



PENN IUR BRIEF

Reflections on Doom Loop or Boom Loop

Work from Home and the Challenges Facing
America's Big Cities

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This Penn Institute for Urban Research (Penn IUR) brief presents a discussion of [Doom Loop or Boom Loop: Work from Home and the Challenges Facing America's Big Cities](#), a Volcker Alliance report co-authored by Richard Voith, Susan Wachter, David Stanek, and Hyojin Lee. The report was featured in a Volcker Alliance/Penn IUR [Special Briefing](#) on May 30, 2024. This brief presents a shortened version of the discussion, edited for clarity, with closing comments by Susan Wachter.

Richard (Dick) Voith: Report Findings

COVID-19 and rapid technological advances like Zoom meetings have dramatically changed attitudes about working from home and about remote work more generally from both employers and workers, as a hybrid schedule has gone from rare to common. While these shifts resulted in greater flexibility with respect to working hours and location, they have led to serious concerns about the impacts on commercial real estate, demand for office space and the potential fiscal impacts on cities, the roles of public transit systems, and the very viability of cities as we know them. Cities only thrive because they create an environment that is active, innovative, and provides opportunities that are uniquely available in these dense, active places.

These urban agglomerations result, in part, from in-person interactions that generate higher productivity, higher wages for workers, and greater consumption opportunities for people in general. These benefits derive from knowledge sharing, often resulting from serendipitous in-person discussions, which offer opportunities for collaboration and for learning in cities. Work from home potentially undermines these agglomeration benefits and the value of cities.

There is a need for policy to respond to these challenges. Markets adjust to respond to all sorts of changes. But the challenges from work from home may not be solved by market forces alone. In larger cities like New York, market forces may not automatically generate the best outcomes for those cities, or, for that matter, the nation. This is because when people find it attractive to work from home, they reduce their in-person interactions with others, potentially lowering the productivity and innovation of their remaining in-person workforce.

Hence, there's the classic externality for those of us who are economists: With work from home, remote workers save commuting costs and other related costs, but they don't bear the cost of lost productivity from in-person labor for a city. So, a city may not retain its agglomerations. As Stijn Von Nieuwerburgh noted in the May 30 Special Briefing, there is a very real possibility of a doom loop scenario of vacant space in distressed central business districts, declining economic competitiveness and fiscal stress—and the fiscal stress resulting in declining crucial services—making working and living in cities less attractive.

But a Doom Loop is not the only potential outcome. Over the years, cities like New York have repeatedly adapted to fiscal crises: New York experienced near-bankruptcy in the 1970s and prospered in the 1990s. After 9/11, many said that dense cities with skyscrapers were too dangerous and again projected the decline of New York. In late 2007, after the housing market downturn and collapse of Lehman Brothers precipitated the Great Recession, people once again predicted the decline of cities.

The current remote work crisis in New York City should not be underestimated. It poses a direct and serious challenge to the commercial office sector and to public transportation. But work from home also potentially offers opportunities for the city. Firms can potentially lower costs by shifting some tasks that do not require in-person interaction to be productive to firms in lower-cost locations, thereby lowering space costs and labor costs, as workers can have flexible affordable housing at a lower wage.

This can allow firms to concentrate employees that typically require in-person interaction to be productive and innovative, effectively resulting in a high concentration of workers that specifically benefit from in-person interaction. This sorting of employees based on their roles that require in-person interaction can enhance the



agglomeration of benefits, wages, profits—all at lower costs. This could make cities like New York even more attractive.

This outcome is possible if New York City manages to maintain a high quality of life, adapt its transportation system, and address housing affordability.

David Stanek: Comparative Outcomes

As part of this report, we looked at overall metrics for five different cities. New York was the primary focus for us, but we also looked at Chicago, Miami, Philadelphia, and San Francisco. Comparing Miami with San Francisco particularly offers the contrast in how cities have been affected by post-pandemic recovery and what the future looks like for them. On one hand, we have San Francisco. It's unfortunately the poster child for a difficult, post-pandemic recovery. Office vacancy rates hover, depending on which report you're looking at, somewhere between 20 percent and 30 percent and are projected to rise almost as high as 40 percent over the next five years. Office market values have declined by 16 percent against the national average of about 10 percent. This is in large part because San Francisco is primarily dependent on the tech sector.

Generative artificial intelligence (AI) could be the next economic boom for San Francisco, but of course, a lot of the companies that are focused on this technology are south of San Francisco, and the downtown market is still struggling mightily. Another indicator of San Francisco's struggle is that public transit use, within urban areas, is about 55 percent of its pre-pandemic level, but if you incorporate suburban ridership, it's less than 50 percent—the lowest of the cities we analyzed.

