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Reviving public transit ridership to downtowns and employment centers:

Case Studies of San Francisco, San Jose, Oakland, Berkeley, and Walnut Creek

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Abstract

This paper examines transit ridership and its role in downtowns in five San Francisco Bay Area cities pre- and post-COVID. We analyze transit ridership data from 2019 and 2022-24, review transit agency responses to COVID's consequences, and examine the plans and proposals for downtowns adopted by the cities and those developed by business improvement districts (BIDs). We draw upon focus groups we held with transit users and interviews we conducted with key stakeholders to gain additional information and insights. We found that trips to, from and within our five case study downtowns account for a significant share of overall regional transit ridership, a finding that underscores downtown transit's importance to state and regional goals for greenhouse gas reduction, pollution abatement, economic prosperity, and equity and inclusion. For the five downtowns, transit ridership is on a path to recovery but as of early 2024 was still falling short of pre-COVID levels, leaving transit agencies facing financial shortfalls despite service adjustments and other cost-cutting measures. The downtowns with concentrations of employment that generally depend on face to face contact (healthcare, education), are faring better than those where working remotely suffices and this appears to be largely independent of the workers' income levels. For general offices, the longer transit trips that rail services provide have not recovered as quickly as shorter bus trips. Downtown plans for the five cities assume transit will be available and used, but have not been updated to deal with changed conditions. The case studies' city officials and business leaders have proposed additional housing, sports events, and frequent festivals and farmers markets as ways to invigorate downtowns. While these strategies could lead to more transit use, they are unlikely to make up for the losses in office worker transit use, a consequence of increased working at home or in a hybrid home-office mode. Since recovery to previous levels may take several more years, finding ways to support transit in the meantime will be important.

Key Words: Transit, downtowns, revitalization

1. Problem Statement and Study Objectives

Many downtowns and other major activity centers in California are struggling, with reduced overall activity post-COVID. One result is a decline in transit ridership. With lower farebox revenues, transit operators have consolidated lines and reduced frequencies and hours of operation on some of them, actions which reduce costs but also deter transit use.

It is well recognized that the fallout from COVID is not the only challenge downtowns and transit systems have been facing; indeed, downtowns have experienced cycles of growth, decline and resurgence across many eras. (See, e.g., Fogelson, 2001; Abbott, 1993; Poitras, 2009; Robertson, 1995; Rypkema, 2003; Rosenthal et al., 2022.) Many decades of suburbanization of housing, retail, and back offices, facilitated by highway building and near-ubiquitous auto ownership, and the more recent growth of e-commerce and telecommuting, facilitated by near-ubiquitous internet access, have changed the way that Americans work, shop, seek entertainment, and build relationships. However, the shutdowns necessitated by COVID during its worst led to the shuttering of substantial numbers of brick and mortar retailers and eating establishments, significant reductions in demand for office space, and a reluctance on the part of some to be in close proximity to strangers – all of which have combined to diminish downtown activity and transit use. Some have gone so far as to propose a requiem for the CBD (Longtin and Mitchell, 2021.)

Reacting to downtowns' struggles, some argue that the traditional employment-focused "central business district" is anachronistic and a more appropriate and resilient strategy for downtowns – and for shopping centers and business parks as well – is to become a mixed-use "central social district," with a significant increase in residential population (Milder, 2023; Chapple et al., 2022, 2023). However, the impacts of such land use changes on local and regional transit ridership are often missing from the discussion. For example, if cities and other major activity centers become "15 minute cities" with an emphasis on walkability and a high share of residents who live near where they work, what is the role of transit? Plausibly, transit will still be used some of the time even for short trips, and transit likely would continue to be a vital service for those who cannot make their trips on foot or bike and for those who visit from outside the walkable area. But transit operations and labor practices need to be adjusted to such a new reality, in which sustainable transportation is largely reflective of nonmotorized travel.

Others argue that transit will recover over time, but a timeframe for recovery of a decade or more poses problems. Transit use as a sustainable mode of transport is an important social, environmental, and equity strategy in cities worldwide. In California, for example, state, regional and local plans call for transit to play a central role for trips longer than a mile or two, and climate plans call for transit mode share to grow by 5-8 percent per year. Continued depressed levels of transit service and use threaten the state's ability to meet its climate commitments and improve equity outcomes, expand economic prosperity, and maintain sound public finances – goals that depend on increasing transit availability and use.

Because downtowns are frequently major destinations for transit users, their recovery is critical to transit's recovery. Identifying pathways to support downtown vitality and transit orientation is an important step if the objectives of state and regional climate plans and plans to manage transportation system effectively are to be realized. Without such recovery, state and regional plans will become increasingly unachievable.

In this study, we analyze pre- and post-pandemic ridership data from six transit operators together with development patterns and revitalization strategies in five San Francisco Bay Area downtowns of differing sizes, functions, and transit orientation: San Francisco, Oakland, San Jose, Berkeley, and Walnut Creek. We focus in particular on the three largest cities, San Francisco, Oakland, and San Jose, where a substantial portion of regional economic activity occurs.

We focus on downtowns as key economic engines and cultural hubs of the metropolis as well as critical transit centers. We reviewed ridership data for 2019 and 2023 from six transit operators and then discussed responses to ridership changes with transit officials. We assessed the importance being given to transit in public and private plans for the case study downtowns, through an examination of downtown plans and business improvement district documents, as well as interviews with city officials, developers, property owners, and other key stakeholders from each case. In addition, we conducted surveys and focus group discussions with current and former transit users to and within these downtowns. Our objectives are to document the challenges transit is facing from an integrated land use-transportation perspective, recognizing that the actions in the land use sphere have important implications for transit and vice versa, and to offer insights that can lead to more effective policies and plans.

