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**Platform Firms, Commercial Real Estate Cycles and San Francisco's
Growth as a Tech Cluster, 2008-2020**

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Between the Great Recession and the COVID-19 pandemic, the U.S. technology industry increasingly shifted towards cities. Local governments pursuing innovation-led growth encouraged this shift, as exemplified by San Francisco, the spatial and symbolic *urban* home of the global technology industry. The commercial real estate market is central to understanding the city's growth as a tech cluster between 2008 and 2020. Platform technology firms substantially contributed to employment growth and demand for office real estate in San Francisco during this period of rapid tech industry expansion. The city also exemplifies how the pandemic-led transition to remote work has profoundly changed the relationship between platform firms and urban space. In this paper, we use interviews and secondary sources to study tech-led office leasing and development activity in San Francisco. We identify neighborhood-level trajectories of path dependence, industrial conversion, failed revitalization, and frontier-making during the period of growth leading up to 2020. Digital platform companies exert significant economic and political influence over cities, but their control over urban space is also constrained by the historical, material, and economic realities of commercial real estate.

Keywords: platform technologies, platform urbanism, Covid-19 pandemic, commercial real estate, San Francisco Bay Area

I. Introduction

The San Francisco Bay Area's development into a global hub of technological innovation spans decades, starting with the production of hardware such as semiconductors in the Cold War era, and today turning on platforms, algorithms, and the monetization of data (Burrell and Fourcade 2021). Historically, San Francisco is the region's secondary tech cluster, with suburban Silicon Valley the long-term anchor of the regional tech economy. But in the post-2008 era, tech employment grew more rapidly in San Francisco compared to Silicon Valley (Stehlin 2016). After the Great Recession, both startups and established tech companies increasingly began to open new offices and outposts in San Francisco as younger tech workers sought out an urban lifestyle. By the mid-2010s, the city accounted for a greater share of venture capital-

backed “unicorns” (private companies valued higher than \$1 billion) than the Valley (McNeill 2016).

The Bay Area, the spatial and symbolic home of the global technology industry, exemplifies how the longstanding suburban dynamics of the U.S. tech sector became increasingly defined by cities between 2008 and 2020. The region’s symbolic and economic power has inspired countless Silicon spinoffs (e.g. Silicon Alley in New York, Silicon Roundabout in London), with emerging tech clusters around the world pursuing economic growth in the image of Silicon Valley (Rest of World 2021). As the Bay Area’s changing sub-regional geography of tech firms indicates, the region also typifies a more widespread pattern, in which digital technology firms increasingly opt to operate in cities as opposed to suburbs (Zukin 2020b). Local governments pursuing innovation-led growth strategies after the 2008 crisis have welcomed and encouraged this shift (Zukin 2020a; 2021).

San Francisco’s rapid rise as a tech hub in the post-2008 era embodies what Jovanna Rosen and Luís Alvarez León (2022) term “the digital growth machine”, where the digital is central to intensifying and extending long-standing urban growth strategies based on “land development and industrial attraction” (2022, 2). Ed Lee, who served as mayor of San Francisco from 2011 until his death in 2017, was well known for advancing the ideology that digital innovation could solve the city’s problems (such as the complicated process of setting up a new business, see Temple 2012) and power the local economy (Alvarez León and Rosen 2020). Lee famously enacted the “Twitter tax break”, exempting businesses located in the city’s mid-Market area from payroll taxes to prevent Twitter from leaving the city (Alvarez León and Rosen 2020; McNeill 2016). He also employed a wide range of discursive, symbolic, and material strategies that nurtured and protected the industry, e.g. allowing tech firms naming rights of key public

institutions like the Transbay Transit Center and San Francisco General Hospital, hosting a civic startup in residence program, and permitting tech companies to use public bus stops for private busses transporting workers from San Francisco to Silicon Valley (Dowling 2018; Maharawal and McElroy 2018; McElroy 2019).

The social costs of San Francisco's tech-led urban economic growth in the post-2008 era are seen in the industry's role in increasing property values, residential gentrification, displacement and homelessness, and its capture of local politics and regulations (Maharawal and McElroy 2018; McElroy 2016; 2019; McNeill 2016; Opillard 2015). The Covid-19 pandemic also demonstrates the wider socio-spatial fallout the digital growth machine can create for cities. Although demand for platform-mediated digital services and commerce surged during the pandemic, generating record revenues for tech giants, the shift to remote work has dramatically transformed the relationship between technology firms and urban real estate markets for office space for San Francisco and tech cities beyond the Bay Area. While many office markets experienced a rapid increase in vacancy rates since the start of the Covid-19 pandemic, by the end of 2022, San Francisco's vacancy rates (24.1 percent) remained higher than comparator locations that also have a prominent tech economy and financial sector, such as Manhattan (22.2 percent) (Cushman & Wakefield 2023c), downtown Toronto (13.2 percent) (Cushman & Wakefield 2023b) and Central London (8.8 percent) (Cushman & Wakefield 2023a). Given its proximity to Silicon Valley, San Francisco was uniquely positioned to successfully accommodate the growth of tech over the last two decades. However, the decision to 'go all in' on the tech-led growth model in San Francisco has meant that the city remains an outlier across many indicators of economic recovery. For example, the University of Toronto School of Cities' (2023) Downtown Recovery website, which uses mobile phone device counts as a proxy for economic

activity, ranks San Francisco 71st out of 71 cities across the US, Canada and Europe with downtown activity at 31 percent of pre-pandemic levels in Fall 2022 (compared to Fall 2019). By comparison, New York ranks 26th with downtown activity at 74 percent of pre-pandemic levels, London ranks 28th with downtown activity at 72 percent of pre-pandemic levels and Toronto ranks 50th at 53 percent of pre-pandemic levels for the same period.

In this paper we use the lens of the commercial real estate market to examine the urbanization of digital technology companies in San Francisco in the years between the Great Recession and the Covid-19 pandemic. During this period, the rise of digital platforms and algorithms contributed to a period of dramatic tech industry expansion, which had intensely local spatial consequences for the Bay Area due to its significance in the tech sector globally. The remainder of the article is structured as follows. In section II, we situate our analysis of San Francisco's digital growth machine in scholarship on previous commercial real estate market cycles, platform capitalism, and the digital growth machine. In section III, we discuss the research context and methods.

Through studying tech-led office leasing and development, in section IV we offer a retrospective on how the digital growth machine took shape in San Francisco's downtown core. Amid an overall expansion of new tech companies and demand for office space, we identify neighborhood-level trajectories of path dependence, industrial conversion, failed revitalization, and frontier-making in the period of growth leading up to the pandemic. In section V, we discuss how the protracted nature of the pandemic, numerous false starts on return to office plans, and tech workers' preference for remote and/or hybrid work over the long term are converging to produce a rationalization of office space use by technology firms.

To the extent that such firms came to drive demand for commercial real estate before the pandemic, changing demand will destroy value in the office market (Gupta, Mittal, and Van Nieuwerburgh 2022) and reverberate throughout urban and regional economies. In the Bay Area, public transit systems continue to face significantly reduced ridership into and around San Francisco and the city's office vacancies are still above 20 percent, creating major losses in spending by commuters for downtown businesses, many now shuttered (Arroyo 2022). Amid ongoing geographical debate about the relationship between digital platforms and cities (Graham 2020; Leszczynski 2019; Sadowski 2020), we conclude by reflecting on how the pandemic is a reminder that the mundane realm of office space is a crucial prism for understanding this relationship. Understanding these dynamics in San Francisco may provide lessons for other cities who have similarly pursued a tech-led growth model.

II. Background

Commercial real estate cycles

The commercial real estate market is characterized by a tendency toward cyclical booms and busts in which periods of high demand and insufficient supply quickly become periods of low demand and high vacancy. The spatially and physically fixed nature of the built environment drives commercial real estate cycles. Spaces that meet the current needs of production and capital circulation attract and retain capital at specific sites within the city and the development of these spaces serves two complementary purposes, supporting production while also serving as a secondary site for excess capital absorption (Harvey 1978). The high level of financial investment and long turnover time required for the production of office and commercial space means these property markets are beset by frequent misalignments between demand and

supply. Boom and bust cycles occur as demand for specific locations and types of space precedes the ability of developers to construct those spaces, meaning that large amounts of office space designed for specific uses may come online after business needs have already changed (Ball 1994).