In comparison, there is Miami. In Miami, the office vacancy rate has been steady since 2020, hovering between 9 and 10 percent; office values have increased on a square footage basis by 23 percent between 2020 and 2023. Miami has lost about 4 percent of its population during the pandemic, but its job growth has been substantial. Miami lost about 13,000 jobs during the pandemic but has since gained upwards of 100,000 jobs. Miami's transit recovery has also been up between 80 and 90 percent.

In between these two extremes, we have Chicago and Philadelphia. Both cities are interesting because their economies depend on different industries. For Philadelphia, the city depends on education and medicine (colloquially known as eds and meds) and Chicago primarily depends on manufacturing, financial, insurance, and professional and technical services. Similarly, both cities didn't lose as many jobs as some of the other cities did, but they also haven't had as robust job gains. Transit ridership in Chicago has recovered only to about 62 percent. Philadelphia's transit recovery is much higher, at about 79 percent, while its population growth between 2020 and 2022 has been flat.

Recent demographic data released by the census data done by William Frey from the Brookings Institute does a really nice job looking at how immigration has impacted demographics in the cities, particularly in Miami.

So what should cities facing the Doom Loop be doing to help them prosper in the future?

The first thing is an economic restructuring of cities to focus on industries that require in-person work, such as health care, life sciences, and renewable energy-related manufacturing.

Next is a focus on transit and housing, two things that go hand in hand. The biggest barrier for a lot of people who work from home is transit costs, both in time and money. If we can improve the transit systems in metro areas and increase the speed of transit and also lower the cost, this would encourage people to go to the office. Office landlords are improving office spaces as best they can, but they are still struggling to fill their buildings.



Additionally, housing production plays a role. Population growth has been flat or mostly flat across these cities, but there has been a lot of in-migration of younger people, and housing costs have increased considerably. Reducing the cost of housing by increasing the pace of housing production is quite important.

Finally, quality of life is a major factor and each city has a different narrative. While we don't necessarily touch on this in the paper, city amenities and addressing issues like crime are important and we recommend them as a focus to how cities should be moving things forward.

Susan Wachter: Recent Data

Dick Voith has described contrasting urban Doom Loop versus Boom Loop scenarios and David Stanek the different city outlooks. To wrap up, it's useful to highlight the most recent data on city population and downtown recovery, as of the end of 2023 and March 2024, respectively, which confirm the trends documented in the report and show that they are ongoing.

Figure 1 is a map of the US, which extends the data in the report, and shows that the population continued to move south and west and away from established urban population centers.

Figure 2 shows the lack of recovery of downtowns in major urban centers throughout the country. Both show the daunting challenges that cities face.

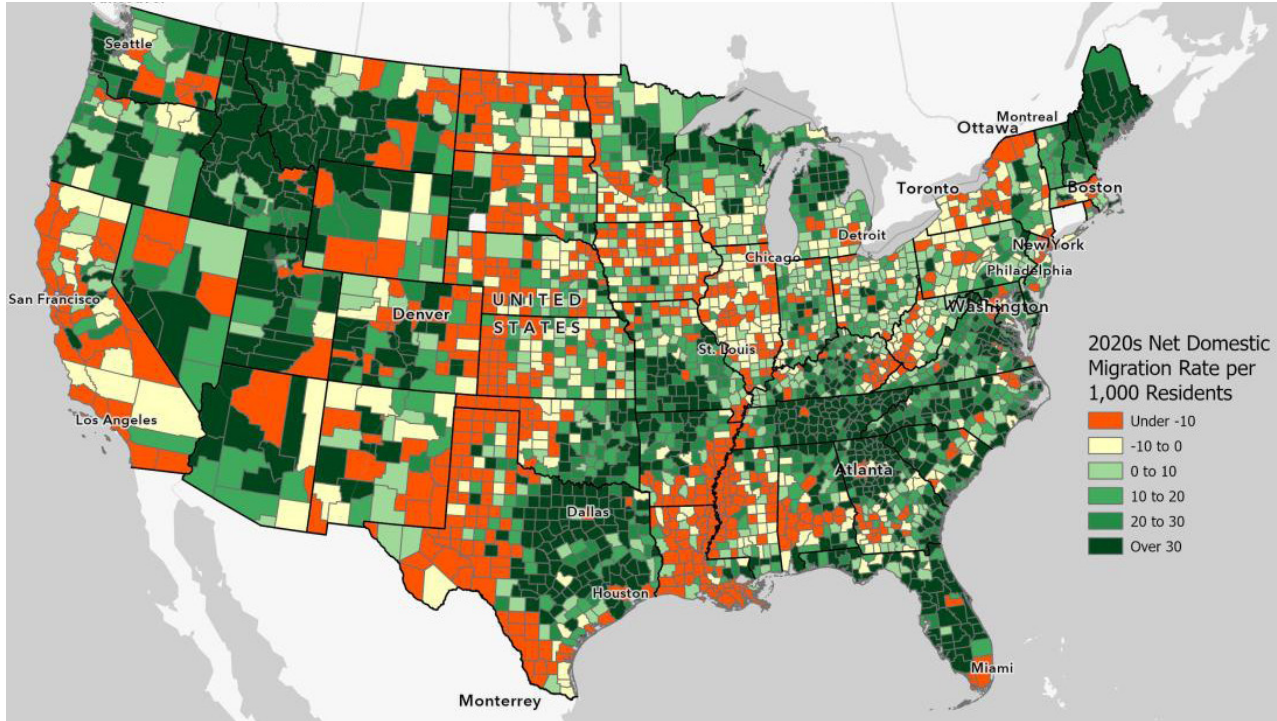
This data show that the trends documented in this report are continuing in the more recent data. The driver of these trends, as discussed in the report, include the move of households to nearby suburbs as well as to rapidly expanding southern and western states. Remote work technology is also enabling firms to disengage from high-cost urban centers. Dallas and Fort Worth are examples, with a new Texas stock exchange. As the report documents, remote work liberates workers from long commutes and enables firms to move to lower cost places while depriving established cities of economic activity. Both deprive cities of tax revenues and economic activity.

