

INRIX



2023 INRIX “Return to Office” Report

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KEY FINDINGS

- Recent data reveals that 18 out of 20 downtowns still sit below their pre-COVID level of vehicular trips. Vibrant, active downtowns are key to the local economy, and the substantial decrease in trips has directly impacted businesses, office buildings, and tax collections.
- New York, the most job-dense downtown in the U.S., sits just -5% below its pre-COVID level of vehicular trips, while San Francisco, the second-most employment-dense downtown, remains -41% below 2019 levels of traffic.
- Downtowns Washington, D.C., Chicago, Seattle, and San Francisco have shown some of the least trip growth this year despite return to office plans, while Downtown New York continues to surge towards its pre-COVID norm.
- Transit ridership through April 2023 shows only a moderate change, in both directions, in most major metropolitan areas studied. The data suggests that shifting from telecommuting to transit has yet to occur in large numbers.
- Regions that are more concentrated in three key industries: Information, Finance, and Professional Services (IFPS), tended to have higher rates of telecommuting, with nearly 40% of employees working from home nationwide, compared to just 13% in all other industries combined.
- Telecommuting rates also varied by location within industries. In San Francisco, 64% of workers in IFPS reported telecommuting. In Houston, just 28% of IFPS workers reported telecommuting. Therefore, even within the same industry, local factors may have an outsized effect on the prominence of telecommuting, and a downtown's recovery.

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INTRODUCTION

The COVID-19 pandemic had a substantial impact on nearly every dynamic of road travel – from urban to rural vehicle-miles traveled (VMT), shifts in suburban and downtown travel, a lessening of the peak period, and the rise in telecommuting.

Downtowns are an agglomeration of housing, retail, restaurants, hospitality, tourism, offices, the arts, and other land uses. As workers transitioned to remote work arrangements, downtown areas experienced substantial declines in trips within central business districts.

A strong downtown is critical for a successful city and region, as well as key government programs. The International Downtown Association noted that downtowns, “deliver an average of 17% of the citywide property tax revenue, 43% of hotel tax revenue, and 12% of sales tax revenue,” the loss of which could lead to public budget cuts.¹ Indeed, a decline of people going into downtown will have negative implications on growth and recovery.

This trend was highlighted in the “2020 INRIX Global Traffic Scorecard”.² The study found that downtowns “would be the last to recover...likely far into 2021 or 2022,” citing the large decrease in travel to and from downtowns compared to regional travel trends resulting from the growth of telecommuting.

Yet 2022 has passed, and some downtowns still struggle with recovery. With concerns ranging from retail foot traffic to real estate values, a lot is riding on a vibrant downtown. Recent headlines capturing the uncertainty in some areas, read similarly: “Owners are Walking Away from Downtown S.F. Buildings. We Mapped 14 in Financial Crisis,”³ and “Downtown Minneapolis isn’t Dead, but its Challenged and Changing – Dramatically”.⁴

Leveraging INRIX Trip Analytics and aggregated data from more than 300 million vehicles and devices, the goal of this study aims to evaluate the multifaceted influences on downtown travel patterns during “return to office” periods, including factors such as telecommuting, transit ridership and trips to downtown, to better understand what is behind recent return to office trip patterns.



¹ “The Value of U.S. Downtowns and Center Cities,” International Downtown Association, at [IDAVODT20_Compndium_2020_ExecSum_021921.pdf.pdf](https://www.idavodt20.compendium_2020_execsum_021921.pdf) (downtown.org)

² “2020 Global Traffic Scorecard,” INRIX, at www.inrix.com/scorecard

³ “Owners are Walking Away from Downtown S.F. Buildings. We Mapped 14 in Financial Crisis,” San Francisco Chronicle, at <https://www.sfchronicle.com/sf/article/map-downtown-san-francisco-buildings-18121855.php>.

