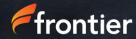
Real Assets Quarterly

March quarter, 2021





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- Digital infrastructure
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Digital infrastructure

Drilling for modern gold

- Accelerated growth in working-from-home, streaming services, social and machine interconnectedness is driving demand for data and is placing greater focus on communications infrastructure.
- Technology thematics such as automation, robotics, artificial intelligence, autonomous vehicles, battery charging and 3-D printing are expected to manifest themselves across the value chain in infrastructure and create opportunities as well as threats for investors.
- Harnessing these trends, investment activity in digital and communications infrastructure (data centres, fibre networks, and cell towers) was already heightened prior to the COVID-19 pandemic and accelerated further in 2020.
- Digital infrastructure will remain an active sector due to strong data growth tailwinds including greater connectivity (Internet-of-Things devices, 5G), higher broadband penetration (FTTH, FTTN fibre), as well as telecommunication operators' desire to monetise minority stakes in their digital assets to fund 5G rollouts.



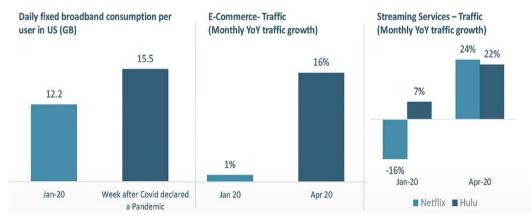


Digital infrastructure – COVID-19 impact

COVID-19 accelerated digital adoption into a mega-trend and digital infrastructure is a key beneficiary

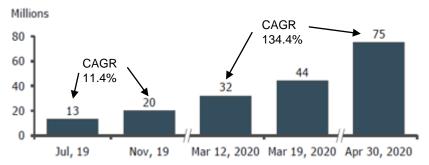
Broadband, e-commerce, video streaming and collaboration tool usage increased tremendously

Growth in US data consumptions (Jan 2020 - Apr 2020)



Source: PWC, Citi Research, Morgan Stanley Research, IEA 2020, S&P

Global daily users of Microsoft Teams (2019-2020)



Source: Infrastructure Australia; Statista, L.E.K. Research

Australian consumers and businesses were quick to adopt remote trends

- COVID-19 lockdowns caused a rush to remote trends for workers and consumers and all things digital, with online shopping (e-commerce) and video streaming services experiencing surges in month-to-month growth.
- As a consequence, broadband users and bandwidth usage increased substantially, which was extremely beneficial for digital infrastructure.
- Australian businesses were forced to accelerate adoption of collaboration tools such as Zoom, Cisco Webex and Microsoft Teams.
 - Microsoft Teams experienced a surge in usage as number of daily active users on the app increasing from 32 million in March 2020 to 75 million in April 2020.
 - Zoom noted its video conference software usage rose by 85% during the COVID-19 period.
- According to Microsoft and AlphaBeta, nearly 9 in 10
 Australian firms adopted new technologies during COVID-19, supporting 3.2 million workers.

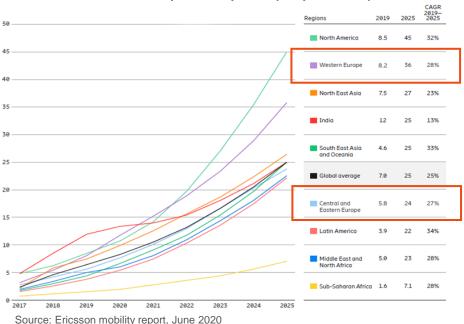


Digital infrastructure – opportunities

Rapid developments and changing consumer behaviour will lead to more opportunities in digital infrastructure

5G and IoT are key drivers for data growth and digital infrastructure

Mobile traffic data per smartphone (GB per month)



Internet of Things (IoT) devices expected to increase rapidly

Moving towards an interconnected world:

2025:
75.4 billion installed devices

2015:
15.4 billion installed devices

Source: Manager research

Telecommunications encompasses various sub-sectors, some more attractive than others

Sub-sectors of telecommunications

Data centers	Fiber networks	Wireless infrastructure	Satellite services	Cloud services	Telecom equipment	Telecom services
		(K)				@
Data center infrastructure for the storage of data, e.g. colocation, REIT	Connection between storage and transmission point, including backhaul, metro and access Fiber network	Infrastructure enabling Wireless transmission of data, i.e. from cellular towers, or DAS (Distributed Antenna Systems) or Small Cells	Wireless data transmission from satellite transponders	Cloud computation and managed services	Equipment enabling connectivity services	Connectivity services for B2C and B2B customers

Source: Manager research

- Cell towers: Mobile network operators are spinning out their cell towers into "TowerCos" to fund their 5G rollout.
- Data centres: Increased activity from data demand, localisation, privacy and EU's data safeguarding rules.
- **Fibre**: EU legislation for ubiquitous, high-speed digital connectivity is creating FTTx fibre rollout opportunities.
- Wireless: Radio access networks (RAN) will require heavy investments due to the large scale of 5G rollouts.
- With heightened activity and capital inflow, investors need to be mindful of valuations.