However, as Dick Voith points out, new technologies, including AI, also need talent agglomerations which cities uniquely provide. In fact, New York City is the city with the fastest growth in tech jobs (Doshay and Bantock, 2024). There is the potential for cities to reclaim agglomeration economies with growth in AI and new tech. For this to occur, enhancing quality of life in urban downtowns will be critical to attracting talent (Couture and Handbury, 2020). Cities can prevent a Doom Loop scenario. A potential saving grace for large cities today is the increasing cost of alternative locations. This is unlike the 1970s, when cheap suburbs could continue to expand outward threatening a continuous urban population loss (Voith and Wachter, 2009). Among other policy suggestions included in the report is, to the extent possible, the removal of barriers to converting empty offices to housing (Gupta, Mittal and Nieuwerburgh, 2022). The playbook is there. It needs to be implemented.



FIGURE 1:

US map extends the data in the report, showing that the US population continued to move away from established urban population centers.



2020s Domestic Migration Rate by County

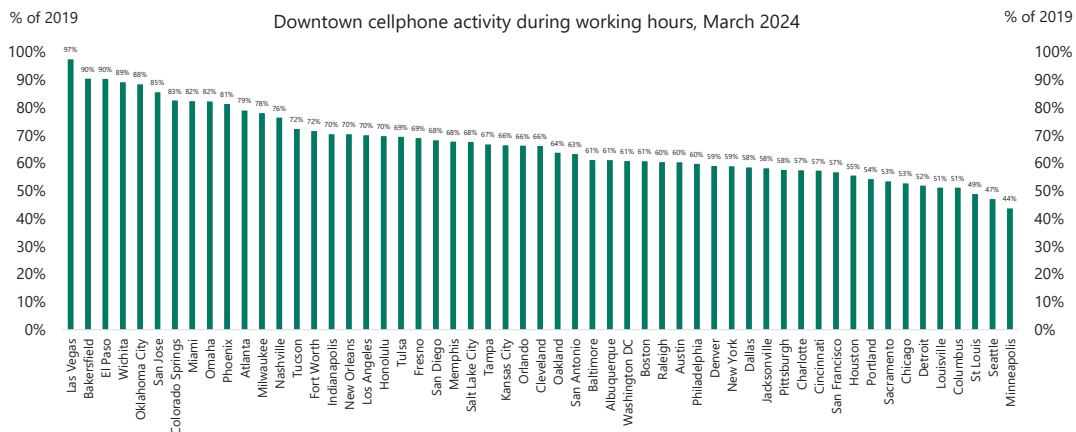
Source: Census Bureau Intercensal County Population Estimates 2020 to 2023 Components of Change. Connecticut counties are not included due to the state switching to planning regions.

FIGURE 2

Cellphone data shows that downtown activity is still significantly below 2019 levels.

APOLLO

Cellphone data shows that downtown activity is still significantly below 2019 levels



Source: University of Toronto, Downtown Recovery, Apollo Chief Economist. Note: The recovery metrics on this website are based on a sample of location-based mobility data derived from cellphones. Metrics are computed by counting the number of unique visitors in a city's downtown area in the specified time period, and then dividing it by the standardized number of unique visitors during the equivalent time period in 2019.



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