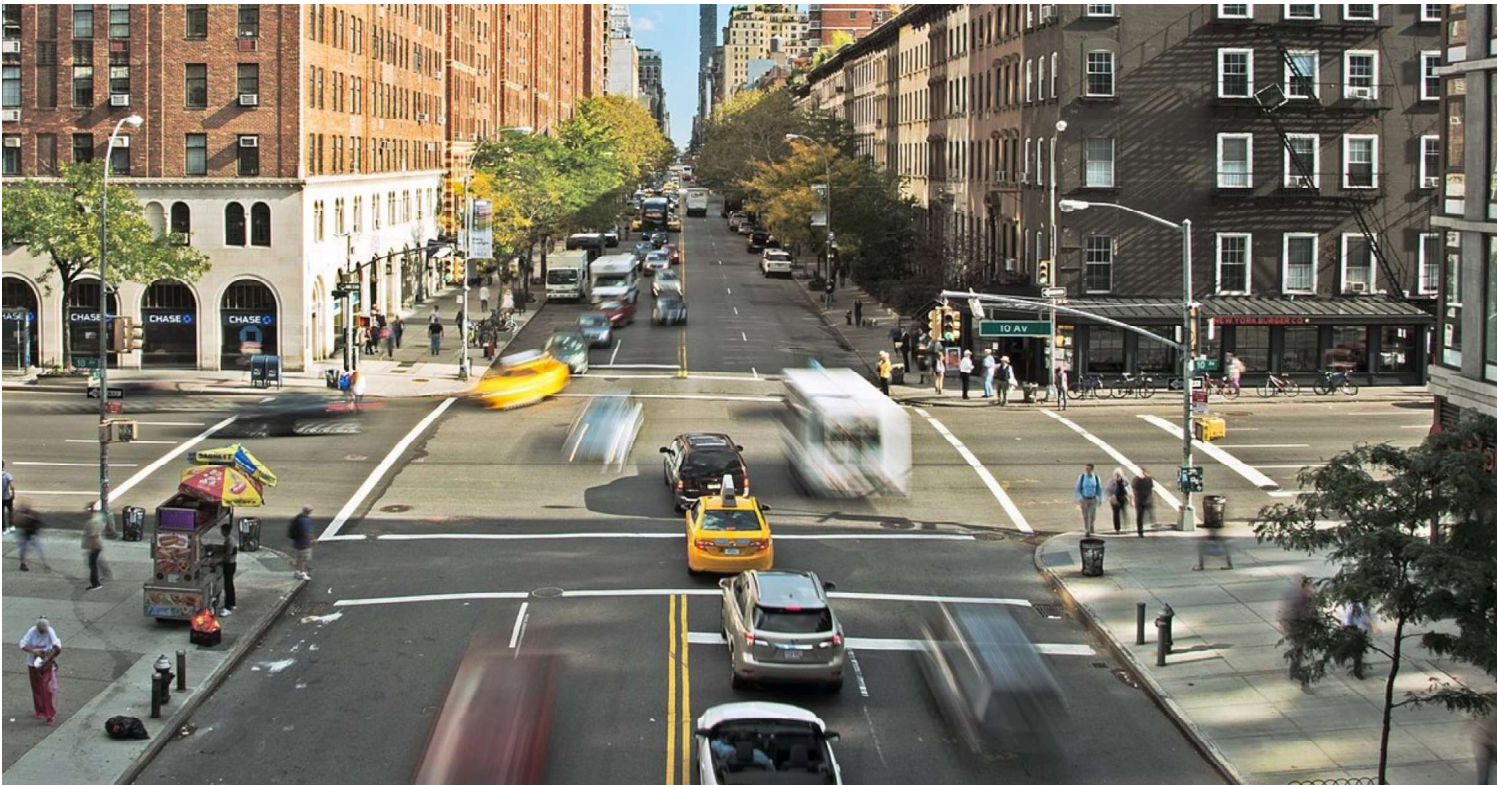
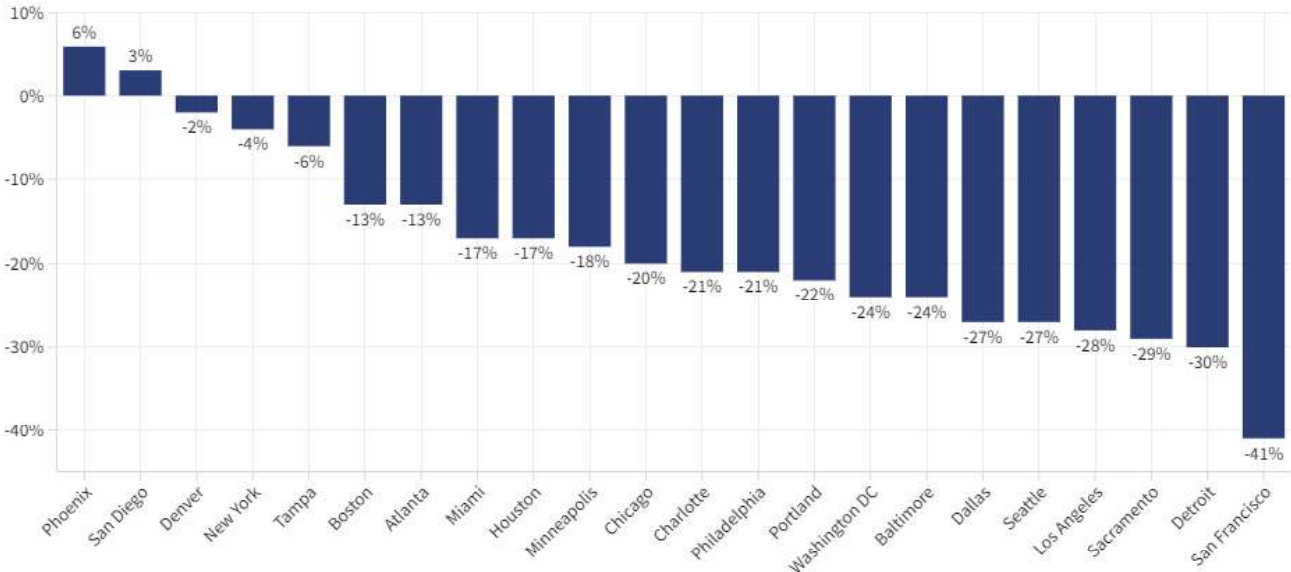
⁴ “Downtown Minneapolis isn’t Dead, but its Challenged and Changing – Dramatically,” Star Tribune, at [Downtown Minneapolis isn't dead, but it's challenged and changing – dramatically](https://www.startribune.com/downtown-minneapolis-isnt-dead-but-its-challenged-and-changing-dramatically/) (startribune.com)

Trips to Downtown Across Modes

While COVID-19's impact on travel spanned across all regions and modes, the sharpest drop in trips has been around downtowns, challenging business owners, employers, and public officials on a mission to get people downtown again.

