

## 2019 Market Preview: Infrastructure

STABLE CASH FLOWS IN AN UNCERTAIN MARKET ENVIRONMENT & THE EVOLVING LANDSCAPE

Investor appetite for stable cash flows and favorable risk-adjusted returns has driven demand for infrastructure investments over the last few years, particularly in this relatively low-yielding environment. With global accommodative policies seemingly coming to an end, investors may be wondering how infrastructure investments will react in a contractionary market environment. In this 2019 market preview, we assess the effects of rising interest rates and inflation on infrastructure as well as explore some of the opportunities for investment over the next several decades.

Infrastructure has benefitted from the historically low interest rate environment and capital flows from institutional investors searching for higher yields. With U.S. interest rates forecasted to rise further, investors may be wondering how infrastructure will react. Rising interest rates can adversely impact infrastructure assets by placing pressure on valuations and negatively affecting cash flows. However, these effects could be offset by an improving economy and assets with cash flows linked to GDP and/or inflation.

Furthermore, one of the unique characteristics of infrastructure is its variety of sectors and sensitivity to interest rates and inflation. Long-term contracted/power-generation assets generally provide strong and stable cash flows (yields) whereas transportation/GDP-sensitive assets provide high total return, and regulated assets provide long-term inflation protection. Depending on the type of contract and source of revenue, the effects of inflation and the current economic environment will vary for each asset. For example, a regulated asset such as a utility company should benefit when revenues are linked to inflation and debt financing is long-term. On the other hand, a GDP-sensitive asset such as a toll road should benefit with a rising economy and inflation from increased traffic volumes and rising toll prices.



**Jeremy Zirin, CAIA**  
Senior Research Analyst,  
Real Assets

## 2019 SECTOR-SPECIFIC OPPORTUNITIES:

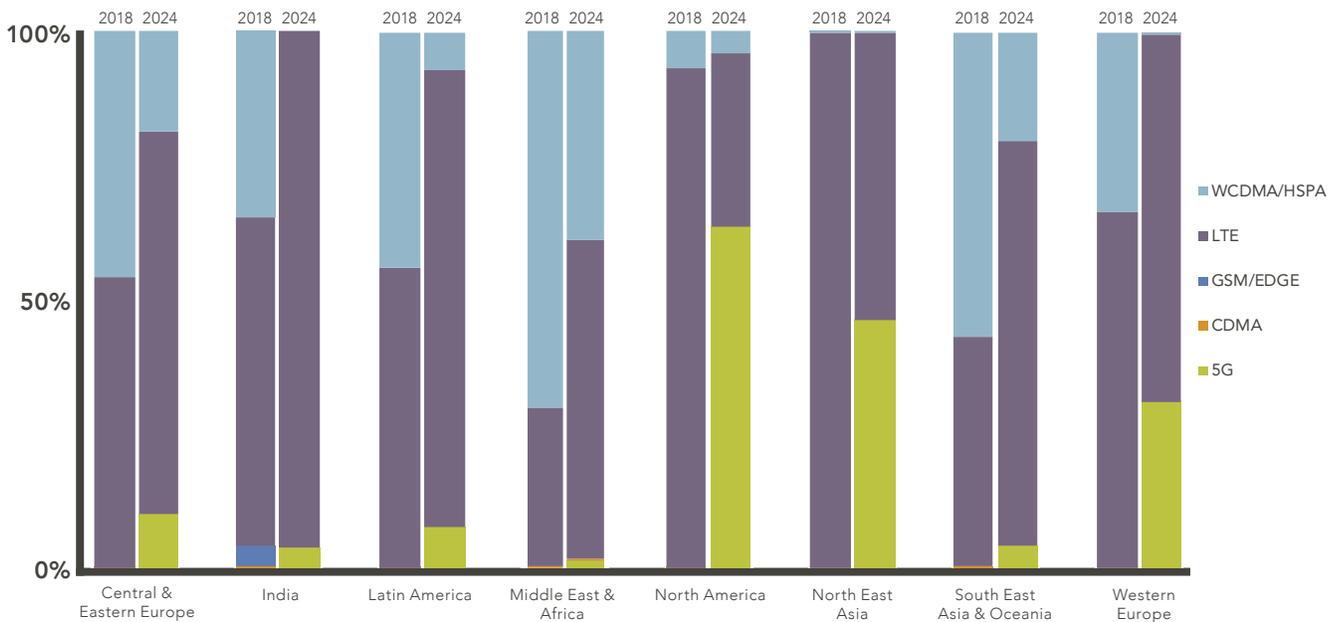
Rising interest rates and inflation aside, infrastructure sectors have undergone significant transformation which should help support the historically high levels of dry powder and provide investment opportunities over the next several decades. The following sectors are just two examples that are undergoing change and opening a window for future investment opportunity.

### Communications:

The communications sector is expected to be a source of new infrastructure investment over the next several years. Specifically, the fifth-generation of wireless cellular (5G), which has officially been rolled-out, is expected to account for 25% of all global mobile data traffic by 2024 and be accompanied by massive increases in data consumption,<sup>1</sup> illustrated in Exhibit 1. The number of mobile broadband subscriptions is growing at 15% year-over-year, and subscriptions associated with smartphones now account for more than 60% of all mobile phone subscriptions.<sup>2</sup>

Service providers domestically are targeting a 2019 launch of 5G services, which would make North America the first region to offer this new infrastructure. The faster speeds are expected to drive a significant increase in mobile traffic over the next few years. This, however, comes at a significant investment cost which means ample infrastructure investment opportunity pertaining to this single mobile service improvement.