2. Background: the Role(s) of Downtowns

Downtowns in the United States are largely the places that provide a city's and metropolitan region's greatest density and diversity of activity, and they frequently are their region's major economic engines, despite recent challenges (Birch, 2009; Rosenthal et al., 2022; Hutson and Orlando, 2023.) It is well understood that downtowns are key loci of regional economic development and innovation and that their wellbeing has national and regional as well as location-specific impact (Birch, 2009.) Downtowns provide location efficiencies for activities that depend on face to face communications (e.g., law firms, courts, business headquarters), and their presence supports numerous secondary enterprises (office supplies, restaurants, personal services, entertainment.) As one example, pre COVID, downtown San Francisco was the source of more than two-thirds of San Francisco's total jobs and as of 2021 provided more than three quarters of its GDP, half of its sales tax revenue, and 95% of its business tax revenue (City of San Francisco: <https://www.sf.gov/departments/roadmap-san-franciscos-future>). San Francisco alone, with less than 10% of the region's population in 2022, accounted for over 25% of the Bay Area's GDP.

Downtowns' contributions are not limited to the economy. Many downtowns are the historical and cultural center of the metropolitan region and a major locus of visitor activity. Downtowns with such attributes thus serve as a smart location for activities that draw participants from throughout the region and beyond – attracting people who might otherwise not have reason to venture downtown or even to that metropolis. Indeed, nationwide, visitor activity in many downtowns exceeds that of employees and residents (Levy, 2023.)

The role of employees in downtowns is multifaceted. In addition to economic contributions at their own workplaces, employees often make up a substantial portion of the patronage of the restaurants, shops, and entertainment activities located near their jobs. Thus, downtown employees are important to the success of many businesses that locate downtown. Employees' presence in the downtown also adds to street life and the sense of safety and security that comes from eyes on the street.

Labor benefits also can be attributed to downtown locations. For employers, a downtown location well-served by transportation services provides access to a regionwide labor pool. For workers, downtowns provide access to a variety of job opportunities. In such places, a worker who loses a job with one employer in the downtown district or wishes to shift to another employer can often do so without having to change their commute and/or residential location. There is also evidence that jobs in downtowns pay higher wages, even for those with less education (Brookings Metro: <https://www.brookings.edu/research/breaking-the-urban-doom-loop-the-future-of-downtowns-is-shared-prosperity/>). This is an important labor and equity consideration.

The transportation impacts of downtown locations have been well documented. Trips to downtown tend to be long and many of the highways to and within downtowns are congested. However, since many downtowns are located on or near transit and transit-oriented downtowns are the most intense jobs clusters in metropolitan regions, many downtown employees can get to work without relying on a car (Brookings Metro: <https://www.brookings.edu/articles/activity-centers/>.) With the co-location of other important destinations (health care, retail, entertainment) downtown, workers, residents, and visitors can also access a wide range of activities within the downtown without driving (or by trip chaining). With good bike and pedestrian planning, many trips are easily made by nonmotorized modes and transit services for longer trips are easily accessible.

Previous studies have documented the impacts of the COVID pandemic on transit ridership at the regional scale (e.g., Parker et al., 2021) as well as the losses in land use and activity in downtowns as a result of COVID (e.g., Hutson and Orlando, 2023) and other economic changes (Rosenthal et al., 2022.) Transit agency data show that downtown services account for much of transit's total ridership, so a better understanding of the role of downtowns in generating transit ridership and of the effects of various strategies for downtown and transit recovery currently being proposed can help inform sound policy.

COVID was not the only factor in the changing fortunes of downtowns. As noted earlier, many downtowns have faced decades of challenges as suburban housing, shopping centers, and office parks competed with them, as internet shopping, entertainment, and home deliveries became ubiquitous, and as remote work and remote meetings became increasingly feasible and effective. However, COVID accelerated these trends by making personal contact a health risk, shuttering businesses that could not withstand the loss of business activity that resulted, and making travelers reluctant to use communal modes.

Today, while concerns about COVID have receded, its effects on urban activities are still being felt. The long-term share of workers who commute daily vs. work at home part time or full time remains to be seen. Some enterprises are anticipating remote work as a permanent phenomenon and are downsizing their office space or planning to do so when their lease expires. Among companies calling for a return to work, many appear to be allowing in-office presence for less than five days a week and/or less than eight hours a day on the in-office days. With changes in work practices come questions about how much office space is needed, what sorts of space are needed, and where it should be located. While personal interactions still matter, whether they need to be downtown and in the same physical location is

being questioned – witness on-line arraignments in criminal cases and virtual social hours. Even in-person locations change as a result of this evolving landscape, for example when a luncheon meeting in a highly acclaimed suburban eatery is deemed equally effective as one in a downtown restaurant.

However, if more jobs and economic activities shift away from downtowns and into virtual spaces or scattered suburban locations, there will be less urban activity and less demand for transit. The effects of these shifts have already been seen, with reduced transit ridership on many transit systems reducing transit efficacy and putting it in financial peril. Further, if activities move into auto-reliant locations, more workers and households will require automobiles to reach destinations, and may end up making more single purpose trips. Such auto reliance can increase the burden on household budgets. It also has a broader social and environmental impact because of the negative externalities that auto reliance will produce. And it may not avoid congestion, since streets and highways in suburban locations also experience this problem – but with fewer travel alternatives available.