Commercial building cycles are influenced primarily by macroeconomic factors such as production strategies and the availability of financial capital (Coakley 1994), but local contextual factors including local government support and industrial composition also play a role (Leitner 1994). The widely-studied 1980s boom in office development across the US, UK, Australia and Scandinavia (Ball 1994), took place amid economic liberalization and deregulation that increased the availability of capital for property development (Fainstein 1994). Following the crash, lenders “scrutinized projects more carefully and demanded that tenant commitments be in place before a building could go up” (Fainstein 1994, 46). Commercial real estate cycles and development patterns are thus crucially shaped by the behavior of developers and of lenders, with the former influencing supply by attempting to anticipate demand and the latter deciding the terms of credit (Beitel 2000; Weber 2015). Periods of overconfidence lead to periods of oversupply, while the periods following busts tend to be characterized by increased caution and a tightening of credit standards.

The Covid-19 pandemic, however, represents a novel element for traditional models of commercial real estate cycles due to the external nature of the negative shock to commercial markets. In 2019, the year before the onset of the Covid-19 pandemic, San Francisco’s market for office space was on the upswing, with the tech industry serving as the city’s primary driver of demand for office space and expansion of the commercial real estate market. While the pandemic and the shift to remote work upended office market dynamics across the United States, the effects are especially

pronounced and persistent in San Francisco, which as of June 2022 had lower occupancy rates than any other major city in the country (David 2022). Understanding the role of large technology companies in the digital growth machine prior to pandemic lockdowns and the shift to remote and hybrid work can shed light on how these actors are adjusting their real estate demand during the ongoing pandemic, and the implications for subsequent building cycles. Over the last six months, the macroeconomic environment has shifted. Rising inflation and interest rates hikes has led to layoffs across several major tech companies including Alphabet (Google), Meta (Facebook), Salesforce, Twitter and Microsoft highlighting the importance of further unpacking the dynamic between tech companies and the commercial real estate market.

Platform capitalism, urban space, and the digital growth machine

The post-2008 era is not the first time that cities have served as the site of computing innovation. With its epicenter in San Francisco's South of Market (SoMa) district¹, the late 1990s boom of internet technology companies was explicitly urban, if ultimately transitory (Hutton 2008). In previous eras of computing, including the dot-com boom, computing infrastructures were custom-built (Narayan 2022). The reliance on custom in-house systems was a key factor in the downfall of dot-com era internet technology companies, limiting their ability to scale up operations to meet speculative demand (Zukin 2021). In contrast, the technology boom beginning around the time of the Great Recession is marked by the ability for firms to use cloud computing as an outsourced means of quickly expanding their services and user bases without commensurate increases in investments in fixed capital, assets, and workforces (Narayan 2022).

An emerging body of literature theorizes the political economy of 21st century technology companies in terms of platform capitalism, a mode of accumulation that

relies on rapid scaling to establish market dominance by turning “social interactions and economic transactions into services that take place on the company’s platform”

(Sadowski 2020, 1736). Platform capitalism is underpinned by network effects (in which increased value results from increased users), the abundance of free digital data users create through interacting with platforms (data operates as capital and is subject to the logic of accumulation), and speculative finance (the hyper-scalability of platforms effectuates the high risk/high reward investment strategy of venture capital funds) (Langley and Leyshon 2017; Narayan 2022; Srnicek 2017; Sadowski 2019).

Although platform capitalism operates across a wide range of geographies globally, platform firms are notably urbanized. Cities offer a range of benefits that support the production of digital technologies by platform firms. These include dense concentrations of the data and users crucial to the growth and success of platforms (Rosen and Alvarez Leon 2022; Sadowski 2020). Many of today’s dominant platforms such as Uber, Airbnb, and Google Maps exploited urban density to expand their market share by responding to the needs and desires of city dwellers (Zukin 2020b). And as the Great Recession disrupted traditional career paths in banking and business, highly educated college graduates with a preference for living in cities provided a ready pool of labor for platform technology companies (Zukin 2020b). Finally, city governments also turned to the technology industry as a source of economic growth and solution to urban problems in the post-2008 era, seeing tech-led innovation as a lifeline out of austerity and financial sector instability (Rosen and Alvarez Leon 2022; Zukin 2020b). This turn embedded the technology sector’s “needs, goals, and preferences within urban governance priorities” (Rosen and Alvarez Leon 2022, 6), expanding its influence in how cities grow and change.

Platform companies today constitute a key segment of the growth machine, a longstanding way of conceptualizing the coalition of public and private actors that aim to facilitate urban development (Logan and Molotch 2007; Molotch 1976; Rosen and Alvarez Leon 2022). In their formulation of the digital growth machine, Rosen and Alvarez León (2022) emphasize how novel processes of the digital economy come to power the core elements of the urban growth machine, such as the centrality of land and the real estate industry to urban growth, while also extending into new realms of growth linked to digital affordances. Understood through the lens of the growth machine, in one sense the relationship of the tech industry to the city is rather ordinary: like any other industry, technology firms seek “to obtain favorable treatment” and “to influence policy” to advance their interests (Zukin 2020b, 960). Yet the imperative and capacity of platform companies for exponential growth is a novel aspect that makes the tech industry distinct from traditional urban elites involved in reproducing the growth machine, uniquely positioning technology firms to create desirable high-paying jobs and remake the city’s built environment. In this article, we focus on real estate, the mainstay of the growth machine, to examine how the urbanization of technology companies materialized in San Francisco between the Great Recession and the Covid-19 pandemic. After situating our case in the regional and local context and discussing our research methods, we investigate trajectories of office leasing and development by platform technology companies in downtown San Francisco’s downtown core.

III. Research context and methods

Regional and local context

The evolving Bay Area regional economy

Prior to the 1950s, San Francisco led the growth of the Bay Area through successive

economic waves, from the Gold Rush of the 1850s, to the proliferation of finance and manufacturing in the late 19th and early 20th centuries (Walker 1996). But more recently the city occupied an ambiguous position within its own regional economic landscape: while still an important site of finance and tourism, San Francisco's size and level of economic activity was overshadowed regionally by San Jose and Silicon Valley in the late 20th and early 21st centuries (Walker and Schafran 2015). Decades of military funding in Palo Alto and surrounds (now known as Silicon Valley) laid the groundwork for the emergence of a robust tech industry and today's highly paid professional workforce (Gilmore 2007; Saxenian 1983).

Silicon Valley has experienced successive periods of rapid acceleration, shifting its primary economic focus from semiconductor manufacturing to consumer-oriented internet and computer businesses (Walker 2006). The area's contemporary landscape is dotted with campuses of tech companies that have become household names – including Facebook, Google, and Apple. Silicon Valley is a canonical case study in the benefits of agglomeration, with the continued robustness of the tech industry attributed to knowledge-sharing, thick labor markets, and the concentration of venture capital (Storper et al. 2015). These advantages are not limited to Silicon Valley but rather extend across the Bay Area region, providing opportunities for tech employers and employees alike to enter spaces such as San Francisco.

Tech industry in San Francisco

San Francisco has been a secondary tech cluster within the Bay Area since at least the 1970s. The 1980s property boom saw the construction of a large amount of office floorspace in San Francisco, and a substantial amount of this floorspace, particularly in and around the Financial District, remained vacant following the 1980s property market

crash (Hartman 2002).

During the 1990s dot-com boom, SoMa became a hub for technology-intensive multimedia industries, often referred to as San Francisco's 'Multimedia Gulch' (Hutton 2008). By the late 1990s, office construction activity was booming, and rising demand led to illegal conversions of industrial buildings to office uses for technology companies, to which the city's politicians turned a blind eye due to the sector's economic promise (Hartman 2002; Hutton 2008). The "office space crunch" in San Francisco (Hartman 2002) was relieved once the dot-coms folded. In the ensuing recession, the plethora of office vacancies had flow-on impacts for restaurants and retail stores which had previously benefited from the tech boom (Hutton 2008, 219). However, there were signs of recovery in and around SoMa as early as 2005, described by Hutton (2008) as 'the New Economy II'. The recovery may have well been the start of the more recent wave of high-tech growth in San Francisco.

Land use policy also shifted with the property market. Concerned with overdevelopment, the San Francisco Planning Department implemented the 1985 Downtown Plan which established an annual limitation on office floorspace (now referred to as the Office Development Annual Limitation Program or Proposition M) (San Francisco Planning Department 2011)². However, broader market factors –rather than Prop M – appear to have played a more decisive role in dampening office development; furthermore the cap was easily circumvented during the dot-com era, as live-work lofts were converted to office floorspace after construction (Hartman 2002).

