor Capital	Melody Wireless Infrastructure	"Diamond Communications and Sculptor Capital Management purchase of private REIT managed by Melody Capital Management. Acquisition includes 2,300 tenanted wireless communication sites, including a combination of rooftop installations, communication towers and ground leases under communication towers located throughout all 50 U.S. states."	\$1.625 B
May	2021	Data Center	Liberty Global/ Digital Colony	AtlasEdge Data Centers JV	"European edge data centers. Liberty Global and Digital Colony announced the creation of AtlasEdge Data Centres, a European Edge data center business. AtlasEdge will be supported by anchor tenancies from Liberty Global operating companies in four European countries: Virgin Media in the UK and in Ireland, Sunrise-UPC in Switzerland and UPC in Poland."	NA
May	2021	Data Center	Switch	Data Foundry	Switch's acquisition includes three data centers in Austin and a 21 acre property where Switch plans to build a 30-megawatt data center, and 1 data center in Houston, where Switch plans to build a 12 megawatt data center on an adjacent 10-acre piece of land.	\$420 M
April	2021	Data Center	eStruxture	Aptum Technologies	eStruxture secures over \$600 million Cdn in financing and finalizes the acquisition of the Canadian data center business from Aptum Technologies.	~ \$485 M (debt financing)

Information provided for educational purposes only. No conclusions or extrapolations with certitude can be drawn regarding this data and any particular investment.

## NOTABLE H1 2021 TRANSACTIONS (CONTINUED)

January	2021	Data Center	Harrison Street, 1547 Critical Systems Realty	JLL	Harrison Street & 1547 Critical Systems Realty acquisition of Pittock Block, a carrier hotel located in downtown Portland previously owned by JLL. This transaction is the single biggest asset sale in Oregon since 2015. The 302,200 square foot building is one of the most connected buildings in the United States, serving 179 service providers, and is one of only two primary Internet Exchanges in the entire Northwest.	\$326 M
January	2021	Wireless Infrastructure	American Tower Corp	Telxius	"American Tower Corporation acquisition of Telxius, including approximately 31,000 existing communications sites in Germany, Spain, Brazil, Chile, Peru and Argentina. Expects to spend an additional ~\$500 million to construct a committed pipeline of approximately 3,300 new sites in Germany and Brazil through 2025."	\$9.4 B

Information provided for educational purposes only. No conclusions or extrapolations with certitude can be drawn regarding this data and any particular investment.



## NOTABLE H1 2021 MARKET ACTIVITY

Month	Year	Sector	Company	Description of Infrastructure Related Activity	Approximate Deal Size (USD)
September	2021	Data Center	Strategic Capital Fund Management	Strategic Capital received \$500M in total equity commitments to launch Datasphere, a \$1.5B data center investment platform, in partnership with a large, global institutional fixed income manager.	\$1.5 B
June	2021	Data Center	GIC, Equinix	"Equinix announced the creation of an additional US \$ 3.9 billion joint venture with GIC, Singapore's sovereign wealth fund, to develop and operate 17 xScale™ data centres across EMEA and South and Central America. The 14 initial facilities in the joint venture – 10 in EMEA and 3 in Brazil with a further data centre in Mexico to be added - will serve the needs of a targeted group of the world's largest cloud service providers. When closed, the transaction will bring the xScale™ data center portfolio to \$6.9 B+ across 32 facilities globally."	\$3.9 B
June	2021	Data Center	Macquarie, Prime Data Centers	Macquarie/Prime Data Centers ~\$5bn capital committed by Macquarie Infrastructure Sustainable mission critical infra development Hyperscale and enterprise 400MW pipeline focus in Americas and Europe	\$5 B
June	2021	Data Center	Principal Real Estate	Principal Real Estate closes first Institutional Fund at \$533mm from 15 investors, focus on value-add and development	\$533 M
May	2021	Data Center	Yondr	Yondr announced a major expansion plan to deliver data center infrastructures across the United States, Canada, Central and South America.	Est \$2 B
May	2021	Data Center	Liberty Global/Digital Colony	Liberty Global and Digital Colony announced the creation of AtlasEdge Data Centres, a European Edge data center business. AtlasEdge will be supported by anchor tenancies from Liberty Global operating companies in four European countries. The JV will operate more than 100 Edge data centers across Europe, bringing together Digital Colony's Edge assets and Liberty Global's real estate portfolio.	N/A
January	2021	Wireless Infra	DISH	DISH signs long term master lease agreements with American Tower, Crown Castle, SBA Communications, Vertical Bridge and seven other private towercos to gain access to up to an estimated 65,000+ cell sites across the U.S. and Puerto Rico in preparation to deploy their new nationwide 5G networks.	N/A

Information provided for educational purposes only. No conclusions or extrapolations with certitude can be drawn regarding this data and any particular investment.