While these many changes pose serious challenges to the future of transit, plans in California and elsewhere rely on transit to meet key policy objectives such as greenhouse gas reduction and congestion management (Barbour and Deakin, 2012, Deakin et al., 2021). California has counted on transit to achieve environmental standards including the reduction of PM2.5, a serious health hazard, and greenhouse gas emissions, a global threat. Most plans for achieving greenhouse gas standards count on transit increases as a significant part of their emissions reduction strategy. If transit use, battered by COVID, remains low achieving the targeted reductions will be difficult. Continued pollution exposure and rising global temperatures mean that many will suffer, and the worst impacts will fall upon people of color and low-income people. In addition, transit has been important to support economic and social participation for those who due to age, income or disability have few or no alternative means of travel, and if transit languishes the social impacts will be negative.

The struggles downtowns and transit are facing thus are intertwined and have important economic, social, and environmental implications. From an economic perspective, the decline in office workers in downtowns has had a disproportionate negative impact on ancillary support services and the jobs they provide. Many workers in these employment sectors now have less access to work; meanwhile office workers have less access to nearby services. Transit workers are also affected by activity in downtowns since that is where much transit service is provided. The environmental impacts of are likely to be large, since a decline in downtown activity and transit use has major implications for climate commitments, equity, and the economy. Among the risks are more pollutant emissions, worse traffic congestion, reduced job accessibility, declining government revenues that support public services, and fewer of the face-to-face interactions that build trust, strengthen community, and support innovation.

3. Research Approach: Data and Methods

We began our study with a review of the literature, as cited in the previous section and in those that follow. We considered the role of downtowns in the regional economy as well as their historical and cultural significance, and also reviewed previous studies on metropolitan travel and its relationship to urban development patterns as well as to demographics and behavior.

We selected the San Francisco Bay Area, a metropolitan area of nearly eight million people, for case study because of our in-depth knowledge of the region and because the Bay Area's multinucleated development pattern provided the opportunity to investigate downtowns of different sizes, development histories, land use mixes, and transit service levels. The five cities whose downtowns we chose to study are San Jose, the largest city in the region (pop. 970,000) and home to numerous tech industries; San Francisco (pop. 809,000), the traditional central business district for the region, with a mix of corporate headquarters, professional firms, government offices, tech companies, and regional retail; Oakland (pop. 437,000), across the Bay from San Francisco, with downtown headquarters for the city's transportation and manufacturing companies as well as government offices and dining and entertainment venues; Berkeley (pop. 119,000), north of Oakland, a streetcar suburb whose downtown, adjacent to the UC Berkeley campus, houses a mix of offices, entertainment, dining, and arts; and Walnut Creek (pop. 69,000), a post-WWII suburb with a downtown containing a major suburban shopping center, smaller shops and offices, and a hospital complex. The five cities are served by a mix of rail and bus transit operated by six transit agencies studied here: SF Muni, BART, AC Transit, VTA, Caltrain, and County Connection. (Transit services are provided by additional agencies including Golden Gate Transit, SamTrans, and several smaller providers, but resources for the project did not permit us to include them.) Transit mode shares for travel to downtown San Francisco, Oakland, and Berkeley are substantial while transit use to downtown San Jose and Walnut Creek is modest.

To determine which transit lines and stations or stops were serving downtown, we needed to establish boundaries for each of the city's downtowns. This turned out not to be a straightforward task because "downtown" plans prepared by different entities or at different times covered different areas. Through discussion with city planners, transit officials, and business leaders, we agreed to look at the areas traditionally considered downtown in each city as well as immediately adjacent areas

that had strong interactions with the traditional centers. This resulted in our including, e.g., UC Berkeley in downtown Berkeley, San Jose State University in downtown San Jose, and the BART station to the north and shopping center to the south in downtown Walnut Creek. For San Francisco, we included the areas within a half mile of the BART stations from Embarcadero to Civic Center.

Since regional or city level travel surveys post-COVID were not available, we obtained data and projections from Replica to assess overall changes in trip patterns from 2019 (pre-pandemic) to 2022 and 2023. We also obtained detailed transit ridership data for the same time periods from the main transit operators serving each of the cities being studied: the Bay Area Rapid Transit District (BART) (San Francisco, Oakland, Berkeley, Walnut Creek), San Francisco Muni (San Francisco), AC Transit (Oakland, Berkeley, San Francisco), VTA (San Jose), Caltrain (San Francisco, San Jose), and County Connection (Walnut Creek.) When available, we obtained transit ridership data by stop. Otherwise, we obtained data by line serving the defined downtown areas. We used these data to analyze changes in travel patterns overall and for the downtowns being studied.

We then assembled and reviewed city general plans, downtown plans, and COVID recovery plans and proposals as well as documents available from business improvement districts (BIDs) to identify the strategies being pursued for maintaining and improving economic performance, activity levels, and user satisfaction, and the role of transit in the plans. We included in this review initially temporary actions taken in response to COVID, such as sidewalk dining spaces and traffic calming measures, which had been retained as of early 2024. We also reviewed transit agency documentation on changes that were made to transit services during the pandemic, as well as transit recovery plans.

We followed up these analyses and reviews with a series of interviews with key informants at university research groups, transit agencies, city planning, transportation, and economic development departments, downtown business organizations, development companies, and employer groups. We also interviewed four current and four former elected officials who had been involved in transit governance. The interviews were designed to elicit perspectives on reasons for the decline in downtown activity and transit ridership that had been documented and to obtain expert views on the impact of the various plans and policies. In total, we interviewed 42 individuals.

