TRANSIT-ORIENTED JOB CENTERS:
RECENTRALIZING REGIONAL JOB SPRAWL THROUGH STRATEGIC TRANSPORTATION & LAND-USE COORDINATION

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# Table of Contents

Table of Contents .................................................................................................................. 2
Introductory Note .................................................................................................................. 3

I. Introduction .......................................................................................................................... 4
    Reversing Job Sprawl ........................................................................................................... 8
    The Contrarian View: Sprawl is Not Bad (and May In Fact Be Good) ....................... 8
    Why Focus on the Commute Trip and Plan for Jobs Around Transit .................... 10
        Transit Ridership and System Efficiency ...................................................................... 10
        Economic Competitiveness and Business Efficiency ................................................ 13
        Job Access and Equity ................................................................................................. 14
    Political and Market Feasibility ...................................................................................... 15
    Transit-Oriented Development: A Housing Story ............................................................ 17
    Reasons Why TOD Jobs Has Been Ignored in TOD Discourse ................................... 18

III. Strategically Planning for TOD Jobs ................................................................................. 20
    Planning for Jobs at a Regional Scale ............................................................................. 20
        Monocentric Regions .................................................................................................. 20
        Polycentric Regions ................................................................................................. 21
        A New Vision for Regional Growth ............................................................................ 23
    Planning for Jobs at a Local Scale .................................................................................. 25

IV. Plans and Policies for Transit-Oriented Jobs ................................................................... 27
    Plans .................................................................................................................................. 27
        Golden Horseshoe’s Planning for Employment in the Greater Golden Horseshoe...... 29
        Metropolitan Toronto, Ontario ................................................................................... 29
        Metropolitan Washington Council of Government’s Priority Development Areas .... 34
        Metropolitan Washington, DC .................................................................................... 34
    Policies ................................................................................................................................ 37
        New Jersey’s Urban Transit Hub Tax Credit Program .................................................. 38
        Government Location Requirements (GSA requirement in the National Capital Region?) ................................................................. 43
    Lessons from Plans and Policies Best Practices .............................................................. 46

V. Ideas and Lessons for the Bay Area .................................................................................. 48
    SB 375, Sustainable Communities Strategy, & Priority Development Areas ............. 49
        Critiques of the SCS and PDA Process ....................................................................... 51
        Recommendations ....................................................................................................... 51
    Resolution 3434: MTC’s Transit Expansion Policy ......................................................... 53
        Current Targets ............................................................................................................ 54
        Recommendations for Resolution 3434 .................................................................... 56

VI. Conclusion ........................................................................................................................ 58

Sources ....................................................................................................................................... 60
Introductory Note

This paper is part of San Francisco Planning + Urban Research’s (SPUR) larger research question tentatively called *The Future of Work in the Bay Area*. This research question is framed by SPUR’s earlier research on job sprawl (*Job Sprawl in the Megaregion, Urbanist* Article, September 2009), a precursor to the Future of Work project. This article identified several solutions for reversing the trend of job sprawl. The preferred method, increasing employment in Downtown San Francisco, Oakland, and San Jose, was detailed in a follow-up article (*The Future of Downtown: Bringing work back to the city*, SPUR Policy Paper, 1/21/09). The second most preferred method is concentrating job growth in transit-served suburban employment centers. Similar to *The Future of Downtown* policy paper, this paper will serve as a comprehensive analysis of the issues related to promoting job growth in TODs.
I. Introduction

Over the past several decades, jobs have continued to decentralize away from Central Business Districts (CBD) to suburban and exurban locations in a process known as job sprawl.

Nationally, job growth is occurring outside of traditional city centers according to a recent Brookings Institution study of the country’s 98 largest metropolitan areas.\(^1\) Between 1998 and 2006, 95 of the 98 metropolitan areas studied saw a decrease in the share of jobs located within three miles of downtown. (Interestingly, the study points out that the “renaissance” experienced by many downtowns during the 1990s was limited to residential rather than jobs-based development.) During this time, metro areas experienced a 10 percent increase in jobs within 35 miles of downtown. However, less than one percent of this job growth occurred in the urban core and only 9 percent in the middle ring.

\[\text{Source: Kneebone, E.} \text{ Job Sprawl Revisited (2009)}\]

This growth pattern explains today’s current employment landscape in which only 21 percent of employees within the study areas work within three miles of downtown. Conversely, 45 percent of employees work more than 10 miles away from the center.