<8% Expected returns 15%+

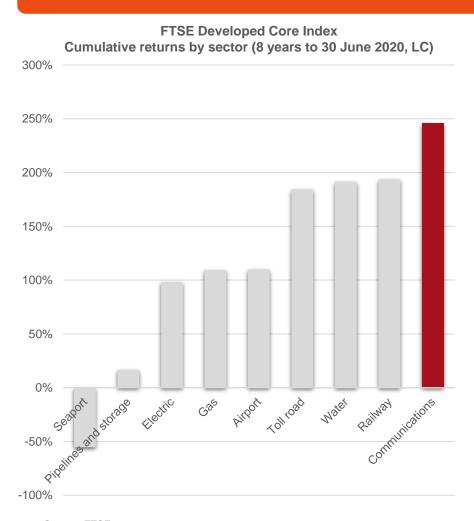
Contracted towers

Greenfield fibre

Digital infrastructure – performance

Listed infrastructure sector performance

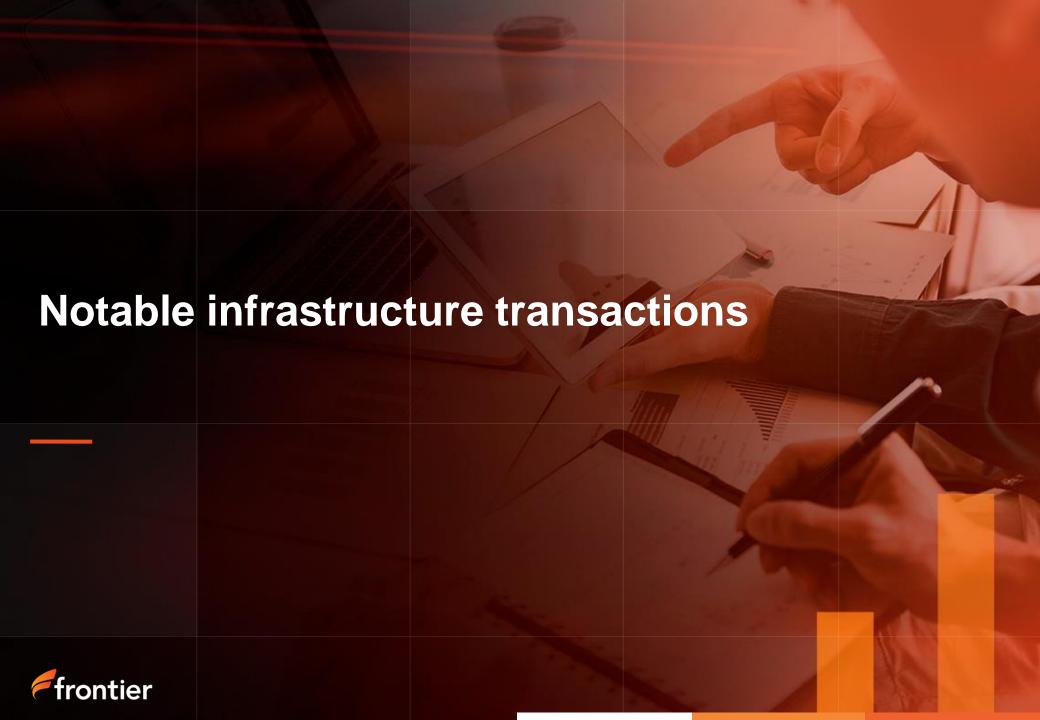
Digital infrastructure performance has outpaced performance from other infrastructure sectors



- While listed infrastructure delivered strong returns over the trailing period, communications meaningfully outpaced other sectors.
- Similar trends have played out in the unlisted infrastructure market, with strong earnings growth combining with the significant weight of capital to deliver substantial performance for early investors in many digital infrastructure assets.
 - It's important to note though performance between digital assets has differed materially.
- Historically, digital infrastructure was perceived as a higher risk investment private-equity style investment and exposure within unlisted infrastructure portfolios was often limited
- Frontier believes digital infrastructure is an attractive growth sector for investors to consider due to:
 - the strong data growth tail winds.
 - governments consider digital connectivity a national priority.
 - regulatory support being offered globally.
 - depth of the communications and technology markets, particularly in the US and Europe.
 - however, investors will need to be wary of increasing valuations and their impact on future returns.