Finally, we recruited transit users or former users who had traveled by transit to or within each of the downtowns we studied before the pandemic. All participants were adults who had used at least one of the transit services included in the analysis to reach one of the downtowns at least twice a month before the pandemic. Some continued to be transit users while others no longer did so. A brief survey was used to screen the participants for the age, residency, and transit use criteria to obtain a set of respondents balanced in terms of age, gender, race/ ethnicity, and household income. Five focus groups of one hour duration were held to discuss views of transit with a total of 54 participants.

4. Findings

Here we present the key findings from our study.

4.1. **Changes in transit use and in downtown recovery vary among the downtowns, reflecting historical trajectory and recent economic patterns of each downtown, its transit user socio-economic characteristics, and the levels of transit service offered. This suggests that drawing generalizations from national data or even metropolitan-wide data risks missing important differences in performance and the reasons for it.**

Data on travel patterns extracted from Replica databases and projections show that overall travel to the downtowns we study here declined substantially between 2019 and 2023. Here we report primarily for the three largest downtowns, San Francisco, Oakland, and San Jose (Figure 1), using the two smaller downtowns as points of comparison.

As shown in Figure 2, in both time periods, work is the most common trip purpose for trips ending in the downtowns, accounting for about a third of the trips; but the largest drop in travel was for work trips. (Note that the Replica data bundled work trips with “commercial” trips, which they classified as work / work related, which will create small discrepancies with other travel survey data.)

Transit mode shares to the downtowns varies substantially, as shown in Figure 3. San Francisco’s transit usage substantially exceeds that of Oakland and both San Francisco and Oakland transit levels dwarf transit use in downtown San Jose. Losses in transit ridership also were higher in Oakland and San Francisco.

While the Replica data on trips are not connected to traveler demographics, previous studies have shown that transit mode share reflects land use characteristics and development densities. Much of downtown San Francisco is mixed use, high density development, as is a substantial share of downtown Oakland. In contrast, much of downtown San Jose is developed at low densities with one and two story buildings adjoined by large parking lots. In the latter environment, driving is the predominant mode of travel, whereas the denser urban environments are more conducive to short trips by walking, biking, and local transit and are more economically served by regional rail and bus services.

Recovery rates for downtown activity overall and for transit vary widely among the downtowns. Figure 4 shows the recovery rates for BART, the major regional rail system, and for the other transit services examined in this study. BART, serving many of the longer transit trips in the region, has been particularly hard hit by ridership losses, with much of the decline due to losses in work trips to downtown San Francisco. Caltrain, like BART, serves longer trips, also has been hard hit. In contrast, the transit operators serving relatively short trips to and within the downtowns lost fewer riders and have been more successful in retaining and regaining ridership.

Recovery rates most likely reflect differences in traveler demographics and their employment characteristics. Again, because the data available to us reported trips but did not tie trips to travelers, we consulted the literature and discussed the likely reasons for the observed travel patterns with experts in travel behavior. We also drew upon our discussions with current and former riders of the transit services studied. Consistent with the literature and prior empirical evidence (e.g., Mallett, 2022), the experts argued that services with a high percentage of transit dependent riders likely saw smaller declines than those whose riders had other travel options available or could substitute telecommunications for travel. Along similar lines of reasoning, travelers whose jobs required face-to-face contact and those with modest incomes were more likely to have continued to use transit, or to have resumed using it, than those whose jobs only occasionally required such in-person exchanges and whose financial circumstances made driving and parking downtown a feasible option.

4.2. The COVID epidemic showed that working at home at least part time is a viable option for many downtown employees. However, working at home, even on a part time basis, has reduced these employees' transit use and their nonwork activities downtown. Reductions in opportunities for downtown dining, shopping, and recreational activities combined with cutbacks in transit service (frequency, hours of operation, direct connections) have further deterred a return to transit use for those who have other choices. It is unlikely that these trends will be reversed any time soon.

Our interviews with experts and our focus groups with current and former transit riders further elaborated on structural shifts in downtown employment that reduce transit ridership. For many professionals, hybrid office / at home is preferred and allowed. With fewer days of commuting, some are choosing to drive on the days they return to the office, finding that congestion along the commute and parking charges downtown are manageable if they are experienced only a few days a week. In some cases, the employee can also travel to and from work off peak, which further eases burden of driving. On the other hand, a number of current transit users report that they have no other choice: some do not have a car available for their use, while others do have a car but parking is not available near their workplace or the parking that is available is not affordable to them. A relatively small number of our respondents reported that they prefer transit as a less stressful way to travel, and one that is consistent with their desire to reduce their environmental footprint.

Transit dependents and those who have chosen to use transit as an environmental or social choice continued to use transit or returned to transit use as the pandemic eased, although some expressed frustration with truncated hours of operation or route restructuring. In the case of Berkeley, transit recovery appears to have been boosted by the resumption of in-person classes at the University of California and Berkeley City College. For Walnut Creek, return to transit use was reported to be associated with a concentration of employment at hospitals; retail employees were the most likely to report that they had continued to come in to work and to do so by transit throughout the pandemic.

Reduced frequencies, fewer hours of operation, and less direct service are deterrents to transit ridership, and this was clearly pointed to as a reason for transit reluctance. Several focus group members reported that they worried that they would have to take a costly taxi or TNC trip to get home if they missed their bus or needed to work late. Others commented that an increased number of transfers or longer headways between bus or train arrivals made transit travel stressful and reduced their willingness to make transit trips. This was especially the reaction for trip purposes for which other destinations are available and readily accessible by car or walking, such as dining out or clothes shopping. While the focus group members acknowledged that service changes had been a response to the COVID crisis, they expressed hope that services would be restored or even improved over their pre-COVID levels in the reasonably near future. Even so, many did not see themselves returning to the same level of downtown activity and transit use as pre-COVID.

