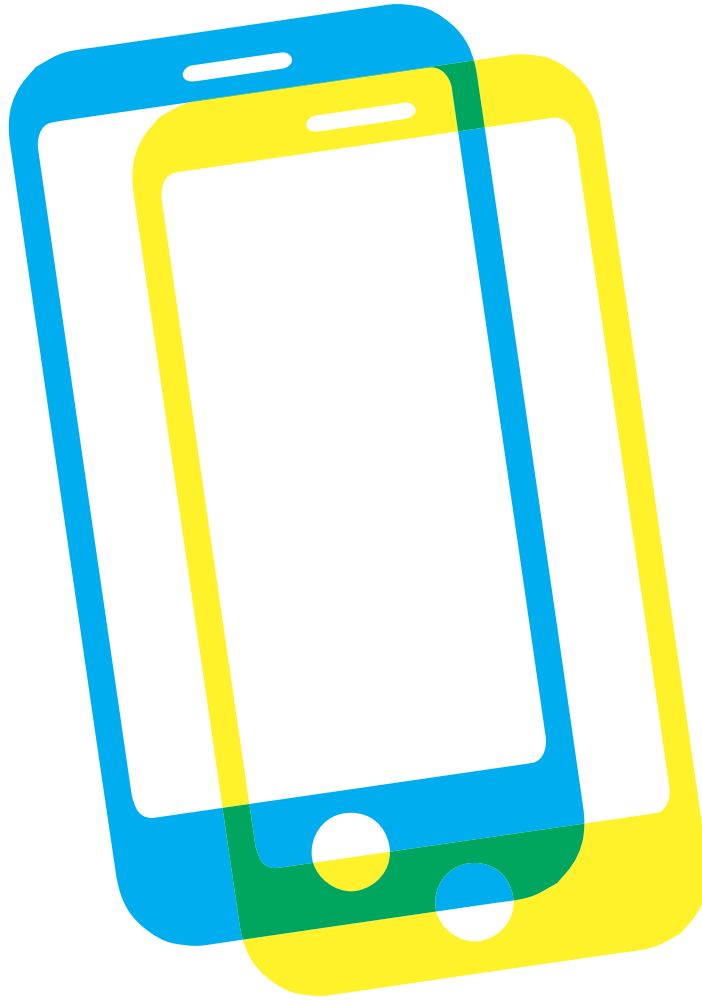


# MOBILE ZONING



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Zoning and building codes, the software of the built environment, have governed the use, location, and occupancy of all US real estate for the past hundred years. Mobile information technology has finally challenged that primacy, and the shape of US real estate markets will never be the same.

The power of municipalities to dictate land use in the US was established via the landmark 1926 Supreme Court ruling; the *Village of Euclid, Ohio v. Ambler Realty Co.*, that codified the practice of separating land use by functional zone.<sup>1</sup> Following *Euclid v. Ambler*, all US real estate, in conjunction with the rise of professional city planning, came to be governed by the belief that a building's use should be fixed, that land use should be centrally controlled, limited to specific predetermined uses, and divided by function. This is the foundation of the modern US real estate industry.

Mobile information technology has upended US land use regulation, and the ramifications of this technological upheaval are finally coming into view.

As many current land use principles were established during the Industrial Revolution, concepts that supported and enhanced a twentieth-century industrial society increasingly conflict with a twenty-first-century economy organized around mobility and knowledge. While industrial jobs are typically tied to a permanent physical location (a factory or manufacturing facility), making them well-suited for external land use controls, today's information and knowledge workforces, powered by mobile telecommunication and cloud-based information technology, are increasingly placeless. This shift has upended real estate demand and the presumptive logic of place-based use limitations and central control.

In today's mobile information economy, the power to do more things everywhere means that, in a practical sense, land use is now vested with individual people, not places. No longer tethered to a fixed location of discrete and limited use, people now bring their jobs, stores, and entertainment with them wherever they go. Not surprisingly, many of these newfound freedoms place personal choice in direct conflict with zoning and building codes. In shifting control to individuals and consumer choice, mobile information technology is challenging government and building owners for primacy in deciding who does what, where, and when.

Another result is that for office and retail assets specifically, everywhere has become “no-cost” shadow competitive supply. Any asset sector that is forced to compete with unlimited “no-cost” competition is permanently impaired.

### THIS IS THE TECHNOLOGICAL USURPATION OF EUCLID V. AMBLER

One result of this change is that people can now be more productive anywhere through their phones than any single purpose building may permit. This suggests that restrictive zoning and building codes, once a source of economic and social stability, have become agents of hastened functional obsolescence. Rigidity has become their weakness.

Another result is that for office and retail assets specifically, everywhere has become “no-cost” shadow competitive supply. Any asset sector that is forced to compete with unlimited “no-cost” competition is permanently impaired.

To remain relevant, rather than fighting technology-enabled freedoms, building owners and municipalities must learn to enable, align with, and support expanded functionality and consumer choice. Those who don't will lose. The impacts will define the future of real estate markets, capital markets, municipal finance, the design of cities, and the environment.