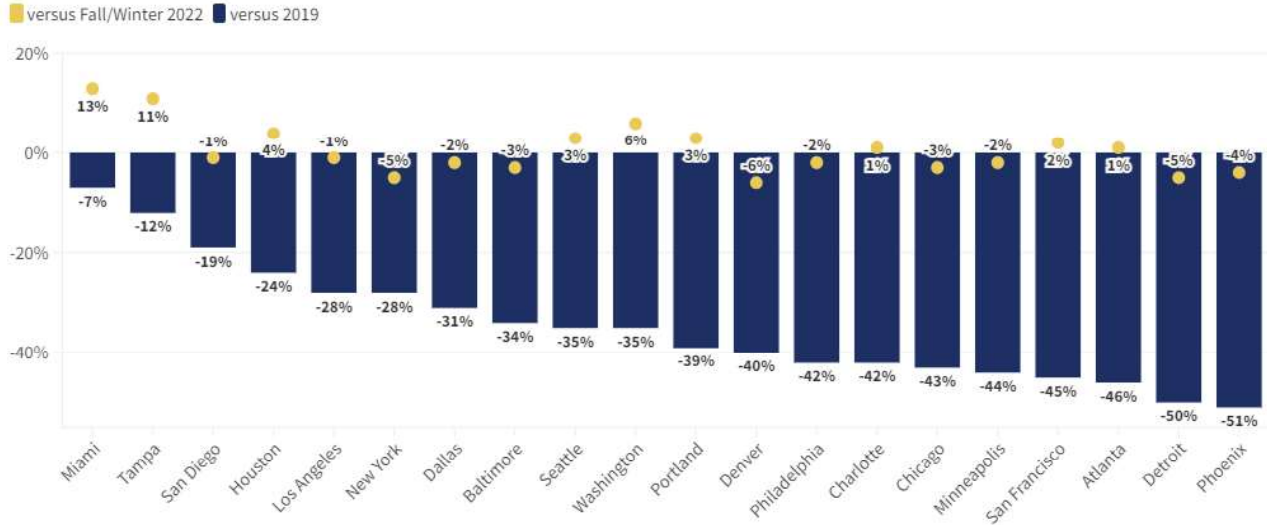
Trips in 18 of the 20 downtowns analyzed are still down considerably. But individually, some downtowns are recovering faster than others. Surprisingly, and unlike other job-dense downtowns, trip growth into Downtown New York has been resilient at just four percent lower than pre-COVID levels.