Frontier believes digital infrastructure is an attractive growth sector for the foreseeable future





Notable infrastructure transactions

Q4 2020

Region	Transaction	Sector	Vendors	Equity providers	AUD (\$m)	Description
Asia	Reliance Tower Infrastructure Trust	Telecommunications	Reliance Industries	BCI GIC, Brookfield Infrastructure Fund IV	4,824	135,000 towers to a Brookfield Infrastructure-led consortium.
	TSK Corporation Sale (37.39%)	Environment		KKR Asia Pacific Infrastructure Fund I	544	Landfill operator and sewage treatment/water O&M provider.
Australasia	Metlifecare Acquisition	Social Infrastructure	Metlifecare	EQT Infrastructure IV	1,499	NZX listed retirement village operator.
	Qscan (71.25%)	Social Infrastructure	Quadrant	Infratil	735	Qscan provides diagnostic imaging services for 70 radiology clinics.
	Opticomm	Telecommunications		Uniti Group	675	ASX listed telecommunications fibre business.
Europe	BRISA Auto- estradas de Portugal	Transport	Arcus European Infrastructure Fund	Swiss Life Funds, Korea National Pension Service, APG	4,746	Portuguese toll road operator which owns five concession companies controlling 1,525km of toll roads.
	Orsted Radius	Power	Orsted	SEAS-NVE	3,634	Danish power distribution business which operates the power grid around Copenhagen.
	Colisee	Social Infrastructure	IK Investment Partners	CDPQ, EQT Infrastructure Fund V	3,537	Operator of a network of 270 nursing homes across France, Belgium, Spain and Italy.
	EDPR Iberian 1.7GW Hydro	Renewables	EDP Renewables (EDPR)	Engie, Credit Agricole CIB, Eurofideme	2,657	1.7GW hydro assets in the Iberian Peninsula.
	Inwit Joint Venture	Telecommunications	Telecom Italia	Ardian Infrastructure Fund V, Predica Infrastructure, Azimut Infrastrutture per la Crescita, Canson Capital Partners	2,431	Italian telecoms tower unit.
	Telefonica German Towers Sale	Telecommunications	Telefonica	Telxius/KKR	2,328	Telxius acquisition of German mobile towers from Telefonica.
	Q-Energy 216MW Solar Portfolio	Renewables	Q-Energy Fund III	CDPQ	2,288	216MW solar portfolio located throughout Spain.
	Borkum Riffgrund II 465MW (50%)	Renewables	Global Infrastructure Partners III (GIP III)	Gulf Energy Development Company	2,105	Windfarm of 56 Vestas turbines capable of producing 8.3 MW each.
	Covage	Telecommunications	Cube Infrastructure Fund, Partners Group	Altice	1,855	Owner of 45 fibre networks that cover three million homes and businesses across 11 regions in France.

Source: Inframation



Notable infrastructure transactions

Q4 2020

Region	Transaction	Sector	Vendors	Equity Providers	AUD (\$m)	Description
Europe	G.Network Communications	Lalacammunicatione ('uha Intraetr		Universities Superannuation Scheme	1,666	Provider of fibre broadband connectivity to homes in the London area.
	Adven	Energy	AMP Capital Global Infrastructure Fund, Infracapital Partners II	JP Morgan Infrastructure Investments Fund	1,648	District heating business.
	Sorgenia	Energy	UniCredit Group		1,621	Sorgenia owns 3.17 GW of power plants and supplies over 300,000 electricity and gas customers.
	Vauban Infra Fibr	Telecommunications	Vauban Infrastructure Partners	Predica Infrastructure, Core Infrastructure Fund II & III	1,450	Newly-created fibre optic platform that is investing EUR 6bn into French broadband.
	Viesgo Portfolio	Energy	Macquarie European Infrastructure Fund 4	EDP	1,397	Coal generation, renewables and electricity distribution
	Sofia Airport Concession	Transport	Bulgarian Ministry of Transport and Communications	Strabag SE, Munich Airport Group, Meridiam Eastern Europe	1,278	Sofia Airport Concession to oversee the construction of a new terminal, as well as manage and operate it for 35 years.
	Babilou Social Infrastructure Edouard Carle, Rodolphe Antin Infrastructure Partners IV		998	French nursery operator of 670 sites.		
	Miya Water Sale	Environment	Bridgepoint Capital	Antin Infrastructure Partners IV	2,958	Spanish water management company.
North America	Cheniere Energy Partners (42%)	Energy	Blackstone Energy Partners	Brookfield Infrastructure Fund IV	4,617	Indirectly-held common units in Cheniere Energy Partners, which operates the Sabine Pass LNG export terminal in Louisiana.
InSite Wireless Acquisition		Telecommunications	InSite Wireless Group	American Tower Corporation	3,644	Owner and operators of 3,000 communications sites, primarily in the U.S. and Canada.
	EdgeConneX Sale	Telecommunications	EdgeConneX, Providence Equity	EQT Infrastructure IV	3,542	Virginia-based data center owner and developer.
	International-Matex Tank Terminals	Energy	Macquarie Infrastructure Corporation	Riverstone Holdings	3,126	IMTT stores and handles bulk liquid products across 19 terminals.
	Lightpath Altice (49.99%)	Telecommunications	Altice	Morgan Stanley Infrastructure	1,792	Commercial and wholesale fiber business Lightpath, focused on New York.
	Zayo zColo Cloud Sale	Telecommunications	Zayo	Siemens, DataBank	1,090	Data centre portfolio with 51 facilities that total 1 million square feet globally.
	Bell Canada Data Center Platform	Telecommunications	Bell Canada	Equinix	4,824	Bell Canada owns 17 data center locations across Canada.