For many former riders, the changes in services offered combined with the availability of other options for work and nonwork activities and travel deterred them from resuming their transit use. Furthermore, most of the former riders were satisfied with their new travel and activity options. Even having a subsidized transit pass did not mean that they would use transit if the travel times were not competitive. This applied to midday trips as well as to morning and evening commutes.

4.3. Transit agencies have relied on the infusion of federal funds to stay afloat during the COVID emergency and also have adjusted the services they have provided in the face of lower ridership levels. With COVID funding running out, many transit agencies are facing “fiscal cliffs” that may require cuts that could lead to a severe downward spiral in service and ridership.

Many transit agencies nationwide were experiencing declining ridership pre-COVID despite expanded services and transit-supportive land use changes, and were investigating the causes of these difficulties and ways to rectify them. (See, e.g., Blumenberg et al., 2020, Byala et al., 2019; Erhardt et al. 2022, Liu et al, 2020.) Studies have shown that among the factors leading to reduced transit ridership are higher incomes, lower gas prices, increased auto ownership, increased motor vehicle fuel efficiency, higher transit fares, competition from nonmotorized modes and (especially in downtown areas) competition from TNCs (Boisjoly et al., 2018, Mallett, 2022, Graeler et al., 2023; Manville et al., 2023.) Authors disagree on which factors are most important and this appears to reflect differences in the scale and scope of their analyses as well as likely differences among metropolitan areas. In any case, only a few of these factors are within transit operators' purview and only a few more are reachable through local or state government policy.

Pre-COVID, strategies to respond to ridership declines included route restructuring, schedule changes, and fare increases – strategies that addressed the transit operators' financial concerns but often at a further cost to ridership. Coming on top of these woes, COVID's impact was devastating for many transit systems; nationwide ridership in 2020 and 2021 was less than half of its pre-COVID levels. In the five case study areas, transit operators acknowledged that Federal funding under the CARES Act had been a lifeline. But as those funds run out, the operators will have to either find other sources of funding – such as state subsidies - or will have to implement significant levels of layoffs, service cuts, and fare increases, unless transit ridership can be reignited.

4.4. Downtown plans and business improvement district programs address concerns about office vacancies and loss of retail sales through programs promoting new activities, but include few strategies for promoting transit.

We looked to downtown plans and business improvement district programs to see how they were addressing downtown woes, and whether they were addressing the problem of transit downturns or proposing ways to increase ridership. We found that most cities and BIDs were active in promoting economic development, but with a few exceptions, neither the city plans nor the private sector programs addressed the problem of declining transit ridership explicitly,

A key way in which the city plans we reviewed aim to facilitate transit ridership is by providing priority treatments on local streets and arterials, and by creating walkable and bikeable environments to and from transit. In addition, the study cities' BID programs promoted shopper or employer-funded shuttles or employer-based transit pass discounts or had done so in the not-so-distant past. Overall, however, the city economic development and business improvement district plans we reviewed assumed that transit would be available but did not speak to the recent downturns. Moreover, all but one of the plans was adopted pre-COVID and there has been no formal, organized effort to reconsider their content in response to the changes in activity levels that have occurred over the past four years. Official responses have instead focused on promoting businesses in the downtown districts and supporting strategies to encourage local and regional residents as well as tourists to visit the downtowns and partake of the dining, entertainment, culture, and shopping opportunities offered. Coordination of such interventions with transit providers has been limited, despite recognition that operators are facing fiscal cliffs and need to regain ridership to avoid further cutbacks.

The politics of urban development explain the reluctance to update plans frequently. Most downtown plans are produced to resolve contentious issues such as user conflicts on a major street – whether bus rapid transit or protected bike lanes should be installed by removing on street parking, for example – or to address the amount of commercial development to be permitted via height limits or density bonuses, or respond to state mandates for housing. Once a plan that addresses such issues is adopted, the responsible officials are often reluctant to reopen the planning process for fear of rekindling controversies. As a result, the planning process is not agile enough to respond to a transit crisis – even though downtown planners are counting on transit being available and attracting riders in order to meet critical goals. Instead of updating a plan, local officials often find it expedient to address current problems such as business losses, office vacancies, and transit ridership declines through more narrowly tailored policy thrusts, for example, by relaxing zoning requirements, rather than by revising a downtown plan.

It also proved to be the case that transit agency staff are not deeply engaged in the land use and economic development plans for the downtowns. The staff we met with reported working with cities on major street changes affecting transit (such as priority lanes) and on small controversies affecting transit operations (such as the length and location of bus stops) but were less likely to engage in broader discussions of density or diversity of land uses. The exception was with regard to transit-oriented development in the immediate vicinity of transit stations, where rail stations in particular have come to be seen as potential opportunity sites for higher density uses.

Business Improvement Districts' plans and programs likewise assume that transit will be available but rarely include specific efforts to promote transit. BIDs recognize the importance of transit to handle crowds and bring locals and longer-distance travelers into the district, but most of the BID programs do not explicitly include strategies for promoting transit nor do they address the consequences of COVID on transit ridership. Furthermore, the BID leaders we interviewed were as concerned about having convenient auto access as they were about transit access and several worried that some of the strategies being discussed as ways to encourage greater transit use (such as congestion pricing) would work against auto access and in so doing, undermine business growth opportunities.