In the Bay Area, the four central business districts or primary downtowns of Northern California (San Francisco, San Jose, Sacramento and Stockton) experienced a net loss of more than 22,000 jobs during the eight-year period between 1998 and 2006, while jobs located 10 to 35 miles from these CBDs increased by more than 225,000.\(^2\) Nationally, job growth out from the center has become a significant trend.

Of metropolitan areas with more than 900,000 jobs within 35 miles of the central business district, all have experienced a decline in the share of jobs within three miles of the CBD and an increase in jobs 10 to 35 miles from the CBD.  

There are numerous problems that job sprawl creates. First, as work decentralizes, it puts more jobs in non-transit-served locations and means most commuters are unable to access work without a car. This increases vehicle miles traveled and raises green house gas (GHG) emissions. Second, job sprawl expands the “commute shed” for workers, allowing them to live further away from traditional centers. In essence, the argument can be made that job sprawl facilitates residential and suburban sprawl as workers are able to increasingly live on the fringe while still enjoying a reasonable commute (approximately 30 minutes or less). Third, job sprawl raises equity and job access issues since jobs in non-transit accessible areas are not available to people who cannot or choose not to own a car. Accessibility issues could limit economic development opportunities for poor residents that have the greatest need for access to jobs. Finally, and perhaps most egregiously, the long-term impacts of the urban design (at both a micro and macro level) of suburban job centers prevents transit from becoming a viable option in the future. At a micro level, low-density suburban office parks do not contain the employment densities necessary to support transit. At a macro level, creating an exorbitant number of job centers scattered throughout the region makes connecting these jobs centers via transit implausible. The result is the continued reliance on automobiles, both now and in the future. That is, unless more attention is given to the spatial locations of job centers.

This paper has several purposes. First, it seeks to further the argument that TOD job centers are a viable and important means to combat and reverse job sprawl. Doing

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so will require advancing a more comprehensive definition of TOD that considers both where people live and where people work. Second, it will look at best practices (both plans and policies) to implement TOD job centers. Because of the scope of the problem (i.e. job sprawl is occurring at a regional and even megaregional level), the most effective solutions likely require regional intervention. However, the policies available to implement these plans are at a different scale (either at a local level or the state/federal government). Therefore, the most effective plans and policies will have to address this discrepancy and identify creative ways to entice or require local jurisdictions to make land use decisions that benefit regions. Finally, suggestions will be made for how the Bay Area can regionally address job sprawl by adapting existing planning initiatives and policies.

This paper will take on the following structure: first, it will make the case for transit oriented job centers as an important tool for addressing job sprawl. Various benefits of transit oriented job centers as well as the complexities associated with that type of development pattern will be explained. Next, it will look at both existing plans and policies that attempt to influence the spatial distribution of jobs throughout a region. Finally, the paper will draw upon the best practices lessons and make suggestions for how the Bay Area can more effectively impact regional job center locations.
II. The Case for Transit-Oriented Development Job Centers

Reversing Job Sprawl

In response to the detrimental impacts of job sprawl on San Francisco and the entire Bay Area, SPUR embarked on a research project tentatively called The Future of Work in the Bay Area in which industry trends, job growth projections, and plans and policies will be studied. The purpose of the endeavor is twofold. First, SPUR hopes to gain a better understanding of what the employment landscape in the Bay Area will look like in the future. Secondly, based on the enhanced understanding of future trends, SPUR seeks to recommend policies that will ultimately stem the leakage of jobs away from the region’s core areas.

This research question is framed by SPUR’s earlier research on job sprawl (Job Sprawl in the Megaregion, Urbanist Article, September 2009), a precursor to The Future of Work in the Bay Area project. This article identified several solutions for reversing the trend of job sprawl. The preferred method, increasing employment in Downtown San Francisco, Oakland, and San Jose, was detailed in a follow-up article (The Future of Downtown: Bringing work back to the city, SPUR Policy Paper, 1/21/09). The second most preferred method is concentrating job growth in transit-served suburban employment centers. Similar to The Future of Downtown policy paper, this paper will serve as a comprehensive analysis of the issues related to promoting job growth in TODs.