Research methods

Using an in-depth case study of downtown San Francisco, we analyze the relationships among capital, technology, and urbanization through the lens of the commercial real

estate market. We trace the trajectory of the office market between the Global Financial Crisis and the Covid-19 pandemic (2008-2022), drawing on 10 semi-structured interviews and secondary sources. Interviews with real estate and finance experts, including representatives from local commercial real estate services firms, real estate investment trusts and debt and equity advisors, provided insight into the evolution of the office market over the past 15 years including leasing, investment and development dynamics. Interviews with local planners and policymakers provided insight into local economic development policies and planning issues related to the commercial market.

We reviewed historical media articles and office market reports to trace the trajectory of the office market and the development pipeline, using key market indicators such as vacancy rates and median rents, as well as qualitative descriptions of the market, to identify three distinct ‘phases’ between 2008 and 2020. The identified phases were reaffirmed through interviews. We used business registration data from the City of San Francisco to determine the neighborhood locations of the largest tech companies within downtown San Francisco. The companies were identified via a list of the largest tech employers in San Francisco as of 2020, based on an annual survey conducted by the San Francisco Business Times. Although this list includes over 150 tech companies, we focus on mapping the 100 companies with at least 100 employees within San Francisco, as well as 21 others that had either ranked within the top 100 in previous iterations of the survey – including Amazon, Alphabet (Google), Yelp, and Autodesk – as well as Meta (Facebook), which was not included in the survey. We focus on these 121 companies because they are the largest in terms of reported tech industry employment within San Francisco and thus are likely to have had the most substantial impacts on demand for commercial floorspace within the city. The list of companies used in our analysis, as well as the downtown areas in which their offices

were located during the study period, is available in the appendix. Our analysis is further informed by media articles and commercial market reports detailing the trajectory of the market for commercial space. Contemporary media articles provide insight into the office market during the Covid-19 pandemic, the responses of platform companies and their future operating models, as well as the broader debates regarding the future of the office market in San Francisco. Compiling data from these diverse sources provides a comprehensive picture of the extent to which the expansion (and possible contraction) of platform company offices is tied to broader commercial real estate cycles.

IV. A retrospective on San Francisco's tech-led office market growth (2008-2020)

During the late 2000s and early 2010s, emerging tech companies chose to locate their headquarters within downtown San Francisco, rather than building their campuses in Palo Alto, Mountain View, or even San Jose. The establishment of San Francisco ‘satellite’ offices among Silicon Valley giants also became common in the past decade, with Google, Facebook, and Apple all establishing outposts within the City. Of the largest Bay Area tech companies by revenue in 2020, only a handful of older companies (Salesforce, Autodesk, Dolby Laboratories, and Adobe) already had offices in San Francisco prior to 2006. Up until the pandemic, San Francisco had become the preferred location for new tech offices within the Bay Area. While tech is not the largest industry of employment in San Francisco, both policy experts and real estate development and finance experts noted that tech is the major industry of growth. The growth of tech since 2008 had a profound impact on the commercial real estate market in San Francisco, which is constrained by the relative scarcity of available developable land. We identify three distinct ‘phases’ of growth between 2008 and 2020.

Great Recession and recovery (2008-2010)

Between 2008 and 2010, the office market in San Francisco experienced a post-economic crisis phase, characterized by high vacancies, rising from 10.2 percent in 2008 to 17.7 percent in 2010 (Selna 2010; Temple 2008). By 2010, 10 million square feet of office space was up for renewal which put additional downward pressure on rents. A shift in the regional market occurred as office rents in SoMa – which had previously been half that of Palo Alto (see Temple 2010)– reached a level that was competitive with the Palo Alto market. Financial and legal firms were the main sources of company closures which contributed to the increase in vacancies, and tech companies moved in to occupy the newly vacant space.

Rise of tech office market in SF (2011-2014)

Between 2011 and 2014, the office market experienced strong growth in San Francisco, particularly in and around SoMa where vacancies almost halved over 12 months, from under 7 percent in 2011 to 3.8 percent by 2012. The decline in vacancies was accompanied by sharp increases in rents, with SoMa rents reaching \$33.50 per square foot in 2011 (up to 25 percent increase) with reports of leases being signed above asking price (Said 2011). Rising rents increased the attractiveness of the office market to investors, who saw the opportunity to renovate floorspace and increase rent yields. Large tech companies, such as Google, Salesforce and Twitter, began to dominate the office market in San Francisco, absorbing large spaces and committing to long leases of 10 years which would expire in 2022 and beyond. By 2013, tech tenants reportedly filled 22 percent of all occupied office floorspace in San Francisco. This growth was spatially concentrated, with tech tenants occupying 58 percent of space in SoMa, but less than 9 percent in the areas north of Market St which contained older office

buildings (Temple 2013). Leasing demand for large spaces (over 100,000 square feet) was greater than supply. Towards the end of 2014, media narratives shifted from leasing activity and towards investment and sales activity, reflecting the lack of vacant floorspace available for lease (or even sub-lease). The rise of the tech office market in San Francisco coincided with the rise of the “innovation complex” (Zukin 2020a; 2021) and “the digital growth machine” (Rosen and Alvarez Leon 2022) characterized by political support for the tech industry as an urban economic growth strategy.

New office development/construction (2015-2020)

Leasing activity fluctuated during the mid-to-late 2010s, with some reports of market stabilization in the lead up to the pandemic (see Savills 2020). However, evidence for this premise is mixed, and low leasing activity may have been reflective of a lack of space rather than a lack of demand. Vacancy rates fell even further leading up to the pandemic, hitting a floor of 3.6 percent in 2019 and floating at 4 percent in the first quarter of 2020 (CBRE 2021). By comparison, the record-low vacancy rate in the dot-com era was under 1 percent. The sublet market emerged during this phase, adding complexity to vacancy and leasing statistics.

Prior to the pandemic, the office market narrative shifted primarily towards the construction of new office floorspace. Tech companies were, by and large, tenants in San Francisco, with office buildings owned by institutional investors (such as Kilroy Realty Corporation and Boston Properties). Silicon Valley has a much greater presence of tech companies as owner-occupiers compared to San Francisco. New construction was focused in and around the Financial District, with Salesforce Tower completed in 2018, and Mission Bay, with Uber’s new headquarters completed in 2020. Additional development capacity was approved for the Central South of Market (Central SoMa)

Plan Area under a plan linked to the Central Subway transit line project. According to several real estate and finance experts interviewed as part of this study, speculative commercial development was occurring in downtown San Francisco prior to the Covid-19 pandemic, due to a high level of confidence in the market. Developers took on high levels of risk and benefited from high returns, as they were often able to sell properties for up to two times the cost of construction once the development was built and tenants were locked in. At the peak of the market, it was common for tenants to commit to leases while buildings were under construction.

Sub-market trajectories of tech growth in downtown SF

Analyzing the spatial distribution of tech and platform companies in San Francisco's downtown office submarkets between 2008 and 2020 reveals the importance of both historical path dependency and frontier-making practices in shaping locational outcomes. The spatial distribution of tech companies in downtown San Francisco has shifted over time, as the number of new tech companies and the demand for space among existing companies both expanded rapidly. Although tech offices appear throughout the downtown, we identify four clusters within which tech offices have located over the past two decades (1) the Financial District, (2) South of Market (SoMa) (3) 'Mid-Market' and (4) Mission Bay (refer to Figure 1). These districts are named with reference to city plan areas and local neighborhood names to reflect the framing of these districts within city planning discourses. These clusters overlap with the boundaries of three planning areas that have played crucial roles in new office market development over the past decade: the Central SoMa Plan Area, the Central Market Payroll Tax Exclusion Zone, and the Mission Bay Plan Area.