The BID programs and other business-endorsed plans we reviewed were seeking to shore up activity in downtowns by attracting emerging industries, expanding outdoor seating for restaurants, filling vacant ground floor spaces with arts displays and pop-up activities, and supporting festivals, markets and other events. The currently "hot topic" of converting outmoded offices and retail to housing came up in our discussions with business leaders, but the overwhelming reaction was that the potential for such changes was limited because of the costs involved: meeting fire and other safety codes for residential use, adding kitchens and bathrooms, heating, ventilation, and air conditioning for each unit, upscaling water and sewer systems, and providing individual electrical and telecom systems to each unit. In addition, they noted that office and retail spaces with large floorplates (hence large interior expanses) can make it difficult to provide the access to windows that residents expect.

Other strategies that have been used in past years to increase transit ridership in downtowns have included employer- or BID-provided free shuttles, employer-subsidized deep discount transit passes, employer trip reduction programs, and the generation of revenues and moderation of car use through parking charges. However, economic considerations have deterred discussion of these matters in the last few years and several business leaders commented that these strategies imposed a substantial burden, especially for the smaller businesses in the downtown, for a small benefit. Instead of looking to downtown businesses to lead on these matters, these respondents advocated that state and local governments should increase transit subsidies to levels reflective of the contribution of transit to the reduction of negative externalities, including congestion and pollution, and should also provide subsidies to support transit's contribution to social equity.

Some of the business leaders we interviewed also recommended actions to recruit and subsidize emerging industries such as artificial intelligence firms to replenish office spaces and generate markets for restaurants and other services. Some also advocated that employers insist on in-person work. However, these proposals also were strongly opposed by some of the business leaders we interviewed, who saw subsidies for particular industries as a high-risk and inequitable use of public funds and felt that work at home had many benefits for both employers and employees that needed to be recognized.

5. Assessment

Overall, we find that at least in the Bay Area downtowns studied here, transit recovery varies with the context of the downtown and with the specific transit services under consideration. Downtowns and subareas of large downtowns with workforces that provide personal services (hospitals, higher education institutions) have recovered faster than job centers where work from home and/or hybrid home-office work dominates. Increases in housing and mixed use development in the downtowns have helped to support local transit, walking, and biking, but the level of transit use the added housing generates has not been sufficient to counteract the loss of longer-distance transit users. Instead, downtown residents are likely to walk for short trips and often use taxis, rideshare services, or personal vehicles for longer trips. This suggests that generalizations based on national data could overlook important considerations specific to the transit operator and locales it serves.

The evidence we have gathered on factors affecting transit recovery is consistent with the findings of other studies, namely that transit recovery has been suppressed by the increase in work from home and the increased availability of other travel options. For short trips, improvements in pedestrian and bicycle facilities and the availability of micromobility options like bikeshare and scooters have grown at the expense of local transit. For longer trips and trips that involve multiple persons or carrying goods, increased income and auto ownership, fuel efficient vehicles and low fuel costs, widespread free parking, and increased fares for transit all work against transit ridership. Moreover, transit service adjustments that make offerings more cost effective, such as route consolidation, elimination of some stops, and reductions in hours of operation, may be financially attractive but do not always result in services that compete favorably with other travel options. These factors were present before the onset of COVID, but their impact was accentuated by the pandemic and they have persisted since then.

Transit recovery has been lowest for the operators with a high share of riders who have choices on whether and how to travel, especially those traveling long distances. San Francisco, San Jose, and Oakland downtowns are regaining their bus mode shares but the regional rail systems, BART and Caltrain, suffered the most severe declines and rail usage continued to lag as of the first half of 2024. In contrast, Berkeley and Walnut Creek downtowns were faster in recovering rail as well as bus ridership, Berkeley likely because the University of California reinstituted in person classes and Walnut Creek because many of its transit users are transit dependent retail and hospital workers.

Slow and uneven recovery in the Bay Area's transit system is a problem not only for the region's transit agencies but also for the state, the metropolitan region, and local communities, since robust and growing transit ridership is a keystone element of plans and policies to reduce the impacts of climate change, reduce pollution exposures, manage congestion, and provide quality services for those who cannot or choose not to drive. Thus, a search for strategies to reinvigorate transit is a worthwhile endeavor.

While one strategy for transit recovery would be to insist on in-person work, for many office workers this would be resisted. Indeed, many employer calls for a return to the office – in the Bay Area and elsewhere - have been for return for a day or two a week rather than the four or five days a week that were the norm pre-pandemic. The specifics of the local and regional labor market, employee preferences, and the potential for employer savings from smaller offices when leases are renewed are considerations here.

Changes in land use, including higher densities and a greater mixing of uses, may be a useful long term strategy for urban resilience, but the contemplated changes are unlikely to have a large impact on transit ridership in the short to medium term. One reason is that such changes take years. In addition, some changes in land use, while desirable in their own right, may not produce heavy transit use. For example, adding housing to downtowns can enhance their liveliness, expand the market for restaurants and personal services, and increase transit use somewhat, but housing construction or building repurposing for housing is limited by site availability, costs, approval and implementation uncertainties. Further, residents of downtown housing do use transit for some of their trips, but they walk, bike, use ridesharing services, or drive their own cars for much of their travel.