While it is true that centralized job centers like the one found in Downtown San Francisco is the most efficient location for a major job center, it is both impractical and impossible to recentralize all jobs into the region’s downtowns. Instead, alternative arrangements must be considered.

After all, the suburbanization of work is now a key driver of residential sprawl as the commute shed defines the edge or boundary of a megaregion. Reversing residential sprawl necessitates stopping job sprawl. Yet with more than half the U.S. population now working in the suburbs, stopping job sprawl is no longer about limiting the movement of work to the suburbs, but instead about reorganizing work within the suburbs to better meet the needs of a sustainable region. This is where TOD job centers come into play.

The Contrarian View: Sprawl is Not Bad (and May In Fact Be Good)

It is important to acknowledge a body of literature that argues not only that attacks on sprawl are simplistic and unfounded, but in fact sprawl may have several
benefits. Although not the focus of this paper, a brief summary of these views is included below.

Gordon and Richardson (1997) summarize the arguments against compact development:\(^\text{10}\)

1. The United States is not running out of open space and prime agricultural lands are not in danger of encroachment.
2. Low-density settlement is the overwhelming choice for residential living. Trying to force people into other types of situations is contrary to what the market wants.
3. Low densities make high-capacity transit systems unattractive and wasteful.
4. The traffic consequences of suburbanization are benign. In fact, average highway speeds have been increasing.
5. The economic and resource efficiency of compact development has never been demonstrated.
6. The cost of constructing "concentrated settlement" is high. Meanwhile, communication costs that make interaction possible are dropping.
7. Decentralization continues despite efforts at downtown revitalization. This proves the market for low-density development.
8. The equity case for compact cities is weak.

Possible benefits of sprawl include equity and job accessibility, and housing affordability. Perhaps the most interesting cited benefit of sprawl is shortened commute times. Despite worsening congestion in metropolitan areas, drivable fringe areas have generally have far shorter commutes than older cities with extensive public transportation cities.\(^\text{11}\) This is due to the speed and efficiency of cars relative to public transportation. To illustrate this example, Glaeser and Kahn (2003) cite New York City’s 39 minute average commute – the longest of any large city. This compares unfavorably to commute times to edge cities, which averaged 21 minutes.\(^\text{12}\) However, the impact of decentralized job centers on commute times is ambiguous. Cervero and Wu (1997) found that dispersed employment-centers resulted in negative impacts on regional commuting including long average commute times and increases in vehicle commuting.\(^\text{13}\)


This research points to the complexities inherent in making value judgments regarding sprawl. While this paper presumes that sprawl in general and job sprawl in particular is an inferior land use pattern to dense, compact development, understanding the opposing viewpoint is important in order to frame the opposing viewpoint.

**Why Focus on the Commute Trip and Plan for Jobs Around Transit**

Both jobs and transit are of critical importance to the vitality of the Bay Area. Jobs and job growth mean that the region is economically secure and solvent. An economically healthy region is important for supporting population growth while simultaneously providing a secure tax base that fund social services and programs that make the Bay Area a desirable place to live. Transit is important for promoting regional mobility and access, reducing the demand on highway and road infrastructure, and reducing auto-dependence. The region is fortunate to have a high quality transit system that features regional rail, commuter heavy rail, light rail, and bus service. Despite some shortcomings, the extensive transit network contributes greatly to the region’s competitiveness.

While jobs and transit are play important roles in creating and maintaining a globally competitive region, it is the intersection of jobs and transit that are particularly important to securing the continued vitality of the region. The synergy between transit and jobs can be utilized to reverse the trend of job sprawl thereby mitigating the negative impacts associated with job dispersal.

There are a number of reasons for better integrating transportation and job location. These benefits fall into four categories: transit ridership and system efficiency; economic competitiveness and business efficiency; job access and equity; and political and market feasibility.

**Transit Ridership and System Efficiency**

*Commute trips are more important than its total share of trips might suggest.*

Commute trips account for under 20 percent of all trips taken.\(^{14}\) Of the commute trips, 2.8% take place on transit.\(^{15}\)

Despite these figures, transit commute trips play a much larger role than the statistics infer. Commute trips happen during a short period of time (1-2 hours in the morning and evening) and transportation systems are designed to meet peak demand. Transportation systems, then, are designed to accommodate transportation demand during morning and evening rush hours. Because demand is highest during these times, there is excess capacity during all other times of the day. Building transportation systems that accommodate commute trips is expensive, both in terms of financial investment as well as the impact on the built environment and quality of life.