Vehicular Trips to Downtown vs Pre-COVID

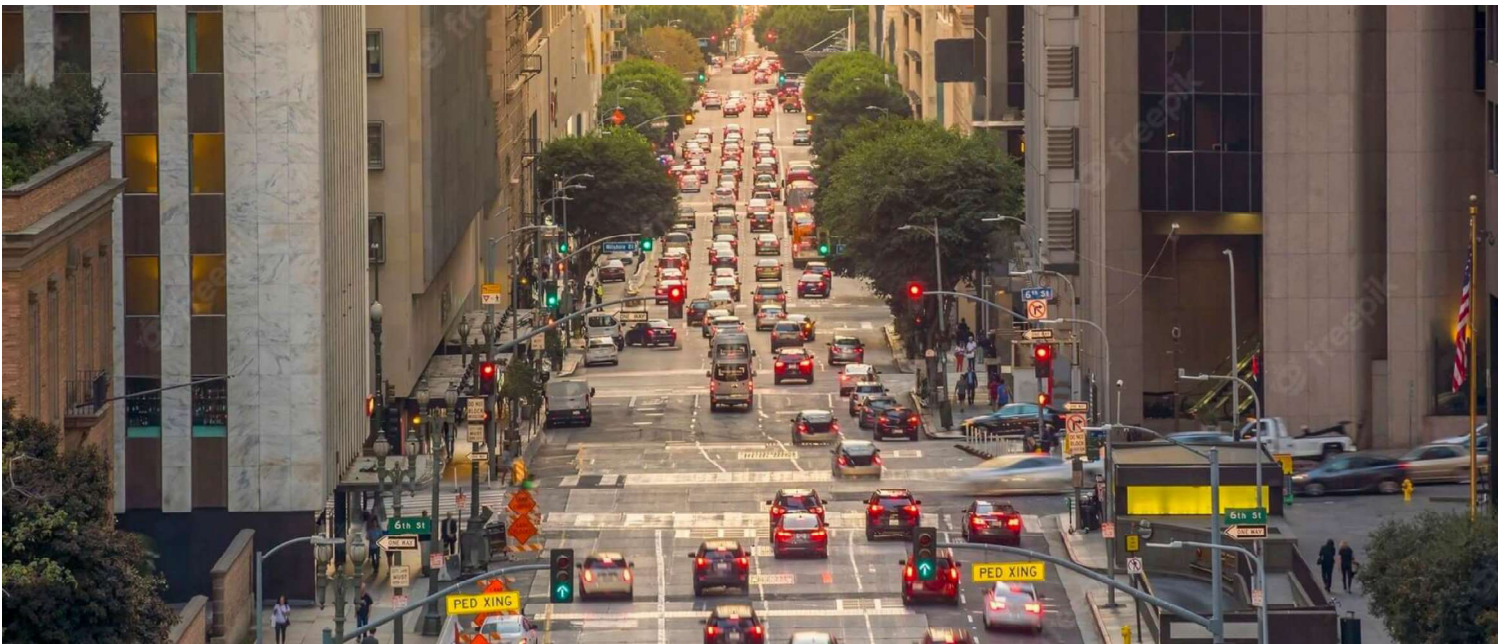


Another way to measure trips to downtown is to look at transit ridership. Transit in dense urban areas focuses primarily on getting people in and out of downtown, as that is typically where the largest trip markets exist. By the end of 2022, transit use still lagged pre-COVID levels by 39%.⁵ Data available through the first four months of 2023 reveal moderate changes in ridership in some of the densest metropolitan areas.

Change in Metro Area Transit Ridership



Collectively, vehicular trips are largely down versus February and March 2020; however, transit use still lags automobile use. We explore potential factors to understand why and how trip recovery varied across downtowns in the subsequent sections.



⁵ "Monthly Module Adjusted Data Release," Federal Transit Administration, at Complete Monthly Ridership (with adjustments and estimates) | FTA (dot.gov)

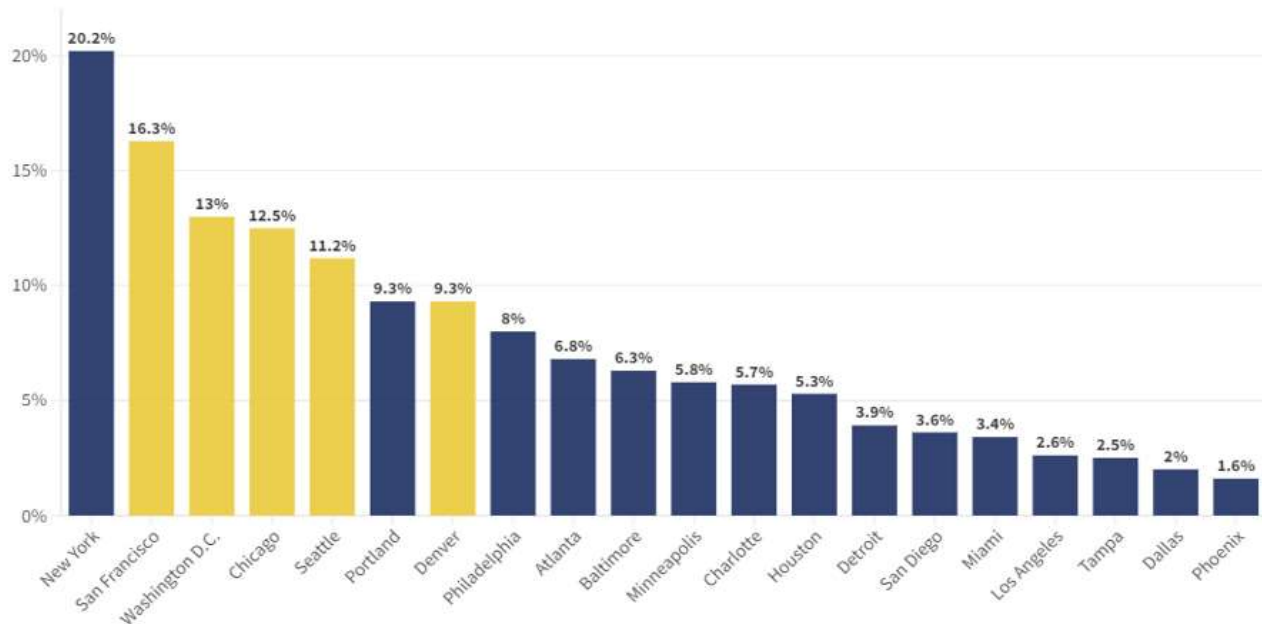
Job Density's Role in Recovery

Demographia's⁶ analysis of job-density in downtowns across the U.S. highlights the significant variation in employment density across the 20 areas studied. From a high of 20% of regional jobs located in Manhattan to a low of 1.6% of regional jobs in Downtown Phoenix, the "importance" of downtown in terms of jobs significantly affected not only the original impact of COVID-19, but also a downtown's recovery.

Percent of Regional Jobs Located Downtown



■ Slowest Growth Year-to-Date



Just a year into COVID-19, re-emergence travel trends began to vary across the analyzed areas. Trips to job-dense downtowns in areas like New York, Chicago, and San Francisco were still down considerably, while less job-focused downtowns recovering sooner.⁷

By the end of 2022, however, job-dense downtowns began to regain vehicular trips at nearly twice the rate as their less-dense counterparts. Trips to downtown grew an average of 14% in 2022 among the most-dense downtowns, versus eight percent in others. But through May 2023, these gains have stalled.