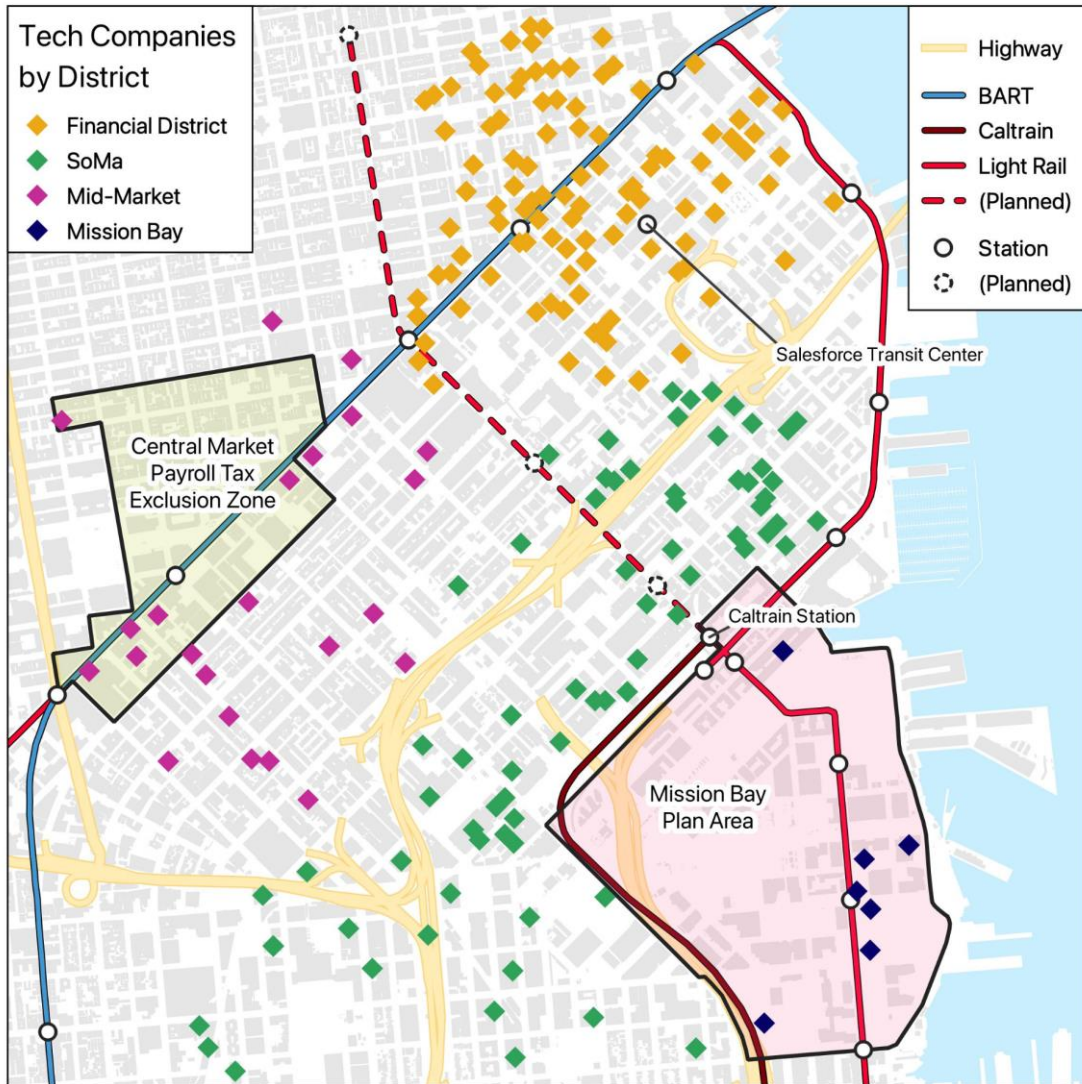


Figure 1. Office market districts and planning areas in downtown San Francisco.

The growth of tech office space within these districts reflects the expansion of tech occupation across the urban landscape: while the Financial District has expanded south of Market Street and hosted major companies such as Salesforce since the late 1990s, tech offices in the rest of SoMa are characterized more by companies that emerged in the late 2000s and early 2010s such as Airbnb and Pinterest. The growth of tech office space in Mid-Market was the outcome of a specific tax policy focused in the mid-2010s, while Mission Bay has only recently emerged as a tech location as multi-decade city redevelopment plans have finally come to fruition. Due to the scalar

imperative of platform firms, many tech companies have also moved within and between these districts over time, shaping the relational evolution of these urban spaces as tech increasingly dominates the local economy.

While tech company location decisions are based on a range of factors, particularly access to skilled labor, the concentrations of firms in these districts stem primarily from the availability and suitability of the office space available at particular moments in time. Each of these districts exhibit distinct economic and built environment characteristics reflective of historical patterns of land use, and which also play an important role in the type of distribution of tech companies.

The Financial District: Path-dependent development in the downtown core

As San Francisco's traditional CBD, the Financial District represents the greatest spatial concentration of office space in the Bay Area and has inevitably become home to some of the region's largest players (refer to Figure 2). Office space has traditionally clustered in the area north of Market Street, dominated by financial and law firms.

While some tech companies such as Amazon have established a number of offices north of Market Street, many newer Bay Area tech companies such as Salesforce, Facebook, and Alphabet (Google), have tended to locate their offices in newer developments to the south of Market Street, in the area surrounding the recently completed Salesforce Transit Center (see Box 1). This clustering reflects deliberate City policy to draw new development to the area south of Market Street, and represents the culmination of decades of ambition to transform the formerly industrial district into a hub of commercial activity. The landscape surrounding the new transit center includes numerous new office and residential towers including Salesforce Tower and several other office towers bearing the Salesforce name, as well as two office towers (181

Fremont and 250 Howard) that host offices for Facebook. Real estate development finance experts noted that higher densities are permissible under the planning controls within the district and it has often been easier to gain approval for high-rise office buildings, making it an attractive submarket for development.

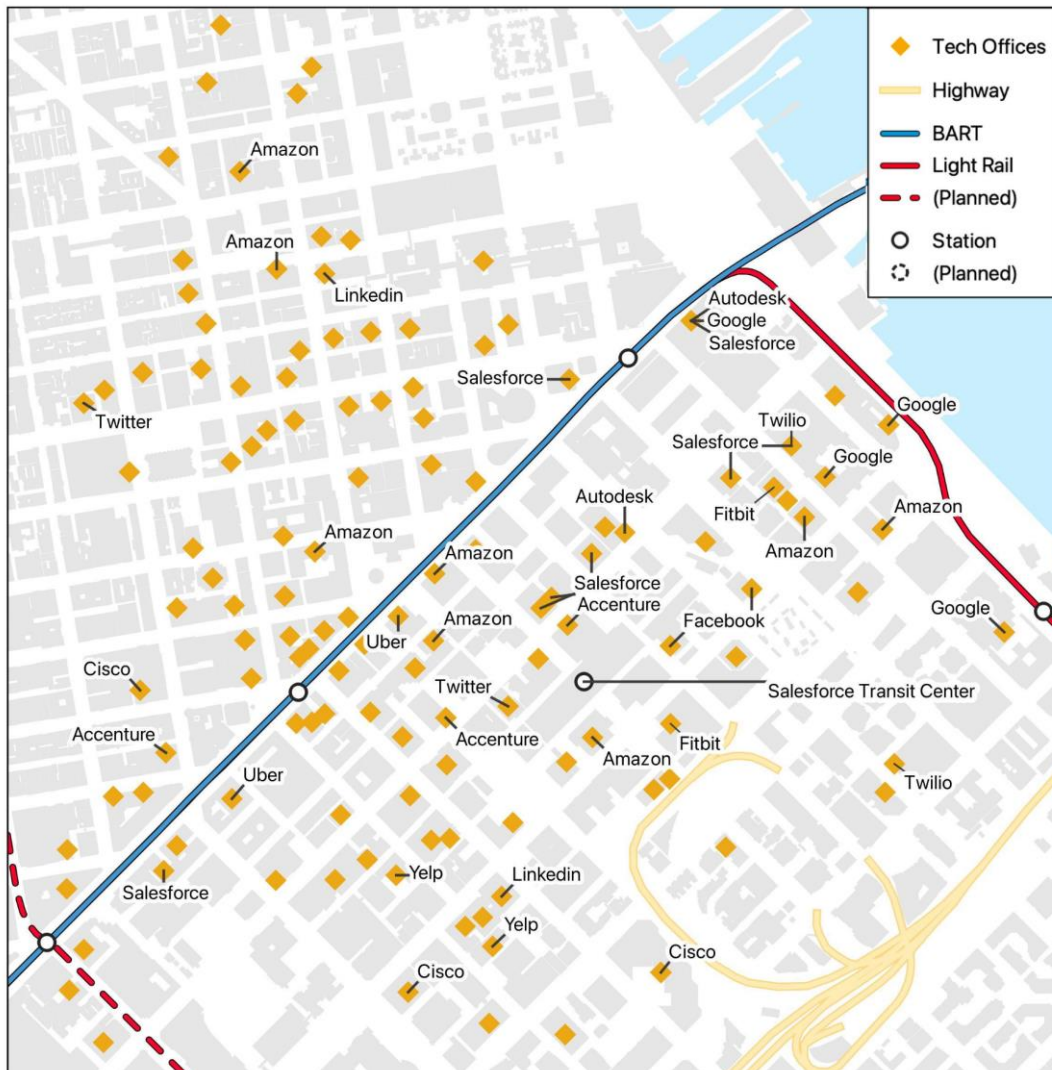


Figure 2: Location of large tech companies in Financial District³

Box 1: Salesforce

Salesforce was founded in 1999, quickly moving to its first formal office space at One Market in the Transit Center District later that year. The company has remained in the district ever since (refer to Figure 3). By 2019, Salesforce was the largest private employer in San Francisco with 8,000 employees and the largest occupier of office space with 2.5 million square feet (Kawamoto 2019). Given its size, the company has found it difficult to find space large enough to accommodate its workforce and thus has opted for more traditional A-grade commercial floorspace. Salesforce had previously committed to developing its headquarters in Mission Bay, but withdrew due to concerns that it was not an attractive location for employees given its physical separation from downtown amenities. In 2014, Salesforce committed to being the anchor tenant of what would become the tallest skyscraper in the city: Salesforce Tower (completed in 2018). It now has three main sites - Salesforce Tower, Salesforce East, and Salesforce West (in bold in Figure 3).