Special events can be useful ways to lure people back to the downtown and fill empty spaces, but they do not necessarily increase transit ridership in a way that will ease the transit agencies' financial problems. Sports events and concerts, for example, can boost transit ridership, but they also put a strain on transit operations by requiring a high level of services not needed on other days. Events such as street fairs and farmers markets may attract locals and may even draw a regional crowd, but may or may not result in an increase in transit use.

Many of the solutions that advocate for downtowns to become complete neighborhoods overlook the broader regional role of downtowns as engines of economic productivity and innovation. Concentrations of offices and ancillary services exist for a reason: in particular, the knowledge spillovers that can occur with face to face communications in dense labor markets and the efficiencies of high densities of consumers and suppliers. Nevertheless, as accessibility options have expanded and multinucleation of metropolitan regions has proliferated, it is important to ask whether the same benefits can be reaped in other ways and at lower densities – and whether as a result, transit's role may be transformed. In the meantime, finding ways to maintain the health and transit-friendliness of traditional downtowns may mean looking at increased state or regional subsidies.

At least for the Bay Area, we anticipate that transit ridership will likely remain depressed for several more years, with long distance transit services the most severely impacted. A faster recovery would likely depend on recovery-focused transit subsidies. Over a longer period, growth in office activities in combination with aggressive efforts and support for mixed use development could rebuild transit ridership and revenues and allow the expansions of transit service and ridership as contemplated in local, regional and state plans and policies, but such growth is likely to take five years to a decade or more. Congestion pricing, parking pricing, taxes on fuels and other efforts to moderate auto use could make transit comparatively more attractive as could efforts to increase transit availability in the markets where transit is most competitive, but their political acceptability remains in question.

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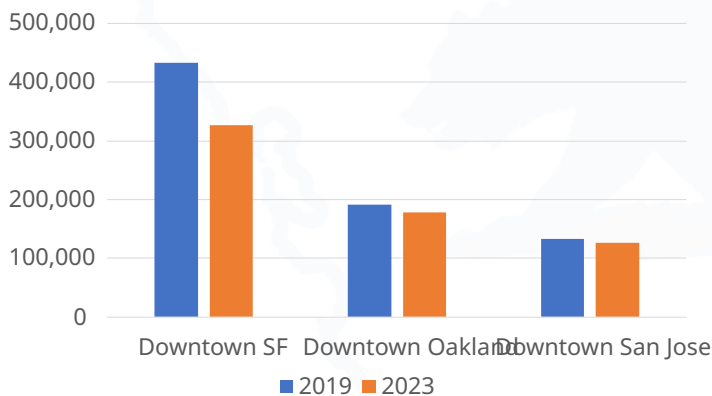
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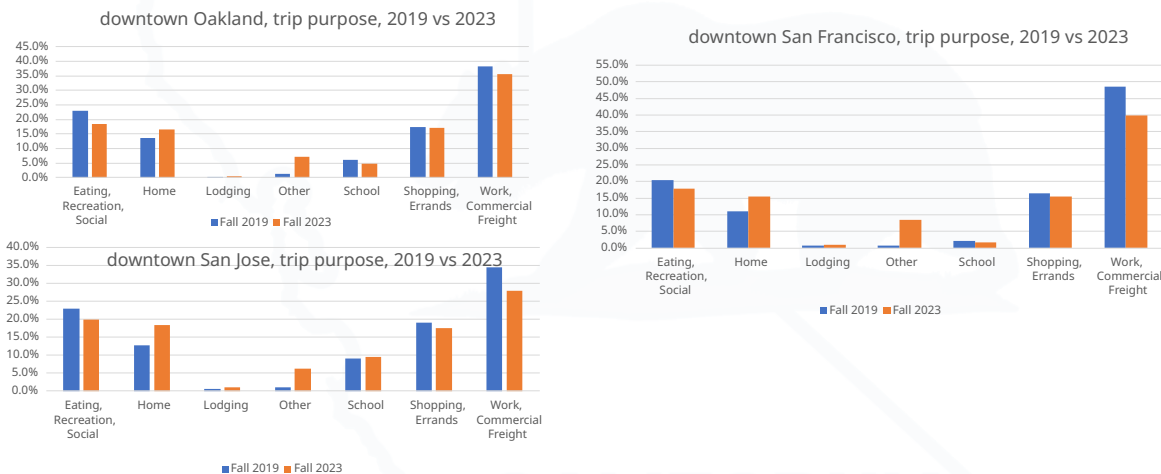
Figure1. Travel to Bay Area Downtowns, 2019 and 2023