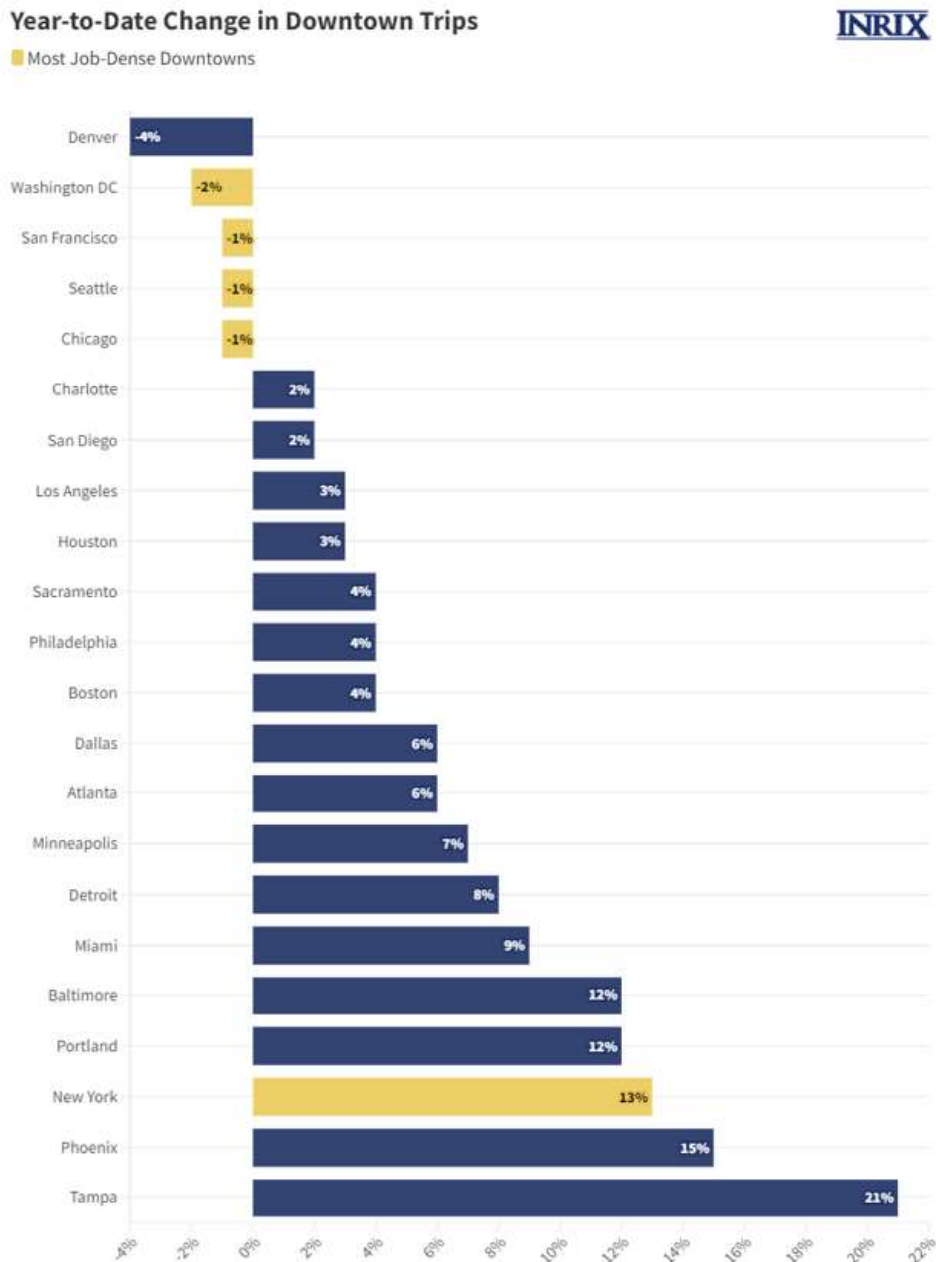


⁶ "Demographia United States Central Business Districts," Demographia, at <http://www.demographia.com/db-cbd2000.pdf>

⁷ "2020 Traffic Scorecard," INRIX, at www.inrix.com/scorecard

Despite recent efforts from employers to bring people back to the office, vehicle trips to downtown haven't increased through May 2023, due in part to employee pushback on return to office plans.⁸ Downtowns Washington, D.C., Chicago, Seattle, and San Francisco have shown some of the least trip growth this year despite these plans, while Downtown New York continues to surge ahead toward its pre-COVID norm.

The most job-dense downtown in the U.S., New York has grown to just -5% below its pre-COVID level of vehicular trips, while San Francisco, the second-most employment-dense downtown, still sits -41% below 2019 levels of traffic.



Notably, four of five job-dense downtowns exhibit some of the least trip growth through 2023 of the areas studied (San Francisco, Washington D.C., Chicago, and Seattle). This suggests that while employment density appears correlated with vehicular trip recovery year-to-date, the New York outlier signals that other factors are likely influencing travel.