Most transit riders are going to work.

Although they only represent 1/5 of all trips, 60% of transit trips are work-related. This means that transit plays an integral role in getting people between their home and place of employment. So, if we care about increasing transit ridership, a key strategy is to increase the number of commute trips on transit.

Workers cannot commute on transit if transit service is not available.

Although an obvious point, transit service must be available in job centers in order for workers to commute on transit. In fact, availability of transit around a job center is a key determinant in people’s decision to take transit to work.

Many factors influence people’s mode choice decisions. A study of commute choice decisions for residents who lived in close proximity to rail transit revealed that the destination was the second strongest impact on travel mode choice behind the availability of parking at the destination.

In a follow-up study that looked specifically at suburban office locations, people whose workplaces were located in close proximity to transit were much more likely to take transit to work than people who work in remote locations without transit

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availability.\textsuperscript{18} Cervero (2006) found that about 20 percent of those who worked in office building close to rail stations in the suburbs took transit to work, approximately three times the likelihood compared to people that worked in offices without transit service.

In the Bay Area, Cervero’s (1994) study determined that those working in an office near BART were 2.5 times more likely to take rail transit to work than individuals who worked in offices without BART service.\textsuperscript{19} The study also lent credence to the argument that both origins and destinations are important factors in determining commute mode decisions. An average of 19.2 percent of people who lived and worked in areas served by BART took transit to work, compared to only 12.8 percent of those who only worked, but did not live, near BART.\textsuperscript{20}

The finding that transit access near origins and destinations logically makes sense. Any trip has both an origin and a destination. To only concentrate on the origin while ignoring the destination means that only half the decision-making equation is considered. Instead, transit accessibility around origins and destinations must be encouraged.

\textit{Transit systems become more efficient when they link multiple destinations.}

A 2008 report by Reconnecting America that analyzed 6 new transit systems found a direct and positive relationship between the number of jobs located with \( \frac{1}{2} \) mile of new transit stations and the ridership numbers on those new transit lines.\textsuperscript{21} By planning new rail transit systems to connect destinations, a network of interconnected job centers was created.

\textsuperscript{20} IBID
The report also found that connectivity and urban design features around the new stations were important indicators of transit ridership. It is not enough for transit stations to be located close (within ½) miles of destinations: there must also be easy pedestrian access and feeder transit systems to connect transit to destinations at a finer scale.

**Economic Competitiveness and Business Efficiency**

*Encouraging spatial concentration of firms is good for businesses.*

Research on the benefits of business agglomerations finds businesses benefit in three ways: by increasing productivity of firms, by fostering innovation, and by stimulating business formation.\(^{22}\) Productivity is enhanced because of better access to employees and suppliers, access to specialized information, availability of complimentary firms and services, access to institutions and public goods, and better motivation due to rivalries. Innovation is fueled competitive pressure with nearby firms, and facilitated by having a better window on the market, skilled and creative labor, ease of forming partnerships with other complimentary firms, and relatively low costs of experimentation as compared to isolated firms. New business formation is an outcome of the increased productivity and innovation. New

businesses form because; individuals working within a cluster can more easily understand gaps in products or services and lower barriers to entry (financing, assets, and staff are easier to come by).

To take advantage of these agglomeration benefits, businesses tend to cluster around one another. Land adjacent to fixed-rail transit stations are able to offer these agglomeration benefits due to the local and regional connectivity that transit provides. These benefits around transit are manifested in higher capitalized land value and rent premiums.23

Firms located within clusters have a competitive advantage over isolated firms. Therefore, facilitating clustering is a way to promote a more robust business environment for existing and new firms, and should be seen as key to a region’s economic development strategy.

Transit accessible jobs allows for increased business efficiency

Not all job descriptions require expensive office space in the CBD. Some responsibilities, such as back office support, can just as easily be performed outside of the CBD than in a downtown. Providing transit-accessible satellite office that can house non-essential business support services provides two benefits to businesses. First, it provides a lower-cost alternative to expensive downtown real estate. From a business standpoint, it does not make sense to pay for pricey real estate if such a cost is not essential to perform business. Second, by providing transit-accessible job centers in the suburbs, businesses can still maintain high levels of connectivity between a main office and any satellite offices that transit provides.