## **/ IMPORTANT INFORMATION**

This information is provided as of October 15, 2021 and is subject to change. Please note certain information in this report constitutes forward-looking statements. Due to various risks, uncertainties and assumptions made in our analysis, actual events or results or the actual performance of the markets covered by this report may differ materially from those described. The information herein reflects our current views only, is subject to change, and is not intended to be promissory or relied upon by the reader. There can be no certainty that events will turn out as we have opined herein. Past performance is not a reliable indicator of future returns. This report uses public market trends and sector analysis. There is no guarantee that any investments will be able to take advantage of positive market trends. This is provided for educational and illustrative purposes only. Forecasts are not a reliable indicator of future returns. Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect. It is not possible to invest directly in an index. An index does not reflect the performance of any security, public or private, nor any fund, public or private.

This material was prepared without regard to the specific objectives, financial situation or needs of any particular person who may receive it. It is intended for informational purposes only. It does not constitute investment advice, a recommendation, an offer, solicitation, the basis for any contract to purchase or sell any security or other instrument, or for Strategic Capital Fund Management or its affiliates to enter into or arrange any type of transaction as a consequence of any information contained herein. Neither Strategic Capital Fund Management nor any of its affiliates gives any warranty as to the accuracy, reliability or completeness of information which is contained in this document. Except insofar as liability under any statute cannot be excluded, no member of Strategic Capital Fund Management, its affiliates, employee or associate of them accepts any liability (whether arising in contract, in tort or negligence or otherwise) for any error or omission in this document or for any resulting loss or damage whether direct, indirect, consequential or otherwise suffered by the recipient of this document or any other person. The views expressed in this document constitute Strategic Capital Fund Management's judgment at the time of issue and are subject to change. This document is only for accredited investors. This document was prepared without regard to the specific objectives, financial situation or needs of any particular person who may receive it. No further distribution is allowed without prior written consent of the issuer.

Investments are subject to risk, including market fluctuations, regulatory change, possible delays in repayment and loss of income and principal invested. The value of investments can fall as well as rise and you might not get back the amount originally invested at any point in time. Investment in digital infrastructure may be or become nonperforming after acquisition for a wide variety of reasons. Nonperforming digital infrastructure investment may require substantial workout negotiations and/or restructuring. Environmental liabilities may pose a risk such that the owner or operator of digital infrastructure assets may become liable for the costs of removal or remediation of certain hazardous substances released on, about, under, or in its property.

Investments in digital infrastructure are subject to various risks, including but not limited to the following:

- » Adverse changes in economic conditions including changes in the financial conditions of tenants, buyer and sellers, changes in the availability of debt financing, changes in interest rates, real estate tax rates and other operating expenses;
- » Adverse changes in law and regulation including environmental laws and regulations, zoning laws and other governmental rules and fiscal policies;
- » Environmental claims arising in respect of digital infrastructure acquired with undisclosed or unknown environmental problems or as to which inadequate reserves have been established;
- » Changes in the relative popularity of property types and locations;
- » Risks and operating problems arising out of the presence of certain construction materials; and

An investment in digital infrastructure involves a high degree of risk, including possible loss of principal amount invested, and is suitable only for sophisticated investors who can bear such losses. The value of shares/ units and their derived income may fall or rise.

Any forecasts provided herein are based upon Strategic Capital Fund Management's opinion of the market at this date and are subject to change dependent on the market. Past performance or any prediction, projection or forecast on the economy or markets is not indicative of future performance.

## **/ RISK FACTORS**

The data shown reflects what Strategic Capital Fund Management feels is a comparative sector, although the data reflects a different product. In general, these products may pay dividends, are liquid, have a secondary market component, are not as risky, are traded, and provide liquidity. Strategic Capital Fund Management is a sponsor of private Regulation D funds which are materially different from publicly traded funds and REITs in that they are offered only to accredited investors through selling group members' financial professionals. Private placements typically have a limited secondary market, are not liquid, are high risk, are not traded on an exchange, are private, and are offered to accredited investors only, among others. This report may be used by financial advisors and/or accredited investor clients selected by their financial advisor.

This material (the "Material") is provided for informational and discussion purposes only and is not, and may not be relied on in any manner as, legal, business, financial, tax or investment advice or as an offer to sell or a solicitation of an offer to buy securities.