⁸ "Swipe your badge or get fired? Employers and workers face a reckoning over returning to the office," Business Insider, At <https://www.businessinsider.com/fight-return-to-office-mandates-remote-work-amazon-apple-2023-3>

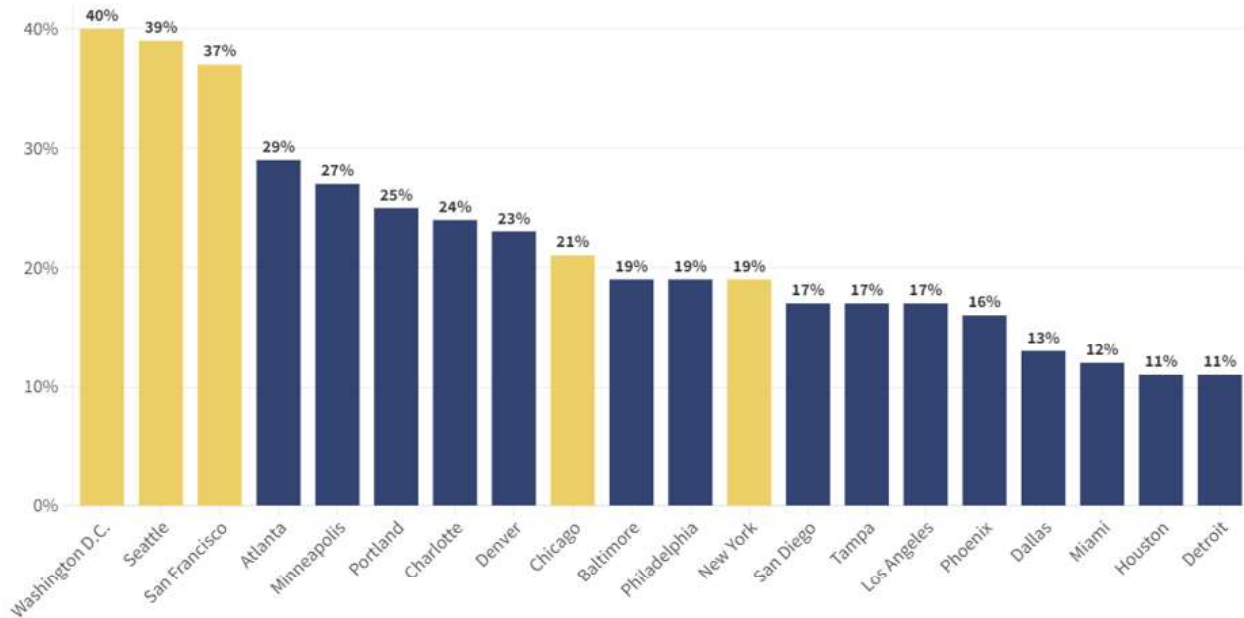
Impact of Telecommuting to Trip Recovery

Since the COVID-19 pandemic, telecommuting rates increased significantly in metro area job markets anchored to downtowns. For example, between 2019 and 2021, a significant shift in Washington, D.C. occurred as 40% of the workforce transitioned from other travel modes to working from home. Other job-heavy downtowns also saw a considerable rise in remote work, with Seattle, San Francisco, Atlanta, and Minneapolis in the top five.

Percent of Workforce Shifting to Working from Home 2021 v 2019, by City



Most Job-Dense Downtowns



Early in the pandemic, the ability to telecommute was crucial to limiting the virus' spread. More recently, the ability to telecommute has been at the front of employer/employee disputes on return-to-office mandates, and more specifically, those mandates in the tech industry.⁹

Bureau of Labor Statistics recently revealed that people in computer, mathematical and legal occupations have the largest ability to telecommute. About 50% of workers can commute via computer, more than four times the rate of the typical U.S. worker.¹⁰

⁹ "Amazon And Other Tech Companies' Return-To-Office Orders Renew Fears of Proximity Bias," Forbes, at <https://www.forbes.com/sites/moorinsights/2023/02/22/amazon-and-other-tech-companies-return-to-office-orders-renew-fears-of-proximity-bias/?sh=dadfdb49c7a>

¹⁰ "Ability to telework available to 10.6 percent of civilian workers in 2022," U.S Bureau of Labor Statistics, at <https://www.bls.gov/opub/ted/2022/ability-to-telework-available-to-10-6-percent-of-civilian-workers-in-2022.htm>

Industries at the Heart of Telecommuting

As previously mentioned, telecommuting rates rose significantly after the onset of COVID-19 yet are significantly higher within three key industries.

According to the Census Bureau, 40% of workers nationwide in Information, Finance, and Professional services (IFPS) reported commuting via “Working from Home” in 2021, compared to just 13% in all other industries surveyed.

Further, workers in these industries shifted to telecommuting to a much larger degree than other sectors. The major shifts in the IFPS industries were more noticeable in job-dense downtowns.