**Exhibit 1:** Mobile Subscriptions by Region and Technology



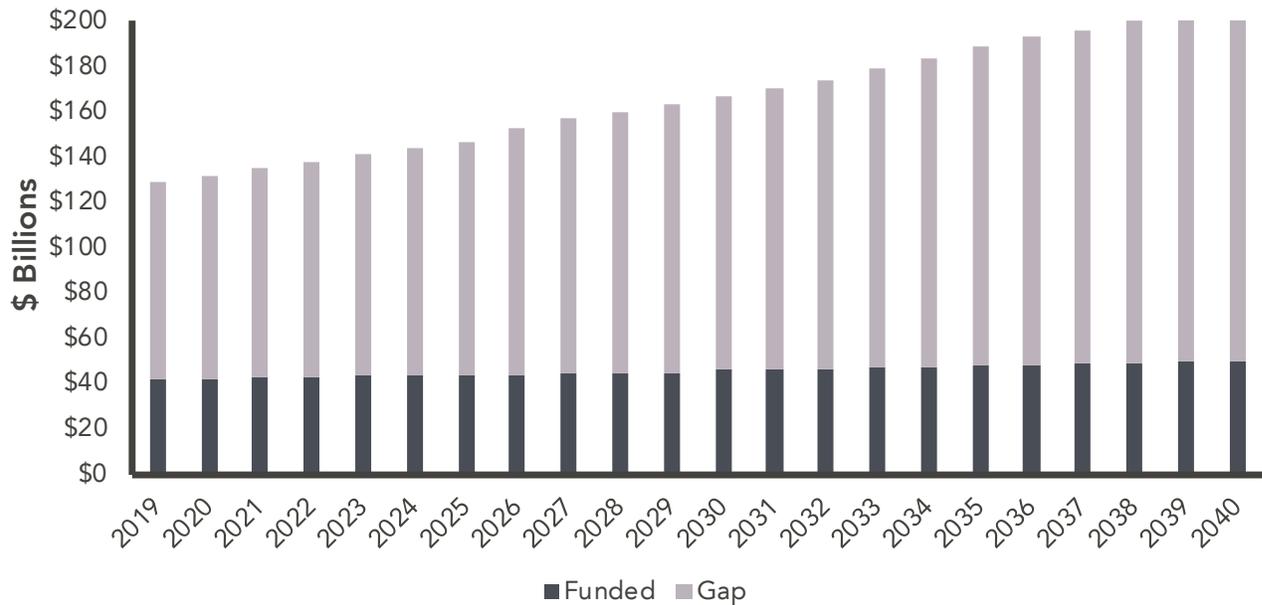
Source: Ericsson Mobility Report, December 2018

### Water:

U.S. water infrastructure provides and treats around 355 million gallons of water per day to support cooking, bathing, and productivity in virtually all sectors of the economy. The infrastructure in place, however, is in poor condition; The American Society of Civil Engineers (“ASCE”) assigned a “D” and “D+” grade to both drinking water and wastewater infrastructure, respectively. Based on this assessment, the ASCE estimated that a minimum of \$123 billion per year over the next 10 years needs to be invested in U.S. water infrastructure.

As illustrated in Exhibit 2, current annual spending on water infrastructure totals around \$41 billion per year, but only one-third of capital needs are expected to be funded over the next ten years, representing an annual funding gap of \$82 billion.<sup>3</sup> Consequently, we would anticipate water infrastructure improvement projects and water reuse<sup>4</sup> as a source of investment over the next several decades.

**Exhibit 2:** Projected Growth in Water and Wastewater Investment Gap



Sources: ASCE 2016, BLS 2016  
 Note: Needs expressed in constant 2016 dollars

The historically high levels of dry powder, new entrants into the market, and contractionary market environment generally present significant risk for infrastructure investments going into 2019. However, it is not all doom and gloom for the asset class. Infrastructure assets vary by revenue type and contract, each of which has varying degrees of sensitivity to rising interest rates and inflation. We expect demand for infrastructure assets to be robust as investors seek favorable risk-adjusted returns and investment managers take advantage of opportunities in sectors and regions in need of upgrades and revitalization, most notably communications and water. ■

<sup>1</sup> Stonepeak Infrastructure Partners, 2018 Annual Letter

<sup>2</sup> Ericsson Mobility Report, November 2018. <https://www.ericsson.com/...ericsson-mobility-report-november-2018.pdf>

<sup>3</sup> Value of Water Campaign, "The Economic Benefits of Investing in Water Infrastructure," 2017. [http://thevalueofwater.org/...Economic%20Impact%20of%20Investing%20in%20Water%20Infrastructure\\_VOW\\_FINAL\\_pages.pdf](http://thevalueofwater.org/...Economic%20Impact%20of%20Investing%20in%20Water%20Infrastructure_VOW_FINAL_pages.pdf)

<sup>4</sup> Water reuse refers to reclaimed or recycled water, which is the process of converting wastewater into water that can be reused for other purposes.

**PREPARED BY MARQUETTE ASSOCIATES**

180 North LaSalle St, Ste 3500, Chicago, Illinois 60601  
CHICAGO | BALTIMORE | PHILADELPHIA | ST. LOUIS

PHONE 312-527-5500  
WEB [marquetteassociates.com](http://marquetteassociates.com)

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