Figure 3: Spatial timeline of Salesforce office locations

South of Market (SoMa): Industrial conversion in a post-industrial economy

While SoMa has often been used to describe the entirety of the downtown located south of Market Street, the aforementioned southward expansion of the Financial District has redefined the office market geography of the area. The proximity of the northeastern corner of SoMa to the traditional CBD catalyzed its rapid transformation. However, much of the remaining landscape still reflects the neighborhood's industrial past, with a mix of newer mid-rise residential and retail developments alongside older warehouse-style buildings, many dating back to the early and mid-20th century. Despite the apparent disadvantages the built environment context might pose for office uses, several clusters of major tech companies have emerged within this post-industrial landscape. Our definition of SoMa comprises much of the area south of the Financial District. The southern part of the district is a particular hub for tech companies, the most prominent of which is Pinterest (refer to Figure 4). This cluster of tech office space spreads to the southwest, where a range of prominent tech companies including Airbnb and Adobe exert a strong presence.

In contrast to the Financial District, SoMa has hosted a range of tech startups. Several prominent companies such as Twitter (founded 2006), Instagram (2010), and Instacart (2012) all emerged from a single city block in Central SoMa (Berger 2018; Lee 2018). According to real estate development and finance experts, the limited floorspace capacity within the neighborhood led these tech companies to move to newer buildings in other districts such as the Transit Center District and Mission Bay as they expanded. On the other hand, many other tech companies such as Airbnb have remained within the district even as they have grown. Tech offices in SoMa are less centrally located than the Financial District, but generally feature lower average commercial rents and large former warehouse spaces which can be converted into desirable flexible

workspaces. Proximity to both the I-280 freeway and the main San Francisco station for the commuter rail service Caltrain also provides companies in these districts with easy access to the Silicon Valley labor pool. Additionally, according to real estate development and finance experts, many tech firms are attracted to the historic industrial brick and timber warehouse spaces. For companies like Airbnb, the location may actually increase visibility and support their brand image.

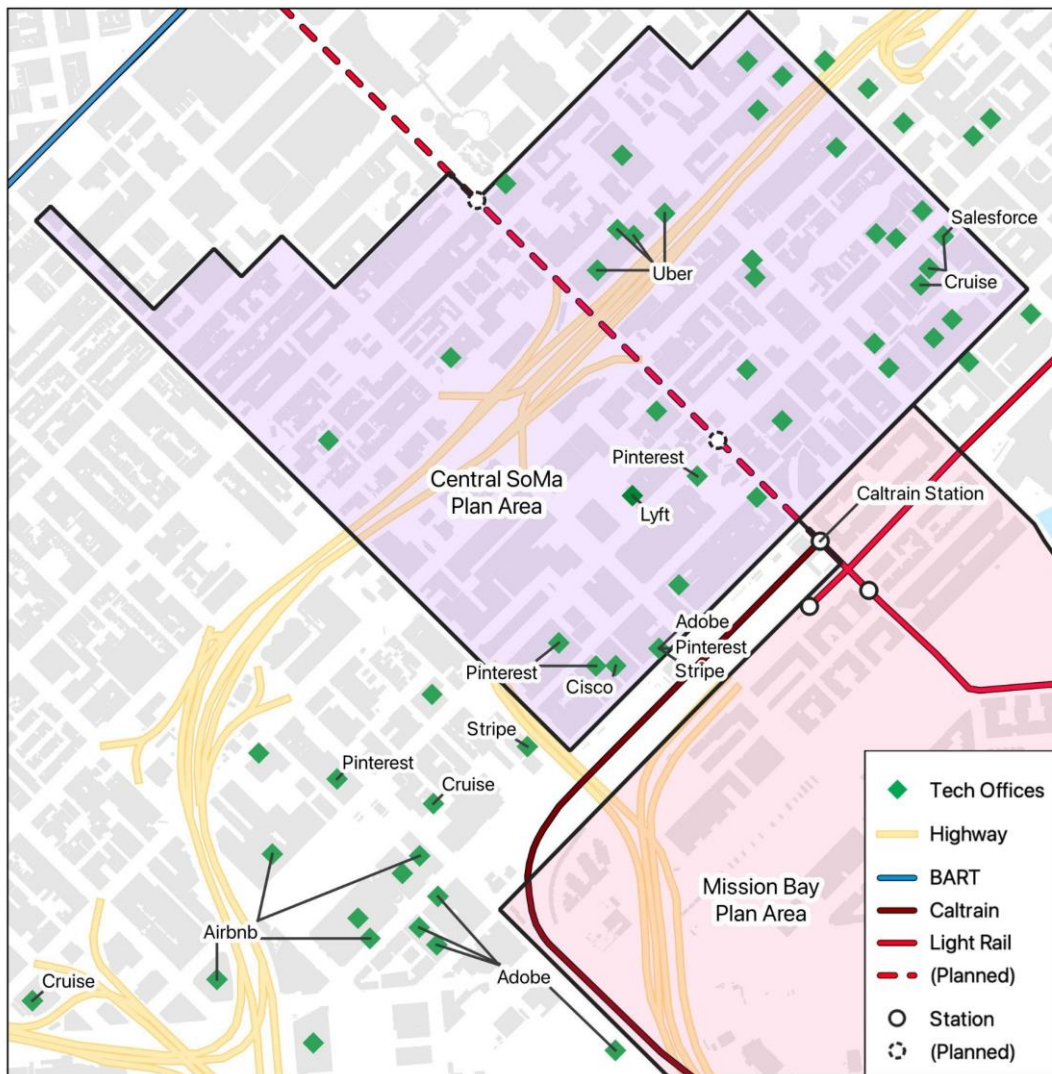


Figure 4: Location of large tech companies in SoMa³

While the growth of the tech industry in SoMa is historically associated with the financial and logistical (and possibly aesthetic) benefits of adapting existing structures,

City government efforts also targeted SoMA to extend the success of development around the Salesforce Transit Center further into the city's post-industrial landscape. The Central SoMa Plan outlines a massive redevelopment strategy including the creation of nearly 16 million square feet for commercial and residential uses, with funding set aside for subsidized housing and transit infrastructure. According to policy and planning experts interviewed for this study, the Central SoMa project area represents one of the last remaining major commercial redevelopment opportunities at the edges of the downtown core, presenting a rare opening to substantially increase the city's commercial floorspace capacity (the City also relaxed Proposition M restrictions within the plan area). Beyond Central SoMa and the adjoining Mission Bay – the latter of which is currently undergoing development – few parcels could be realistically rezoned for large office buildings, let alone feasibly redeveloped given planning constraints on density. The planned expansion of a light rail line through the heart of the Central SoMa project district linking the Caltrain station with the downtown core – opened in 2023 after several years of delays – is expected to build transportation capacity to accompany the redevelopment of the district. The reimagining of Central SoMa, therefore, offers the most tangible opportunity for the expansion of the tech office frontier prior to the pandemic. Some experts suggested that if the pandemic had not occurred, Central SoMa might have actually *oversupplied* the commercial market, suggesting that tech demand may not have been sufficient to support the commercial market expansion in the long run. Given that the Central SoMa Plan was only passed two years prior to the pandemic, the prospects for future development and tech office expansion in the district have been thrown into doubt.