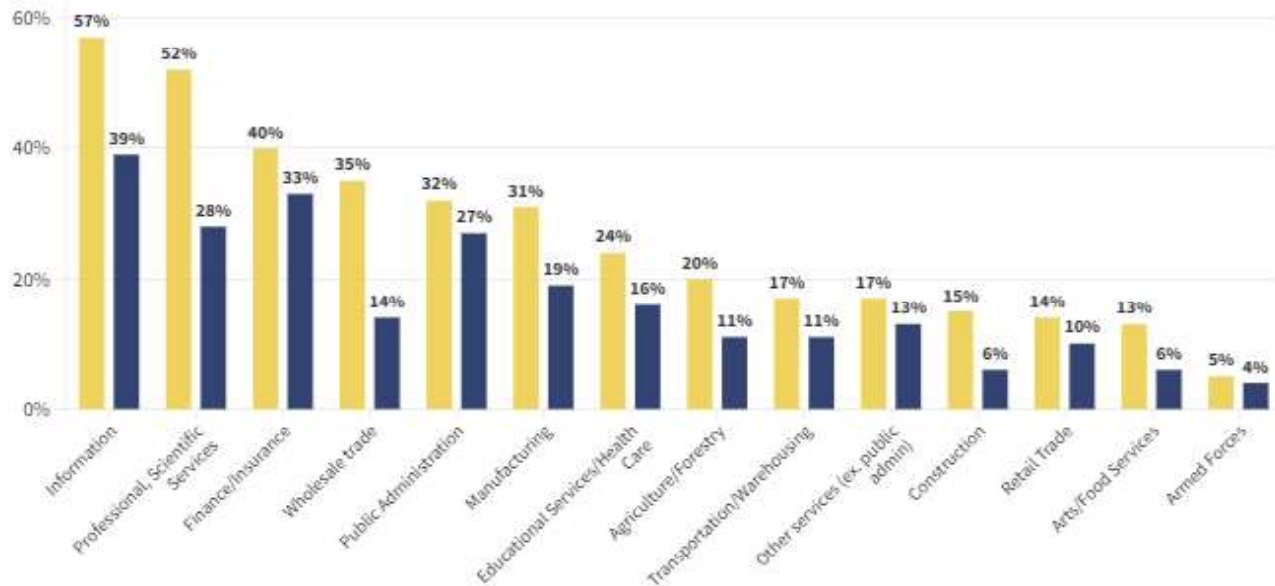
For example, in cities with job-dense downtowns, more than half of workers in Information and Professional Services shifted modes to working from home, versus 33% of IFPS workers in cities with less dense downtown.¹¹ Among the 20 cities analyzed, IFPS industries comprise of a varying share of the workforce, from a low of 19% in Detroit to a high of 42% in San Francisco.

Percent of Industry Workforce Shifting to Telecommuting, 2021 v 2019, by Downtown Job Share of Regional Employment



Top 5 "Job Dense" Downtowns: Chicago, New York, San Francisco, Seattle, Washington D.C.

■ Top 5 Job-Dense Downtowns ■ Other Downtowns



11 "Means of Transportation to Work," Census Bureau, at Means of Transportation to Work (census.gov)

Since those who work in IFPS industries are more likely to telecommute - and if cities have a large share of the workforce in those industries - it is reasonable to expect high rates of telecommuting. Yet workers, even within the same industry, telecommuted at different rates across the country.

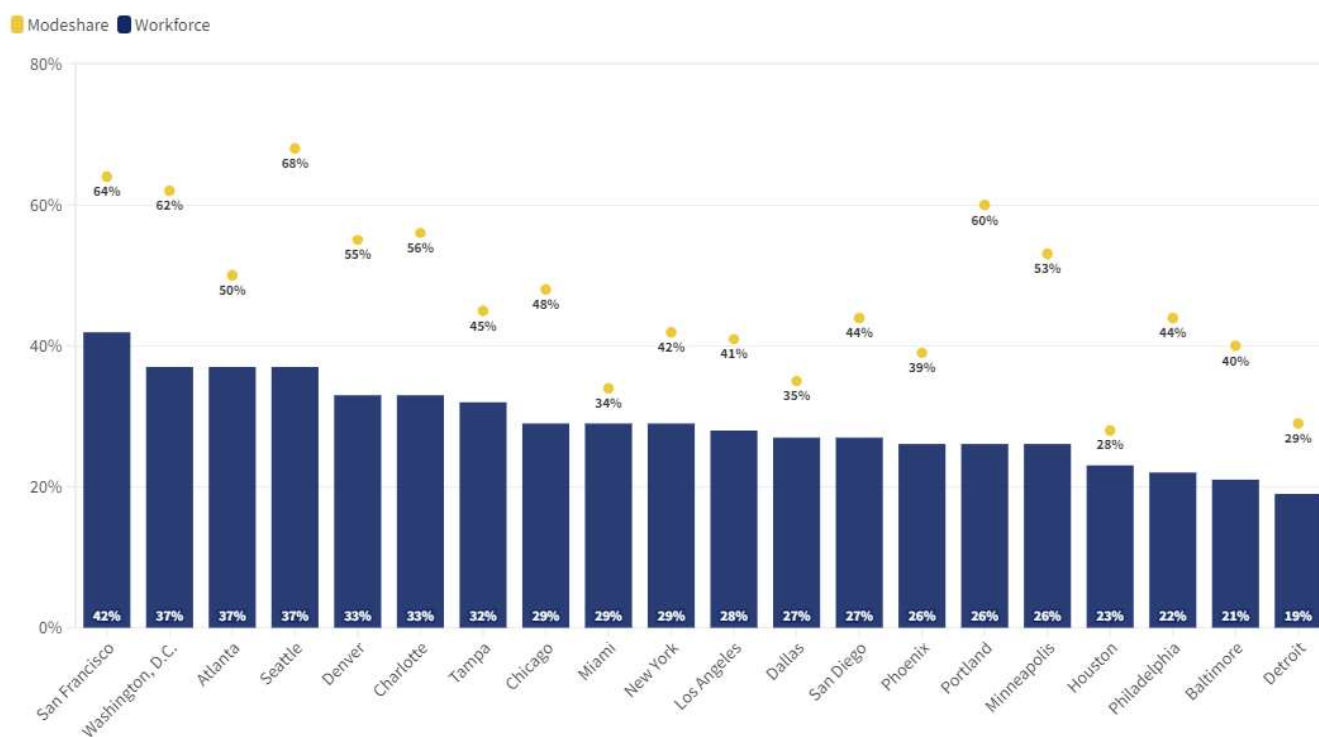
Areas like Portland, San Francisco, Seattle, and Washington D.C. indicate commuters in the IFPS industries telecommuted at significantly higher rates than their peers in other cities. In Seattle, for example, 68% of those in the IFPS industries telecommuted in 2021, double that of Miami.