Job Access and Equity

People change their jobs more frequently than they move residences.

Approximately 1 in 6 (16.8%) Americans move residences each year.24 Nearly 1 in 4 (23.4%) Americans change jobs each year.25

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Together, these statistics show that home locations are relatively fixed as compared to work locations. As people shift jobs, access to a network of transit accessible jobs important for achieving a high transit commute mode share.

*Transit accessible jobs centers promotes equity by increasing job access to low-income residents by transit.*

The importance of access to a network of transit accessible jobs also has benefits for low-income people. Kain’s (1968) “spatial mismatch theory” suggests that job suburbanization poses a job-access problem for residents who cannot afford to own a car and therefore have limited household mobility.26 In cities with limited transit services, the spatial mismatch (i.e. the ability of low-income residents to access quality jobs) suppresses employment opportunities since low-mobility households cannot access major job centers located in the periphery.27

Locating jobs in locations that are accessible by transit opens those jobs up to people of all income groups, thereby promoting economic opportunity. Additionally, the network of interconnected, transit-accessible job centers allows continued job access to low-income people even if they change jobs.

Transit accessible jobs also reduces the need for auto ownership, thereby removing an expense (between $6000-$9900 annually28), that is out of the reach of many low-income people. Car ownership is expensive and therefore out of the reach of the most fiscally constrained people.

**Political and Market Feasibility**

Office development is generally less contentious than residential development.

Barnes (2005) argues that commercial development, especially in areas that are already primarily commercial, is a less contentious proposition than developing in residential areas. Development in commercial areas, he argues, can avoid battles that are typical of development projects in residential areas. Arguments can be avoided in commercial areas because personal ties to the area are not as strong as in residential areas. Whereas residential disagreements usually center around density and design, issues with commercial development tend to center around “solvable” problems such as traffic and parking, which are easier to mitigate. The relative ease of developing commercial property, then, could both be more attractive to real estate developers weary of political battles as well as allow developments to be constructed more quickly then residential projects that would require a lengthy vetting process.

Office development near transit is a more efficient use of valuable transit-served land than residential development.

Land around transit stations is scarce. This scarcity leads to a price premium for buildings with transit access. Because of the scarcity of land, it makes sense to efficiently utilize transit-accessible land in a way that provides the most productivity from developments built near transit.

When considering efficiency, there are two major benefits of office development. First, there is greater acceptance of workplace density as opposed to housing density. In terms of achievable densities in downtown areas, job densities typically exceed the highest residential densities by a factor of five or greater. While this finding is particular to downtown density thresholds, it is likely that the greater acceptance of workplace density would extend to suburban TODs as well.

Secondly, workers require less space per person than residents. The average size of new homes is approximately 2400 square feet. Given an average household size of

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2.6, each person uses just over 900 square feet. In contrast, industry standards recommend about 175 square feet per office worker. This means that a higher density of workers than residents can be accommodated in the same area, making office space more efficient use of space.

When these efficiencies are considered on an aggregate level, the potential for less land consumption at a regional scale becomes significant.

*People are willing to work (and shop) in dense, transit served locals.*

People’s tolerance for working and shopping in dense, transit served areas is high, even if they prefer to live in low-density settings. This preference (at best) or indifference (at worst) for dense work environments should serve as a policy window to advocate for dense, transit-served employment centers.

**Transit-Oriented Development: A Housing Story**

Despite the numerous benefits associated with locating job centers near transit, TOD policies and discourse have largely been centered on housing and retail.

Since it was first conceived as an alternative development pattern to sprawl, the definition of a Transit-Oriented Development (TOD) has grown and evolved. Recent trends in TOD incorporate more complex and varied planning-related goals in the realms of environmental sustainability, public health, social equity, and others. For example, Reconnecting America launched an effort to promote Mixed-Income Transit-Oriented Development (MI-TOD) in an effort to promote housing affordability in transit-served locations. This push for a formalized concept to include mixed-income housing in TODs represents an evolution to incorporate emerging planning principles into the traditional view of transit-oriented development.