Source: Data from Replica, (draft) Analysis by Maya Najjar, UC ITS

Note: Data from an unpublished draft research report

Figure2. Trip purpose for the Bay Area's three largest downtowns, 2019 and 2023



Source: Data from Replica, (draft) Analysis by Maya Najjar, UC ITS

Note: Data from an unpublished draft research report

Figure 3. Mode share to the Bay Area’s three major downtowns 2019 and 2023

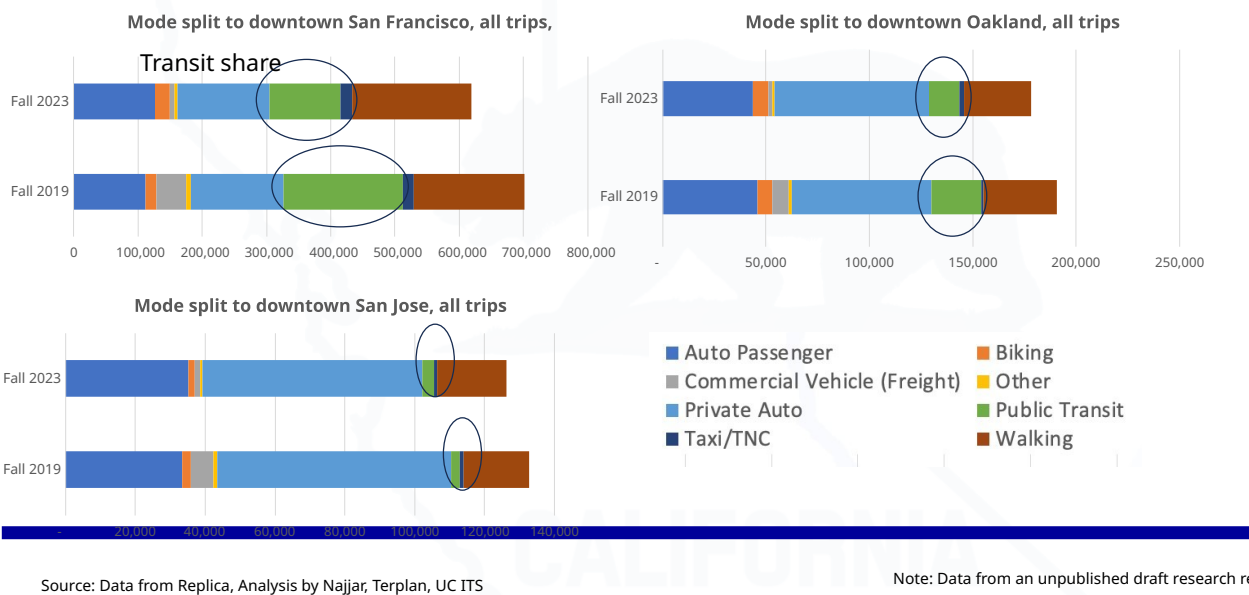


Figure 4. Transit recovery rates by location

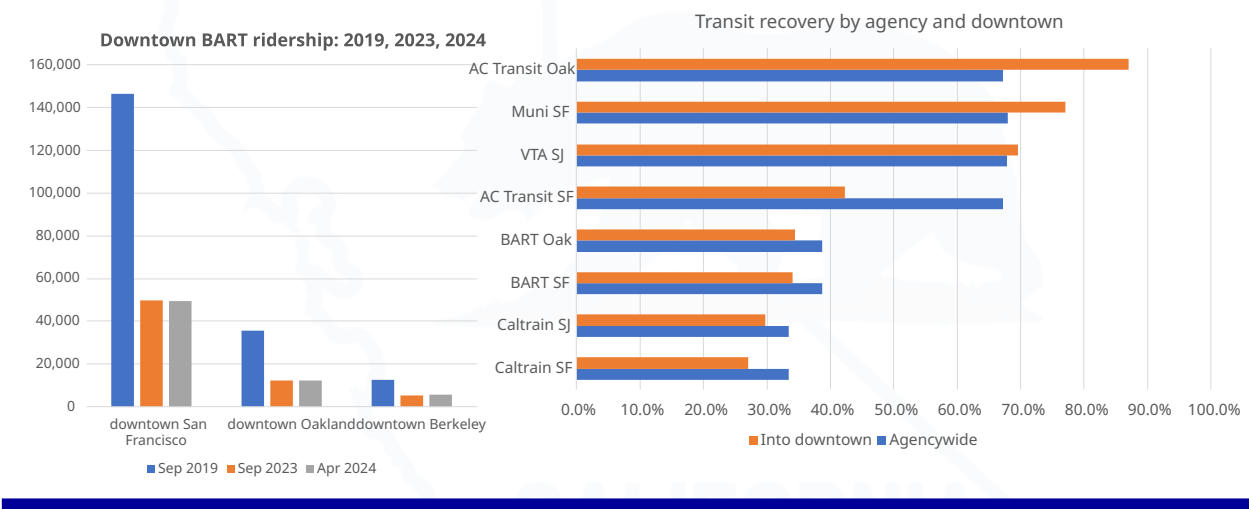


Table 1 Recovery rates by transit agencies serving downtown San Francisco, Oakland, San Jose, Walnut Creek, and Berkeley

BART				Muni	AC Transit			VTA	County Connection	Caltrain	
Downtown Recovery by Stop (2019-2023)				Downtown Recovery by Route (2019-2023)	Downtown Recovery by Route (2019-2022)			Downtown Recovery by Stop (2019-2022)	Downtown Recovery by Stop (2019-2023)	Downtown Recovery by Stop (2019-2024)	
SF	OAK	BK	WC	SF	SF	OAK	BK	SJ	WC	SF	SJ
34.0%	34.5%	43.0%	38.6%	77.0%	42.3%	87.0%	80.7%	69.6%	61.5%	27.1%	29.7%
City Recovery (2019-2023)				City Recovery (2019-2023)	City Recovery (2019-2022)			City Recovery (2019-2022)	City Recovery (2019-2023)	City Recovery (2019-2024)	
SF	OAK	BK	WC	SF	SF	OAK	BK	SJ	WC	SF	SJ
36.2%	38.1%	40.9%	33.7%	68.0%	42.3%	78.5%	76.5%	67.8%	49.6%	27.1%	29.8%
Agency Recovery (2019-2023)				Agency Recovery (2019-2023)	Agency Recovery (2019-2022)			Agency Recovery (2019-2022)	Agency Recovery (2019-2023)	Agency Recovery (2019-2024)	
34.8%				68.0%	67.2%			67.8%	49.6%	33.4%	

Source: Data from transit agencies, Analysis by Najjar, Terplan, UC ITS