

## 2021 TOP TEN ISSUES AFFECTING REAL ESTATE®

The Counselors of Real Estate®

### Viewing Infrastructure Through a Different Lens

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*Infrastructure was listed as the #9 issue in the 2020-21 Top Ten Issues Affecting Real Estate® by The Counselors of Real Estate®.*

Infrastructure, the vital basic physical and social systems that support the subsistence and growth of global economies and populations, once again rears its head as a principal and critical issue impacting real estate this year. As the world reawakens to its vulnerability to extreme events amidst the current COVID pandemic, we are forced to view infrastructure through a different lens given its crucial function in helping to sustain life and commerce, from the global to local levels. Going forward, it is accordingly imperative that we consider both the *ongoing* and the *extreme* infrastructure crises when trying to address the resulting significant impacts on land and the built environment.

The *ongoing* infrastructure crisis is manifested in an estimated \$15 trillion gap in global infrastructure investment by 2040.<sup>1</sup> This underinvestment will express itself in inadequate operation and upkeep of existing infrastructure as diverse as energy, surface transportation, port, and water delivery systems. Its effect will be to reduce quality of life levels, economic development, real estate values, and the future resiliency of our basic systems. Further, other new basic infrastructure needs will go unmet potentially affecting real estate values and development patterns as underserved locations become

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less livable or even undevelopable. In the face of this deficiency in infrastructure spending, competition amongst jurisdictions for infrastructure dollars will be fierce.

Further complicating the *ongoing* infrastructure crisis, we are increasingly subject to *extreme* infrastructure impacts related to major disruptors – including COVID, extreme weather, cyber attacks, and terrorism – which will require novel, adaptable and strengthened infrastructure across the globe. This more event-related infrastructure crisis further demonstrates that funding is the most elusive piece of the infrastructure puzzle. Both *ongoing* and *extreme* infrastructure funding will need to expand significantly as well as change and adapt

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in its structure. Reliance on public-private financing (which typically requires tolls, project revenues, or state and local financial support as a funding stream) will be more difficult in the future as state and local budgets are devastated by declines in sales and income taxes, record unemployment, pension fund liability costs, and now COVID-19 related costs.<sup>2</sup> Perhaps even more important, many critical infrastructure needs including public health care, public safety, education, public broadband, housing and homeless assistance, and other needs are not typical revenue generators.

Further, in the U.S. particularly, infrastructure has become a polarizing political issue where bipartisan, much less partisan, support and leadership has been elusive. One could hope that with upcoming elections and pandemic-related unemployment nearing 40 million, infrastructure as a topic may become the darling of political platforms and job creation strategies possibly providing infrastructure a boost if funding can be realized.

The extreme crisis of COVID has impacted infrastructure in several ways including highlighting advantages and limitations in existing systems and related real estate. For instance, retailers across the globe are increasingly relying on a complex and expanded logistics infrastructure as online sales grow as a percentage of total revenue. Fueled by lockdowns and fears of COVID transmission, online sales have escalated, particularly in population segments previously resistant prior to the pandemic. Once stores reopen and the surge subsides, the demand for a strong logistics infrastructure, particularly of “last-mile” warehousing and distribution facilities, will depend on the degree to which online shopping remains as a permanent behavioral change for large segments of the population.

Also, there is broad speculation as to whether fears resulting from the current pandemic will lead to decentralization and de-densification of population into more suburban or exurban lifestyles. A majority of pre-pandemic population models predicted a movement of population over the next few decades to urban centers to take advantage of consolidated infrastructure, opportunity and amenities. Any potential

decentralization of population will put further stress on existing infrastructure systems, particularly if development spreads beyond current settlement patterns to engage undeveloped greenfield sites that would require new infrastructure.

Further, the pandemic has shown us the importance of flexibility and scalability in infrastructure systems. COVID has created significant uncertainty in what the future demand will be for physical infrastructure—or how it should be designed, particularly with social or “soft” infrastructure systems such as health care and education. The adaptability of infrastructure systems has proven crucial, especially in light of the tremendous disruptions in, and reconfigurations of, infrastructure systems in response to the coronavirus. Educational program delivery has moved online, telemedicine has emerged as a viable means to broadly administer health care, and Zoom conferences have replaced physical meeting facilities. In extremely short order, hospitals have implemented drive-through medical testing centers, convention centers have been transformed into temporary health care centers, and abandoned hotels have been purchased or leased by municipalities as quarantine facilities. These changes represent a revolution in service delivery means and methods, which will significantly impact future infrastructure location, design and operation.

These rapid adaptations have tested the limits of our current infrastructure systems, which underscore the need for future change. The great strain on broadband systems during the pandemic has highlighted the need for broadly upgraded and redundant communication systems. In the case of transportation and travel infrastructure, the almost immediate decline in usage has created awareness of the need to change contingency planning. While in some cases the mothballing of systems may be possible, it is likely that most systems must maintain at least a skeletal level of operation. The operation of these systems often involves fixed costs that are no longer covered by the revenue streams originally envisioned. For instance, public transportation systems, toll roads and airports must still operate to fulfill at least a basic level of service even though ridership and usage are significantly reduced, causing significantly reduced

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revenue coverage. Other infrastructure systems deemed critical by the government – telecommunications, public safety, energy systems, etc. – must continue to operate despite local and global disruptions, and how to plan for their continued operations and financing will need to be radically rethought.

As future disruptors are likely to further challenge the ongoing global infrastructure crisis, we need to think strategically to create new rationales to attract private funding to join depleted public funding sources to support infrastructure needs. Future infrastructure design, operation methods and liability structures need to be reformed given potentially increasingly disruptive contexts resulting in disastrous infrastructure failures. Infrastructure planning and execution must become more selective, data-driven, equitable, and jurisdictionally cooperative to best prioritize limited infrastructure funding. Infrastructure decision-making and delivery systems must overcome a lack of centralized authority, political pork-barrel prioritization, ineffective procurement processes that lack the level of certainty required to attract investors, and often unskilled, corrupt and inefficient construction resources.

Finally, emphasis on the use of Contech and Fourth Industrial Revolution design, implementation and operation methods are necessary to achieve greater proficiencies and productivity from infrastructure investment in order to support future growth of the built environment, population and global commerce.<sup>3</sup> •

### ENDNOTES

1. Global Infrastructure Hub, <https://www.gihub.org/>.
2. Romm, Tony. “Cities and States Brace for Economic ‘Reckoning,’ Eyeing Major Cuts and Fearing Federal Coronavirus Aid Isn’t Enough.” *Washington Post*. April 10, 2020. <https://www.washingtonpost.com/business/2020/04/10/cities-states-coronavirus-budgets/>.
3. Kivity, Shai. “How Infrastructure Spending Can Fight a US COVID Recession.” *World Economic Forum*. March 27, 2020. <https://www.weforum.org/agenda/2020/03/covid-19-recession-us-infrastructure-solution/>.



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