Despite the evolution of TOD as a concept most research and discussion has centered on residential and retail development near transit, while the role of employment near transit stations has largely been ignored. Although providing housing and shopping options in a context that reduces the dependence on the automobile is an important endeavor, it is in fact only half of the equation that

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factors into people’s travel decisions. Consideration must be given to where people who live near transit will work.

**Reasons Why TOD Jobs Has Been Ignored in TOD Discourse**

There are several reasons why jobs have largely been absent from TOD conversations:

*Many Smart Growth leaders were residential developers and architects.*

The New Urbanist and Smart Growth planning movements were started by architects who were primarily concerned with housing and new community typologies. This housing-first history is continuing to perpetuate itself even today. Jobs, therefore, have been an afterthought in modern planning frameworks from the beginning.

*People are more engaged with community issues around their homes rather than at work.*

People are more concerned with what happens with the communities around their homes than they are with what happens around their places of employment. This is due to several reasons. First, people vote based on where they live, not where they work. Therefore, people have greater capacity and power to become more personally invested in their residential communities. Second, people inherently have a greater sense of attachment to their residential communities. This is because people change jobs more often than they move, meaning employees tend to not have a strong connection to their workplace. Additionally, people as homeowners have a vested interest to engage in their residential communities in order to protect home values. This same level of personal interest does not exist in employment areas.

*Planning for jobs is more complex than planning for housing.*

Housing options are relatively limited and simple for various stakeholders (planners, politicians, community groups, etc) to understand at a personal level. Everyone needs housing, and people can use this personal relevance to comprehend the benefits of building housing around transit. Intuitively, people can understand at a personal level that providing housing near transit will increase transit ridership.

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By contrast, jobs and the physical spaces in which they exist are quite varied. Industries such as healthcare, back office management, manufacturing, research and development, food services and preparation, etcetera require vastly different physical spaces. Therefore, understanding the jobs landscape requires extensive knowledge of a complex subject as opposed to a simpler, more binary (single family vs. multi-family) approach to housing. This variety in product can lead to unfamiliarity and confusion over employment-intensive development.

Existing policies create a culture that ignores the importance of transit-served employment centers.

Current policies are almost exclusively housing-focused. These policies ensure that planners, politicians, developers, and the public remain focused on housing while treating employment as an afterthought. For instance, many TODs in California occur in redevelopment areas that must comply with California’s Redevelopment Law (CRL). Most TODs are located within redevelopment areas since tax increment financing provide an important source of revenue that makes TODs financially feasible. The CRL requires that 20 percent of Tax Increment funds be used for affordable housing.\(^{38}\) No such requirements exist for employment.

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III. Strategically Planning for TOD Jobs

Simply put, planning for jobs around transit means allowing for jobs to be located at a few strategic, regionally-significant, and easily accessible places within a region. It does not mean requiring a critical mass of jobs at every transit station.

Planning for jobs must be considered from both a macro, regional scale as well as a micro, station-area level.

Planning for Jobs at a Regional Scale

To better understand the regional spatial planning, it is important to understand the theoretical framework for how regions grow.

Monocentric Regions

The traditional spatial categorization of regions was that they followed a monocentric development pattern, in which one major city anchored a region. This center served as the economic, cultural, and population center for the region. Development would occur around the center in concentric circles with increasingly lower densities.39

A monocentric region permits an incredibly efficient transit system. Because a monocentric region has only one center, a predictable pattern of desired trips arises, with people in outlying areas wanting easy access to the single center. Transit systems could easily connect outlying areas to the center while simultaneously providing intensive transit service in the core. Also, transit systems can take advantage of the

inherent density of monocentric regions to transit service to a large number of people with minimal infrastructure investments.40

Polycentric Regions

Post-Ward War II development patterns, however, marked a dramatic shift in the way regions grew. In fact, development patterns changed so much that the monocentric model no longer provided an accurate framework for categorizing regional spatial organization.41 A number of reasons contributed to the initial obsolescence of the monocentric model: the decentralization of economic activities, the increased mobility afforded by the automobile, the fragmentation of spatial distribution of activities, changes in household structure and lifestyle, and the emergence of complex commuting patterns.42

Polycentrism is somewhat of an amorphous concept. However, several key features of polycentric urban regions (PURs) exist. First, PURs have a distribution of large and small cities, and is not dominated by one large city.43 While these cities may have been historically distinct from one another, they have since become interconnected due to expansion of the urban form.44 Despite this new regional connection, cities still retain some of their distinct character and often perform a specialized role within the complex regional structure.45

41 Davoudi, S. (2003). Polycentricity in European spatial planning; From an analytical tool to a normative agenda. European Planning Studies, 11 (8), 979-999.
42 IBID
Another way to think of centers in a polycentric region is as regional destinations, or where people in a region would like to travel. Because these centers are employment-intensive and have social and cultural value, people within a region will need and want to travel to these places.