Mid-Market: Failed revitalization

In contrast to the organic growth of tech in SoMa, the Mid-Market neighborhood reflects a deliberate effort to create a tech hub in an historically disinvested area. Mid-Market's central location along a major transportation corridor serving San Francisco, Oakland, and the East Bay suburbs (BART) would seem to provide numerous advantages for employers. However, parts of the area also fall within the Tenderloin, long a site of disinvestment and still one of the lowest-income neighborhoods in the city (Robinson 1995; Stehlin 2016). The history of Mid-Market as a discrete neighborhood within the City's planning discourses began in the early 2010s, when the City pursued a controversial rezoning and payroll tax scheme to prevent the exodus of Twitter to the nearby suburb of Brisbane (McNeill 2016). In a case of "geobribery" (Smith 2002) updated for the broader rise of the "innovation complex" (Zukin 2020a), Twitter's threat to leave San Francisco impelled the City to institute a spatially targeted payroll tax cut for companies located within the "Mid-Market" area. Twitter moved its headquarters to 1355 Market Street in 2012 and sparked a small commercial real estate frenzy, attracting both Silicon Valley venture capital firms and tech companies such as Uber and Square (now Block), the latter of which both moved into the building next door (1455 Market Street) (refer to Figure 5).

Very few tech companies have followed since, and most of the area included in the payroll tax exemption district has not seen tech office expansion, including the entirety of the district north of Market Street. According to planning experts interviewed as part of this study, no new office buildings have been built in Mid-Market. Office market activity in the neighborhood has occurred through conversion or renovation of existing buildings; indeed, the newest Mid-Market building occupied by a major tech company – Uber's pre-Covid headquarters – was constructed in 1979. Even with a

much smaller inventory of existing stock, Mid-Market featured vacant floorspace at the height of pre-pandemic commercial market demand (Torres 2018). The area's history of disinvestment and the City's deliberate efforts to "revitalize" the area have also made it a locus of conflict over public and private uses of space. In the years following the City's designation of Mid-Market as a zone for targeted investment, the presence of low-income and homeless populations in the area's public spaces have become increasingly policed (Stehlin 2016). Hopes that an infusion of tech would facilitate the economic transformation of the neighborhood appear to have fizzled.

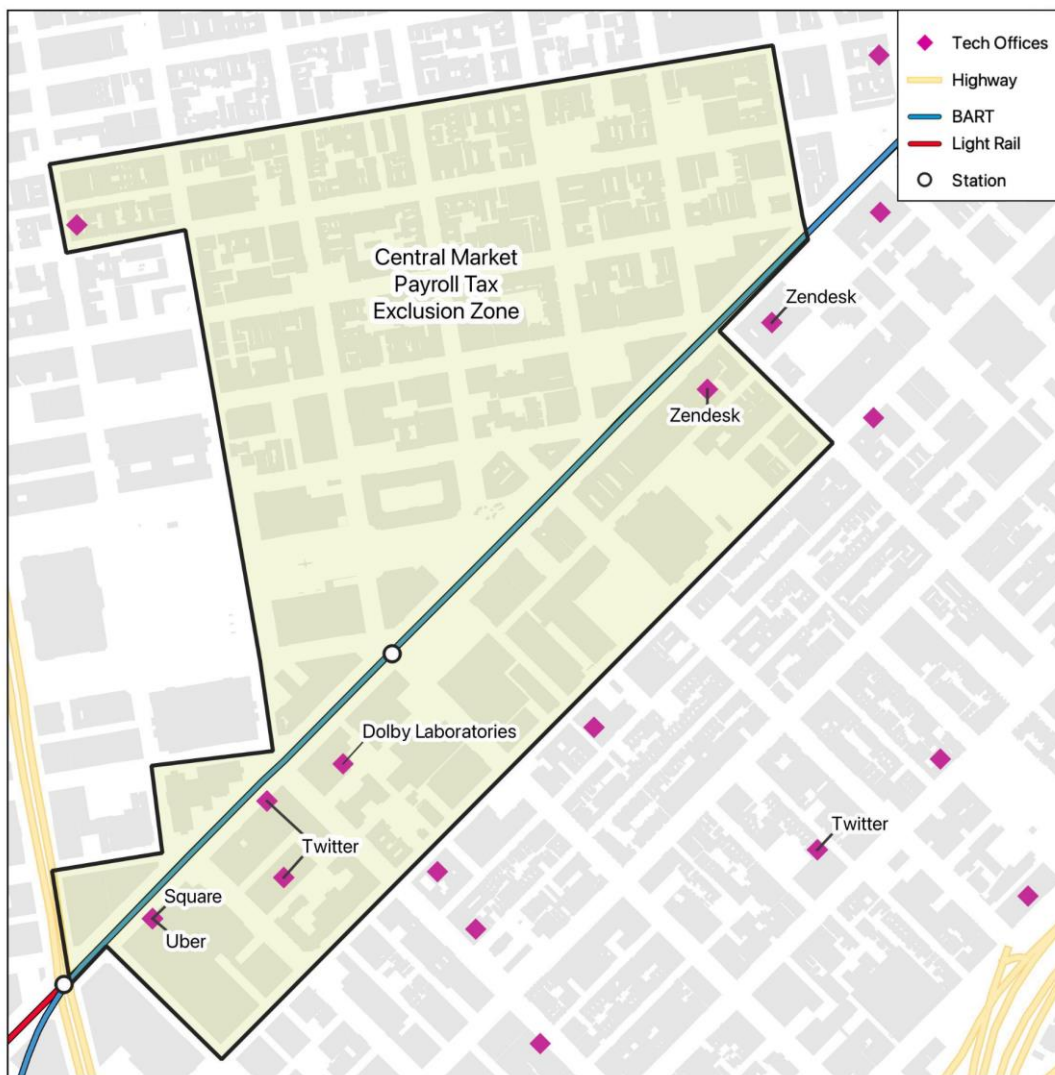


Figure 5: Location of large tech companies in Mid-Market³

Mission Bay: The making of a frontier

Although Mission Bay only recently emerged as a site of new investment and tech presence, its redevelopment is a longstanding focal point of San Francisco's land use politics. Covering a vast swath of land south of SoMa historically owned by the Southern Pacific Railroad, Mission Bay was a target for redevelopment as early as the 1980s, when plans were developed to transform the entire industrial area into new office and residential development. Following a series of false starts, the neighborhood finally began to see new development along the 1998 "Mission Bay South Redevelopment Plan" in the 2000s and 2010s. Development has primarily consisted of new residential and office building, a new campus for the University of California San Francisco, and the Chase Center – a new privately-funded basketball stadium. The site for Chase Center had previously been purchased by Salesforce as part of a plan for their new headquarters, which was eventually abandoned in favor of Salesforce Tower (Coté 2014; see Box 1). While the neighborhood did not become the home of Salesforce, it began to host several other prominent tech companies starting in 2017, including Dropbox and later Uber (see Box 2). Following the pandemic, the latter supplanted its Mid-Market offices with its new Mission Bay headquarters (refer to Figure 6). Whether the neighborhood emerges as a tech cluster to rival those of the Financial District and SoMa, or represents a minor tech outpost more akin to Mid-Market, is difficult to predict. However, significant plans are underway to further transform the area by adding additional office and residential space, and major non-tech commercial tenants such as Visa have already committed to significant office space within the area (Leuty 2019; Li 2019).



Figure 6: Location of large tech companies in Mission Bay³

BOX 2: Uber

After a series of office locations largely within the Transit Center District, Uber ultimately moved its headquarters to the Mid-Market district in 2014 (refer to Figure 7). Sharing a building with Square (now Block) at 1455 Market Street and located just a block away from the headquarters of Twitter, Uber helped to anchor what appeared to be a growing tech presence in the Mid-Market neighborhood. In return, Uber was able to benefit from cheaper rents compared to the Financial District and the ongoing payroll exclusion tax. However, by 2016, Uber was already expressing an interest in moving its headquarters to a new purpose-built campus in the Mission Bay district. In 2021, Uber opened its new headquarters centered around 1515 Third Street in Mission Bay, with plans to phase out its Mid-Market location by

2025 (Li 2022d). The changing location of Uber reflects the shifting fortunes of downtown San Francisco’s commercial submarkets, and its perpetual search for the optimal commercial space.



Figure 7: Spatial timeline of Uber office locations

The downtown tech landscape

The foregoing categorization and spatialization reveals the relational nature of tech office space use across downtown San Francisco and the contingency of tech office locations upon specific historical conditions. While the traditional CBD in the Financial District north of Market Street would seem to be an optimal site for tech due to the availability of office space and the presence of amenities, it was not the sole or even

primary site for tech offices within San Francisco during the 2010s. In part, this geography is likely a reflection of the heightened demand for office space during the 2010s among tech and non-tech companies alike, which the existing CBD office market could not sufficiently address.