Let's focus on two sectors that zoning and building codes have traditionally separated, but which are now merging through technology: residential and office (i.e., living and working)

### DC AREA: THE CANARY IN A COAL MINE FOR A CHANGING ECONOMY

Emerging from the pandemic crisis, the line between home and work hasn't just blurred—it has virtually disappeared. Markets featuring highly educated, well-compensated information and knowledge workforces—traditionally the safest office markets—are increasingly the most at risk. Why?

At its most basic, an office building is a machine for storing and processing information. Its value is therefore derived from the volume of people who need to visit every day to access information to do their jobs. In 2007, the iPhone and mobile internet technology liberated all information from buildings. Today, most people carry in their pockets a machine that provides immediate access to all information, at all times. The permanent de-linking of information from physical space shifted power from the landlord to the tenant and permanently changed the dynamics of office demand.

The Washington, DC region is home to the US Federal Government, the nation's largest and most stable employer. Due to the outsized influence of federal employment, the DC area was long considered the nation's safest office investment market. Evidencing this stability, in Q1 2010, Washington, DC had the lowest office vacancy rate and the highest average office rents in the US.<sup>2</sup>

In addition to being the nation's largest employer, the US Federal Government is likewise the nation's largest information processing enterprise. It is through this lens that the disaggregating power of mobile information technology and its impact on office demand become clear.

In 2010, the US Government passed the Federal Telework Enhancement Act (FTEA) and in Q1 2010, the DC MSA (Northern Virginia, District of Columbia, Suburban Maryland) had an overall office vacancy rate of 11.93% on a total inventory of 390 million SF, for a total vacant supply of 46.5 million SF.<sup>4,5</sup> The FTEA required all executive agencies to establish and implement policies and protocols enabling staff to work from home. The goal was enhanced work/life balance, and talent recruitment and retention. In passing the FTEA, the US Federal Government became the first large-scale employer to embrace a mobile workforce.

Over the course of the next decade, the DC area experienced positive job growth every year, and every year office vacancy rose. This dichotomy was unprecedented. What had never occurred in any year between 1945 and 2010, has occurred every year since.

Today, the DC MSA has an overall office vacancy rate of 18.8%; a total office inventory of 372.5 million SF; and a total vacant supply of 70 million SF; an increase in total vacancy of 23.5 million SF since 2010. During this same period, the area's office inventory decreased by 17.5 million SF, meaning that total DC area office demand decreased by 41 million SF in just over one decade.<sup>6</sup> This is the equivalent of an additional 205 office buildings, each containing 200,000 SF, all becoming 100% vacant, in the safest US office market. In response to reduced demand, rental rates declined while concessions and TI allowances increased, lowering office values market wide.



Similar demand and value reductions to office assets are now occurring across the US.

Facing unlimited tech-enabled shadow competition and increased worker freedom, office owners must find additional utility for their assets in order to maintain profitability. But the burden isn't on owners alone. Just as decreased demand begets decreased value, decreased value begets decreased tax revenue. Confronted with declining office demand, and declining sales tax revenue from reduced office attendance, municipalities that had long relied upon stable daytime populations and rising office values to support their operations will increasingly face an unenviable choice between either reducing basic services (e.g., schools, police and fire protection, etc.) or increasing property taxes on residents.

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### WORKING FROM HOME MAY NOT BE AS EASY AS YOU THINK

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Prior to the pandemic, in 2019, less than 6% of the US workforce (10 million people) worked from home.<sup>7</sup> In 2009, the amount was 4% (6 million people).<sup>8</sup> This represents a four-million person increase over a ten-year period. Today, according to the most recent polls and studies, 58% of the 164 million-person US workforce, or 96 million people, telework at least one day each week.<sup>9</sup> This means that an additional 86 million people, who only three years ago spent some portion of each day at an office, now spend that time somewhere else. This is the largest and fastest migration in human history.

Mobile information and knowledge workers now comprise the largest and most underserved constituency in commercial real estate, and its least understood demand generator. For many US corporations, this transition has created a windfall opportunity, as real estate costs have been offloaded from corporate balance sheets onto employees. Despite the rapidly growing market for working from home, most of the existing housing supply in the US is neither designed for nor equipped to support this transition. What are some of the challenges?

In the US, residential and office buildings are designed for different uses and occupancies. This difference is reinforced through building codes which each have different standards for fire protection, sprinkler design and coverage, building egress, floor strength, handicapped accessibility, and parking, based upon use. As commercial uses are designed for higher occupancies, commercial codes are typically more restrictive than residential codes, making the retrofit of residential properties impractical for commercial function. From a land use perspective, no standard accommodation currently exists for multi-family housing units to serve as *de facto* office space. Therefore, despite the perception that existing multi-family supply should provide a natural home for rapidly emerging telework demand, code impediments complicate this reasonable adaptation. Even if local zoning regulators were willing to allow existing multi-family buildings to accommodate expanded commercial cross functionality, existing building code and life-safety limitations would remain significant impediments to any meaningful near-term transition.



Creating assets that can attract and support evolving tenancies is, therefore, the single greatest opportunity in commercial real estate today.