The Bay Area is a prime example of a polycentric region. The area contains three main cities (San Francisco, Oakland, and San Jose) as well as numerous secondary cities (Walnut Creek, Berkeley, Palo Alto, etc).\(^4\)

There are both pull and push factors that have supported the continuance of polycentric regional spatial composition. Pull factors are the economic benefits derived from decentralizing away from a central economic center. These benefits come from the principles of agglomeration economies and economic clusters. Agglomeration economies and economic clusters provide a number of benefits to firms and industries through externalities related to a regionally dispersed, yet sub-regionally clustered development pattern. These benefits include: access to labor,

\(^{46}\) See SPUR’s *Bay Area Regional Form and Population Growth* (February 2010) article for more information on how the Bay Area has developed over time: http://spur.org/publications/library/article/bay_area_regional_form_and_population_growth
vertically disintegrated sources of supply for inputs, untraded interdependencies with other producers, and effective governance relations.\textsuperscript{47}

A number of push factors also played a large role in the decentralization of regions. These include “flight from blight” reasons include failing inner city schools, rising crime rates, and fiscal distress within cities.\textsuperscript{48}

Together, these push and pull factors have made their market on regional landscapes by encouraging multi-centered regions. Anas et al (1998) categorize the new centers into two groups.\textsuperscript{49} This first category is older towns that have gradually incorporated into an expanded urban area. The other typology is newly formed nodes called edge cities. These edge cities, often located at the confluence of several major highways, typically contain large concentrations of office and retail.

While polycentric regions have become the norm in response to market forces that provide economic advantages, decentralization has not been entirely positive. There is a fine line that distinguishes polycentricism from urban sprawl. And, as discussed above, sprawl has many negative externalities.

The negative aspects of polycentrism can be traced to the transportation and land use characteristics of dispersed regions. Mobility and accessibility in polycentric regions tends to rely on private automobiles. While many polycentric regions have high quality transit systems, the car is without a doubt the preferred mode of transportation at least partially because of an incomplete transit network that connects major job centers. And with this auto-dependence comes a host of negative externalities.

A New Vision for Regional Growth

The question arises: How can we plan our regions to take advantage of the economic advantages associated with a multi-centered region while minimizing the negative impacts caused by the auto-centric nature of this development pattern?

A regional growth pattern based on TODs would transform the polycentric model in order to avoid pitfalls inherent in that form of regional development. Polycentric regions are not inherently flawed. The idea of having various centers has economic development, social, and practical merit. However, the failure to integrate

\textsuperscript{47} Davoudi, S. (2003).
\textsuperscript{48} Nechyba, T. J. et all (2004)
transportation and land use planning is a major downside of polycentric regional growth patterns. A new approach to regional spatial growth is needed that avoids this major pitfall.

Instead of regional mobility and accessibility based on vehicular travel, a TOD-focused growth pattern would integrate transportation and land uses to concentrate development around existing and new transit stations, and to improve and extend the transit network to better connect origins and destinations.

Because of the importance of integrating transit and land use in a regional spatial structure based on TODs, regional growth would occur around transit stations. Where development occurs, then, would primarily be reliant on current and planned high quality transit alignments. Other factors impacting the form of a TOD-based regional development pattern include topography, land management and conservation, local real estate dynamics, zoning, and master plans.\(^{50}\)

There are two options for the form that a region based on TOD: “pearls on a necklace” and the “sub-center” model.\(^{51}\) Since the end goal is to provide the high quality and advantages that an archetypical polycentric region provides while mitigating against the negative externalities inherent in an auto-dependent region, a TOD-based region must meet two main requirements. First, development must be concentrated on transit (see below for a discussion on individual TOD design). Second, it must have a rich mix of uses along the transit network. This mix of uses must provide the land uses that people demand at a regional scale. In other words, areas for housing, employment, and entertainment must be located within TODs.