The expansion of tech office space beyond the Financial District proceeded in several different ways. While the tech cluster in SoMa represents a fairly “organic” clustering of tech companies driven by space availability and nearby amenities such as the Caltrain Station, other clusters are clearly products – at least in part – of local government intervention. Mission Bay has been the subject of a comprehensive plan designed to expand commercial floorspace and have been apparently successful in attracting and retaining tech companies over time. Development in Mission Bay has progressed far more slowly than in the southern part of the Financial District; however, both districts reflect similar forms of tech expansion toward compact urban campuses with significant commercial floorspace. Mid-Market, on the other hand, reflects an approach based on financial incentives rather than comprehensive planning, and its minimal growth and uncertain future reflect the perils of downtown revitalization strategies driven mostly by “geobribery” (Smith 2002).

V. Pandemic trajectory of San Francisco’s office market

Despite narratives of a ‘mass migration’ out of cities during the pandemic, particularly tech flight out of San Francisco (Bowles 2021), out-migration has slowed and returned to pre-pandemic levels. Nevertheless, remote and hybrid work arrangements appear firmly established in the work routines and real estate preferences of professional workers, who are seeking larger houses and open space to support remote work (Rothstein 2020). The pandemic profoundly impacted San Francisco’s office market.

The commercial vacancy rate increased from 5.4 percent in the final quarter of 2019 to 16.7 percent by the end of 2020, continuing to increase to 19.9 percent by the end of 2021 and 24.1 percent by the end of 2022 (Cushman & Wakefield 2023d). Increased vacancy rates are caused by cancellations of leases and subleases, and lack of lease renewals. Despite workers beginning to return to the office, such high vacancies reflect continued economic uncertainty for the San Francisco office market. During the fourth quarter of 2022, the market was flooded by 1.2 million square feet of sublease space made available by tech company layoffs (Cushman & Wakefield 2023d). Upcoming lease expirations, including two million square feet of office subleases which will expire by the end of 2023 (Waxmann 2022a), are anticipated to further contribute to increased short-term vacancy rates.

While high vacancy rates typically translate to lower rent prices, real estate and finance experts interviewed for this study noted that rents have remained high due to low tenant demand. Typically, demand is driven by tenants renewing leases; due to the level of uncertainty in the market, tenants are forestalling lease renewals and investors who do not want to get locked into lower rents prefer to keep the space vacant rather than drop rents.

The oversupply of vacant office space and difficulty in securing pre-commitments caused a downturn in office construction (McGahey 2021). In 2020, Pinterest canceled its pre-commitment to lease 490,000 square feet within the yet to be constructed 88 Bluxome Street project in SoMa (Li 2020a). According to real estate and finance experts, market uncertainty is likely to promote a shift back towards reliance on pre-leasing for construction projects. Recent interest rate rises may further tighten construction activity and pre-leasing requirements.

San Francisco now lags behind all other major downtowns across the United States in office occupancy rates (Chapple 2022), and this has continued to have devastating impacts on supporting services such as retail (Arroyo 2022). The vacancy rates reported above do not take into account the amount of office floorspace which has remained leased but occupied well below capacity throughout the week. Many of the companies that occupy office floorspace in San Francisco were able to continue operations remotely and appeared to come out of the pandemic relatively unscathed. In several cases, platform tech companies experienced a growth in operations, unlike the Great Recession where financial institutions shed large numbers of employees reducing their demand for office space (Eavis and Haag 2021). While tech workers continue to earn substantial incomes, their expenditure patterns have shifted away from the downtown and towards the urban or suburban centers close to where they live, reshaping the local service economy in San Francisco. Several U.S. cities with high concentrations of tech and professional services have experienced a downturn in the commercial real estate market since 2020, however, San Francisco has been feeling the effects of remote work much more strongly than other tech cities in the United States largely due to the dominance of tech employment throughout San Francisco and the wider Bay Area.

The pandemic has forced many companies to accelerate previous plans to increase remote work (Seabrook 2021), however this does not appear to be a shift towards entirely remote work but rather an increase in flexibility for workers. Barrero et al. (2021) anticipate that in the longer term in the US, 20 percent of full work days will be undertaken from home. In the Bay Area, by the end of 2022, 33.6 percent of full-time work days were undertaken from home (Barrero, Bloom, and Davis 2021, based on 2023 results of the Survey of Working Arrangements and Attitudes). During 2021,

several prominent tech companies (Uber, Facebook, Salesforce, Alphabet, and Amazon) announced a hybrid model with some form of in-person presence, anticipating many workers will spend about half their week in the office. However, in response to employee pushback, many tech companies have loosened these policies and even provided permission to some workers to be fully remote (Goldberg 2022). At the end of 2022, among workers who have the ability to work from home across the US, 32.5 percent were working in-person, 46.8 percent hybrid and 20.7 percent entirely remote; among workers in the Information industry (which includes part of the tech industry), 23.2 percent were in-person, 56.5 percent were hybrid and 20.3 percent were entirely remote (Barrero, Bloom, and Davis 2021, based on 2023 results of the Survey of Working Arrangements and Attitudes).

In terms of leasing activity, some tech companies, such as Twitter and Salesforce, have attempted to sublet their excess floorspace at various points during the pandemic (Eavis and Haag 2021; Li 2020b; Waxmann 2022b). In January 2022, it was reported that Sephora (a beauty product retailer) will sublease 286,000 square feet across 16 floors from Salesforce in 2023, allowing Sephora to consolidate its two existing offices on Market Street (Li 2022a). In Mid-Market, Twitter is expanding its San Francisco headquarters by 80,000 square feet, moving into additional space at 1355 Market St (previously occupied by Thumbtack) (Li 2022b), suggesting an ongoing commitment to remain in the neighborhood. However, Mid-Market recently lost Uber, who has now relocated its headquarters to Mission Bay, and will also lose Block (formerly Square) who announced in June 2022 that it will not renew its 470,000 square foot lease at 1455 Market Street which is due to expire in September 2023 (Li 2022c). Block will retain its other two San Francisco offices which are located in areas beyond the scope of this study (Li 2022c).

Given the relative shortage of development opportunities for new office space in other parts of downtown San Francisco, planning and policy experts interviewed for this study believed companies seeking larger spaces and newer buildings will ultimately be drawn to Mission Bay and the planned Central SoMa development, where possibilities for new commercial space are relatively abundant. Shifting demands for the amount and type of commercial space may increase the appeal of more tailored spaces for specific in-person activities such as laboratory space. However, with tech companies moving towards consolidating and rationalizing their existing floorspace, some neighborhoods will suffer more than others. There is already evidence of an exodus from Mid-Market with the leases for Block and Uber expiring in the near term. The future growth of SoMa –which is centered on Pinterest and Airbnb (two companies that have not rushed to return to in-person operations) – is in question given the halt to any new office space construction at Central SoMa in the short to medium term.

Despite ongoing uncertainty, the overarching market narrative is that platform tech companies will retain some form of office presence in San Francisco under a hybrid model. The implications of this hybrid model for downtown office markets remain unclear. If workers are required to be in the office on a particular day of the week or demand is higher for certain days, then businesses will need to retain sufficient floorspace to accommodate these workers. Alternatively, if companies rotate which teams are present in the office each day, they could reduce their floorspace maximizing its use. Successive waves of Covid-19 variants through 2021 and 2022 contributed to uncertainty regarding the medium- and long-term operating model of these platform tech companies. It remains to be seen whether the Covid-19 pandemic has led to an acceleration of a previous trend of an increase in remote work, a widespread shift, or a temporary change. Uncertainty in the office market has been further compounded by

changing macroeconomic conditions (especially rising interest rates), and numerous major tech companies have announced recent layoffs. Between 1 July 2022 and 12 December 2022, 4,700 workers were laid off across a range of industries in San Francisco with the largest reported tech layoff being Twitter (290 employees). In the first five months of 2023, almost 6,000 workers were laid off across San Francisco, with Salesforce laying off 1,150 employees. While major tech companies have been scaling down their operations and rationalizing their existing office space to cut costs, the future of the city's downtown remains a policy challenge for the City and County of San Francisco.

VI. Conclusion

A wide body of critical research examines how digital platforms have shaped urban property markets, including in San Francisco specifically. Much of this work highlights how changing residential real estate dynamics lead to intensified housing precarity, either due to the changing structure of demand associated with an influx of highly paid tech professionals (e.g. the Ellis Act evictions, see Maharawal and McElroy 2018), or how platform business models are reconfiguring housing supply (e.g. Airbnb creating a short-term rental market, see Wachsmuth and Weisler 2018). By comparison, the mundane realm of office space is somewhat neglected in debates about the relationships among capital, technology, and urbanization. This article demonstrates that commercial real estate markets offer a crucial lens into how digital platforms reshape urban space.