Property performance

Performance to 31 December 2020

	1 year return				Total returns					Index composition			
	Income	Capital	Total	3 years % p.a.	5 years % p.a.	10 years % p.a.	15 years % p.a.	20 years % p.a.	25 years % p.a.	Assets	Value A\$m	%	
All Australian property	4.7	-4.4	0.1	6.0	8.3	9.5	9.2	9.9	9.9	1,330	184,203	100	
Retail	4.1	-13.7	-10.1	-0.9	3.3	6.7	7.3	9.1	9.3	362	59,820	32	
Office	4.9	-0.2	4.7	10.0	11.3	10.9	10.2	10.0	9.9	326	89,496	49	
Industrial	5.6	7.9	13.9	13.3	12.3	12.2	10.3	11.0	11.5	419	23,514	13	
Others	4.5	1.9	6.4	8.4	11.7	12.6	11.8	-	-	227	11,802	6	
Retail - Australia													
Super regional and major regional	3.6	-15.4	-12.4	-2.2	2.4	5.6	6.9	8.7	8.9	64	32,339	18	
Regional	5.2	-14.6	-10.1	-2.1	2.2	6.4	7.2	8.8	9.0	26	5,118	3	
Sub regional	5.5	-11.5	-6.5	0.0	3.8	7.5	7.3	9.5	9.7	69	8,287	4	
Neighbourhood	5.3	-6.7	-1.8	1.6	5.2	8.3	7.6	9.4	10.2	65	2,933	2	
Other	3.7	-12.2	-8.9	1.8	5.6	8.6	8.9	-	-	135	10,970	6	
Office - Australia													
Premium grade CBD	5.0	-0.9	4.0	9.3	10.3	10.6	10.1	9.9	9.9	61	31,364	17	
Grade A CBD	4.7	0.0	4.7	10.1	11.6	11.0	10.2	9.8	9.6	122	40,068	22	
Grade B CBD	4.9	-4.1	0.6	8.6	12.5	11.2	10.5	10.7	10.3	24	2,315	1	
Non CBD	5.4	1.6	7.1	11.2	11.9	11.4	10.1	10.1	10.6	112	15,182	8	
Industrial - Australia													
Warehouse	5.5	7.8	13.7	13.1	12.1	13.2	11.2	11.6	11.8	167	7,083	4	
Distribution	5.8	8.4	14.6	13.2	12.2	12.0	10.7	11.5	11.4	139	9,676	5	
Industrial estate	5.8	7.3	13.5	13.6	12.9	11.7	9.1	10.3	11.4	30	2,338	1	
International unlisted													
IPD UK All Property	5.4	-6.0	-0.8	2.8	4.4	7.4	4.8	6.8	5.9	N.A.	N.A.	N.A.	
IPD Europe Ex-UK	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	
NCREIF US Property Index	N.A.	N.A.	1.6	4.9	5.9	9.0	7.1	8.2	9.1	N.A.	N.A.	N.A.	
REITS													
S&P/ASX 300 AREIT	N.A.	N.A.	-4.0	5.8	7.4	11.3	3.7	6.6	7.8	N.A.	N.A.	N.A.	
FTSE EPRA GREIT \$A (H)	N.A.	N.A.	-13.7	0.1	2.9	7.2	4.9	N.A.	N.A.	N.A.	N.A.	N.A.	

Source: Bloomberg, NCREIF, MSCI, Frontier



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