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In addition to code considerations, building owners and investors who allow assets to be used in ways that are not clearly lawful (apartment owners allowing residents to occupy their apartments as an office) face considerable risks from insurers and lenders who require that assets be operated in compliance with all local laws and ordinances. Tenants too, face considerable risk in assuming that the technology-enabled freedoms correspond with lawfully permitted use. Would a renter's insurance claim made on an apartment unit being occupied for a non-lawful office use be granted?

Just as today's existing office buildings are poorly equipped to compete with unlimited no-cost shadow supply, building and zoning code limitations render most of today's existing multi-family housing ill-suited to meet rapidly expanding telework demand. Both asset types, therefore, face hastened technology-fuelled functional obsolescence.

How large is the challenge? The US today has more than 96 million teleworkers, 44 million rental apartment units and almost 15 billion sf of vacant office space.<sup>10</sup> The total value of the combined US office and multi-family markets is US\$5.4 trillion, and neither sector is well suited to accommodate largest pool of rapidly emerging demand.<sup>11</sup> Creating assets that can attract and support evolving tenancies is, therefore, the single greatest opportunity in commercial real estate today.

## FLEXIBILITY: THE NEW NORMAL

As technology will not stop advancing, how can investors prepare? Some ideas to consider include:

**1) Flexibility is stability:** As consumers now have the power to decide where and when to do everything, buildings need regulatory regimes that support customer self-determination. Going forward, real estate products that expand function to enable growing demand will generate the safest income. As income stability and predictable growth drive exit multiple, the more a building can do, and the more people it can effectively serve, the more it will be worth.

**2) Existing office assets are now value plays:** As technology permanently changes the demand for even recent vintage properties, many high-quality single purpose office assets will now cost far less to buy than to build. Repurposing high-quality physical plants with updated “software” to enable expanded uses will result in generational basis and speed to market advantages, while limiting the risks of ground up construction.

**3) Increased utility means increased sustainability:** Buildings that expand allowable uses to align with evolving consumer choice means fewer buildings are needed. Fewer buildings equals more green space. Multi-functional spaces are likewise the most affordable as they allow consumers to combine several “life-cost” categories (e.g., living, working, and commuting) within one physical space. In a world of \$4–\$5/gallon gas, that is meaningful. Increased building utility likewise extends the life and peak hour functionality of municipal infrastructure while allowing people to trade commute time for an expanded set of more enjoyable pursuits. Considering these clear benefits, one question for investors is can they still achieve ESG goals by investing in single purpose real estate assets?

Recognizing the potential for an uneven regulatory response, portfolio managers should consider allocating capital to locations where municipal leaders either support expanded building utility today or where underlying codes permit expanded uses by right.

To remain relevant, physical space needs to be as flexible and value enhancing to its customers as cyber space.

**4) Municipal responses will be uneven:** Faced with declining tax revenues from reduced office demand, municipalities may be tempted to reassert land use hegemony and increase enforcement against home workers. This would likely increase volatility in multifamily assets while having little to no impact on office utilization. Recognizing the potential for an uneven regulatory response, portfolio managers should consider allocating capital to locations where municipal leaders either support expanded building utility today or where underlying codes permit expanded uses by right. In the new reality of permanent evolution, the local Planning Director and Fire Marshal will play an outsized role in the future viability of municipalities, individual real assets, and become quantifiable risks for portfolio managers to underwrite. Locations where assets can quickly and inexpensively pivot to where demand is going will be increasingly attractive to capital.

As technologies advance, the built environment must keep pace. To remain relevant, physical space needs to be as flexible and value enhancing to its customers as cyber space. While we don't know what tomorrow's technologies will enable, we can be certain that they will be faster, more dynamic and more liberating than what we have today. Building owners, investors, and municipalities must be proactive in establishing regulatory frameworks that understand, anticipate, accept, and support this new reality. The future of real estate investment requires it.

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## ABOUT THE AUTHOR

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Robert Seldin is Managing Principal for Madison Highland Live Work Lofts, part of Madison Marquette, a leading private full-service real estate provider, investment manager, developer, and operator headquartered in Washington, DC.

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## NOTES

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## REVIEWER RESPONSE

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Seldin’s article succinctly dissects the intersection of land use dictated by municipalities, the built environment, and the impact of technology on demand—particularly for office.

The result is an eye-opening look on how work-from-home has impacted office use, both pre- and post-pandemic, and how both owners and municipalities will need to adapt to changing demand patterns.

While there have numerous articles on the future of office, Seldin’s article is unique and provocative, framing the issue with the fundamentals of real estate: i.e., what is the permitted use of the physical asset? It then moves to how technology has untethered the knowledge worker to the physical asset. Using the Washington DC MSA as a case study, it shows how the Federal Telework Enhancement Act,

passed in 2010, massively impacted the space-use in the market over the last ten years. He nicely frames that “office owners must find additional utility for the assets” and municipalities will be faced with choices to address declining revenue impact for under-utilized office.

While he points out that working from home in apartments may not be “up to code” and give rise to certain liability issues, one might argue that is currently not a burning issue for municipalities and insurers alike. Overall, this is a fresh take on demand drivers for space use and might be considered one of the most interesting reads on the topic in 2022.

– Thomas Brown  
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