New York continues to be an outlier. While its downtown has the highest concentration of regional jobs compared to anywhere studied, vehicular trips have essentially recovered to pre-COVID levels. One factor, perhaps, is the diversity in its industrial make-up, with just 29% of the workforce in IFPS industries, versus 42% in San Francisco, the next job-heavy downtown on the list.

Additionally, those working in the three sectors in New York also telecommuted at significantly lower rates than in San Francisco, Washington, D.C., Seattle, and Denver, with 42% of those in New York choosing telecommuting - versus 64% in San Francisco.

Downtowns that hold a significant share of regional employment saw the largest shift to telecommuting across all industries, not just IFPS, though those industries had the largest shift to telecommuting across the board.

Information, Finance, and Professional Services (IFPS) - Workforce Percentage and Mode Share



CONCLUSION

It appears that both the shift to telecommuting and reduction in vehicular trips were most prominent in areas where: a) the downtown holds a high share of regional jobs; and b) the downtown holds a high concentration of jobs in Information, Finance and Professional Services industries. Downtown New York, which holds more than 20% of the region's jobs, however, is notably absent from the discussion, as its diversification of industries (as well as lower telecommuting rates to begin with) may be helping it achieve pre-COVID levels of traffic faster than its downtown peers.

Since the start of this year, vehicular trip growth appears stalled in some of the most job-dense downtowns. It was posited that perhaps travelers eschewed driving for transit, yet transit ridership growth over the past eight months has been relatively stagnant in most major metros.

This suggests that other, local factors have a significant influence on telecommuting, in addition to industry. Though beyond the scope of this report, some research organizations have pointed to an area's education level and racial demographics as important factors in telecommuting rates.¹² Perhaps other factors, like broadband access and local culture are also contributing to higher telecommuting rates (and therefore, lower vehicular trips into downtown).

An active, vibrant downtown is vital to the economic output of a region, state, and country. While many Chambers of Commerce, downtown associations and city governments work to get people into downtown – using any transportation mode – an influx of car trips might work against the stated environmental goals of the aforementioned organizations.

However, it is clear that telecommuting continues to be a massive force in keeping both vehicular and transit trips down, especially in job-dense downtowns that hold a large number of workers in the IFPS industries.



¹² "Telework may save U.S. jobs in COVID-19 downturn, especially among college graduates," Pew Research Center, at <https://www.pewresearch.org/short-reads/2020/05/06/telework-may-save-u-s-jobs-in-covid-19-downturn-especially-among-college-graduates/>

DATA SOURCES AND METHODS

INRIX Trip Analytics aggregates data from billions of anonymous GPS datapoints to analyze trip origins and destinations into user-defined zones. In this study, more than 1.6 million trips were analyzed for the weeks beginning May 7 and May 14, 2023 heading to and from downtown zones. Freight traffic and pass through passenger traffic were omitted from this report, but available for further analysis.

Downtown zones were determined by Google's geographical definition of downtown. The definition of downtown varies depending on sources, so care must be used when comparing this report's conclusions and data with other sources

Industry and telecommuting statistics come from the U.S. Census Bureau American Community Survey datasets. Year 2021 data is the latest available, and 2022 datasets are set to be released in October 2023.

ABOUT INRIX RESEARCH

Launched in 2016, INRIX Research uses INRIX proprietary data to provide mobility insights around the world. These insights are used by media, policymakers, transportation planners, freight movers, safety professionals, and the general public to move people and goods more efficiently, safer, and with reduced carbon emissions to improve the traveling public's quality of life.

INRIX Research is a team of transportation policy experts and data scientists with backgrounds in academia, think tanks, and state and local government agencies. Our team has decades of experience using the latest in technology to tackle some of the biggest problems in transportation and safety.

Our published reports, expert commentary, and ad-hoc data requests are a free and valuable resource to journalists, researchers, students, and others to improve the state of transportation across the Globe. Spokespeople are available upon request.



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