While not the largest source of employment, tech has been the largest industry of *growth* for the San Francisco economy over the last two decades, as well as the main source of new office space demand. In the decade following the Great Recession, platform companies expanded rapidly in the city, reflecting a post-2008 turn toward

tech as an economic development strategy. Tech-led growth was not a new strategy for San Francisco; the City previously pursued a high-tech vision for growth during the 1990s dot-com boom, when SoMa was San Francisco's epicenter for technology-intensive multimedia industries. However, since the 2008 financial crisis, the City has played a more politically active role in supporting tech companies through subsidies such as the Twitter Tax Break, reflecting "the digital growth machine" or "innovation complex" in action. At the same time, the City's attempts to respond to commercial market pressures through a series of comprehensive plans – including the Transit Center District Plan, the Mission Bay South Redevelopment Plan, and the more recent Central SoMa Plan – have helped to further expand tech office utilization, providing alternatives for tech companies that would otherwise meet their expanding needs by relocating from the city altogether.

The Covid-19 pandemic has complicated this narrative, however, reshaping the operating model for many office-based industries including tech. San Francisco's cultivation of the digital growth machine in the post-2008 era are likely a chief contributing factor to the city's status as an outlier in measures of post-pandemic office vacancy and downtown recovery. Even under a hybrid model of operation, tech companies may no longer require the same amount of office space as they did prior to the pandemic, and we are increasingly observing a movement towards the rationalization of existing office space. The consolidations of operations occurring across many tech companies mean the footprint platform firms once had in downtown San Francisco is likely to shrink and 'less desirable' neighborhoods for tech companies will lose out. As Salesforce rationalizes its space in the Financial District and Uber consolidates its offices at Mission Bay, Mid-Market faces an uphill battle in attracting any additional tech growth. The future of the SoMa tech cluster remains in doubt as it is

largely reliant on new construction activity that is unlikely to occur in the short to medium term given ongoing commercial real estate market uncertainties. Similar to consequences of the 1990s dot-com crash on SoMa, without the foot traffic of high-income tech workers, the city's downtown neighborhoods are unable to support local businesses and streets are now lined with shuttered retail and restaurant spaces.

After aggressively pursuing the digital growth machine for over a decade, San Francisco now recognizes tech may not be the primary engine of the commercial market and local economy going forward. In 2023, the Mayor released a new vision for downtown San Francisco which incorporates strategies such as tax incentives to attract a broad range of industries and land uses (City and County of San Francisco 2023)⁴. The plan also incorporates other familiar revitalization measures such as an expanded police and security presence, art-and culture-led offerings, and tourism promotion, which often work to produce spaces that cater to affluent residents visitors and criminalize and banish marginalized groups (Maharawal 2022).

Tech-led growth will likely remain a substantial driver of the economy across San Francisco and the Bay Area, but the spatial impact of this growth will look somewhat different. Tech employees who continue to work from home, even for part of the week, are likely to continue a longer-term shift in consumption expenditure towards residential neighborhoods across San Francisco and the Bay Area more broadly. Emerging evidence indicates food service retailers are responding to spatial shifts in demand by opening new stores in locations close to where tech workers live such as in Mill Valley, Marin County (Dougherty, Goldberg, and Wojack 2022).

The uncertainties stemming from the pandemic demonstrate that while platform technology companies exercise outside political and economic influence locally and globally, as well as increasingly in daily life, they also have a more mundane

physicalized and spatialized existence within urban office markets. Rather than exercising a form of sovereignty over the urban landscape via their physical presence within cities, tech companies are embedded in the physical and built environment realities of the urban office market and dynamics of supply and demand. As part of the digital growth machine, these companies certainly play an important role in modifying the spaces they inhabit, engaging in tactics designed to shape planning processes and extract financial concessions from cities. This, however, renders them merely as prominent actors within broader urban political structures, rather than sovereign forces that act independently of those structures. Looking towards the future, the commercial real estate market is likely to be further impacted by ongoing economic uncertainty associated with inflation, rising interest rates and a tightening of financial and investment markets. However, the extent to which this contraction represents a radical change to the fate of the San Francisco office market and the spatiality of the tech industry – or merely another round of the traditional boom-and-bust cycle – remains to be seen.

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End notes

1. SoMa typically refers to *all* commercial and residential areas between Market Street and Mission Bay.
2. In its current form, 950,000 gross square feet (gsf) of office floorspace is available for approval each year under Proposition M, of which 75,000 gsf is reserved for Small Allocation projects (between 25,000 and 49,999 gsf) (San Francisco Planning Department 2011). Office space which is not allocated in a given year is carried over to subsequent

years. It is unclear how the limit has been determined and whether this relates to projected employment demand and floorspace per job.

3. Note: only the 20 largest tech companies are labeled on district maps. See Appendix Table 1 for list of companies with offices in each district.
4. Available to new office-based businesses across Administrative and Support Services, Information, Insurance, and Professional, Scientific, and Technical Services, these incentives are available to platform tech companies who typically fall within the Information sector.

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Appendix

Table 1. List of top tech companies in San Francisco and their office locations

Company	Financial District	South of Market	Mid-Market	Mission Bay	Notes
Accenture	✓				
Adobe		✓			
Affirm	✓				
Afterpay	✓				
Airbnb		✓			
Airtable	✓		✓		
Alphabet (Google)	✓	✓			
Alto		✓			
Amazon	✓				
Ancestry		✓			
Apartment List		✓			
Asana	✓	✓			
Augmedix			✓		
Autodesk	✓				
Avenue Code	✓				
Blend	✓		✓		
Block (Square)			✓		
Brex	✓				
Carta		✓			
Cisco Systems	✓	✓		✓	
Cloudflare		✓			
Coinbase	✓	✓			
Collective Health	✓				
Cruise		✓	✓		
Crunchbase	✓				
Databricks	✓				
Demandbase	✓				
Docker	✓	✓			
Dolby		✓	✓		
DoorDash	✓		✓		
Doximity		✓			
Dropbox		✓		✓	
Earnest	✓		✓		
Ebay	✓				
Eventbrite		✓	✓		
Facebook	✓				
Fastly		✓	✓		
Financialforce	✓				
Fitbit	✓	✓			
Flexport	✓	✓			

Company	Financial District	South of Market	Mid-Market	Mission Bay	Notes
Forgerock	✓				
Funding Circle	✓				
Github		✓			
Gong.io					No SF office found
Grove Collaborative					Outside downtown
Gusto		✓			
Handshake	✓				
Hover	✓	✓			
Included Health	✓				
Instacart	✓	✓			
Intercom	✓		✓		
Irhythm Technologies		✓			
Iterable	✓	✓			
Juniper Square	✓				
Lendingclub	✓				
Linkedin	✓				
Liveramp	✓				
Lob.com				✓	
Lucasfilm					Outside downtown
Lyft				✓	
Minted	✓				
Motive	✓				
Nerdwallet	✓				
New Relic	✓				
Nextdoor	✓		✓		
Nextroll	✓				
Okta	✓	✓			
Omada Health	✓				
Onelogin	✓				
Opentable	✓				
Optimizely	✓				
Ouster		✓			
Pagerduty		✓			
Patreon		✓	✓		
Pinterest		✓			
Plaid	✓		✓		
Practice Fusion	✓	✓	✓		
Prosper Marketplace	✓				
Quantcast	✓	✓			
Recurly		✓			
Reddit		✓	✓		
Ripple	✓				
Salesforce	✓	✓			
Samsara		✓			

Company	Financial District	South of Market	Mid-Market	Mission Bay	Notes
SAP		✓			
Segment	✓	✓			
Sisense	✓				
Skillz	✓				
SoFi Technologies	✓				
Sonder		✓	✓		
Sony		✓			
Splunk		✓			
Spoton	✓				
Stitch Fix	✓				
Strava		✓			
Stripe		✓		✓	
Taskrabbit		✓			
Thumbtack			✓		
Touch of Modern	✓	✓			
Turo	✓				
Twilio	✓	✓			
Twitch	✓				
Twitter	✓		✓		
Uber	✓	✓	✓	✓	
Ubisoft		✓			
Udemy		✓			
Unity Software	✓	✓			
Upgrade	✓				
Varo Bank	✓				
Visa	✓				
Volta Charging		✓			
Walkme	✓				
Western Union				✓	
Wix.com				✓	
Xero		✓			
Yelp	✓				
Zendesk			✓		
Zenefits	✓				
Zillow	✓				
Zumper	✓	✓			
Zynga		✓			