What does this mean for planning for jobs at a regional scale? It means that employment centers should be located around transit stations. But it also means that housing, entertainment, and other vital uses should be located around transit. The key is to provide the right balance of these uses at the right scale.

\(^{50}\) Cervero, R. Personal communication, November 4, 2010.
\(^{51}\) IBID.
Planning for Jobs at a Local Scale

Planning for jobs does not mean every transit station should be surrounded exclusively by high density office towers. As mentioned above, each transit node should not and cannot be self-sufficient. Instead, land uses adjacent to transit stations must be considered at both a corridor level and a regional level.

Even where a job center is determined to be an efficient and desired land use, this does not preclude housing, retail, and other uses from occupying valuable space in close proximity to transit. Recent research has found that employees’ willingness to walk from transit is significantly less than residents’ willingness to walk from transit (500-1000 feet compared to between ¼ and ½ mile). Therefore, in order to maximize land adjacent to transit stations, workplaces should be sited closest to transit and surrounded by residential and other uses. These figures on willingness to walk differences between workers and residents demonstrate that there is space for a horizontal mix of uses even around employment heavy TODs.

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Urban design elements that encourage safe and convenient access to and from transit stations are also essential in making transit-oriented job centers successful. Urban design features, such as sidewalks and other pedestrian amenities, bicycle infrastructure, pedestrian scaled development, and street trees, make for pleasant connections between transit stations and the surrounding developments. Despite having a weaker relationship than land use density and diversity in determining people’s mode choice, careful consideration in urban design will be essential in creating new transit-oriented job centers and retrofitting existing suburban employment centers.

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IV. Plans and Policies for Transit-Oriented Jobs

The benefits of co-locating jobs and transit are plentiful. How then can a region, and particularly the Bay Area, achieve a greater share of suburban jobs to be located in TODs? The following section looks at regional land use and economic development planning documents that set forth regional visions that concentrate job growth around transit. Additionally, policies to impacting the location decisions of employers are discussed. It will become clear that incongruity between plans and policies explain why there has been little success in attracting jobs to TODs.

Plans
Planning for job locations is often a first and necessary step in preserving employment sites and developing transit-served job centers. Plans that seek to concentrate development in areas served by transit often feature the phrases “smart growth” or “transit-oriented development” in their titles. However, the vast majority of plans either explicitly or implicitly exclude planning for jobs. Instead, they are primarily or exclusively focused on housing location. As discussed above, although locating housing around transit is important, ignoring the location of jobs misses a large influencer of people’s commute behaviors.

Successful employment plans need to be at the correct scale. Economies work at a regional level. Therefore, the plans that best accommodate and plan for employment growth are developed by regional governments and planning bodies. In United States, regional plans are developed by regional government bodies such as Metropolitan Planning Organizations (MPOs) or Councils of Government (COGs).

As discussed above, planning for jobs in a difficult task, and subsequently, most regional planning bodies fail to properly plan for the location of jobs throughout a region. However, some regions have taken a proactive stance through devising plans that consider job locations.

The function and form of these plans varies greatly across regions. First, jobs planning can be an integral component of a region’s general growth policy, considered alongside and equal with housing-related plans. Second, job location can be a subset of a larger regional planning document. For instance, a region may devise a regional growth plan that sets a general vision for where and how a region should accommodate growth. A series of reports focusing on more specific topics (including job location) can supplement the larger plan. Finally, a jobs plan can be written as a sort of retrofit to an existing regional growth plan if the existing regional plan originally ignored job location. In this format, a region can decide to focus attention to future job locations by developing a jobs plan that simultaneously
supplements and supports the vision set forth in the existing plan. This retrofit style is especially attractive given the number of existing plans that do not consider job location. Retrofit plans provide a valuable opportunity for regions to begin to plan for jobs without having to completely overhaul an existing regional plan or undergo an expensive and time consuming process to develop a new regional growth plan. Successful adoption of a retrofit plan is dependent upon having an existing regional plan that generally calls for future for transit-oriented development to be a key component of growth control.

Several of these regional plans that include job location planning are detailed below.
Golden Horseshoe’s Planning for Employment in the Greater Golden Horseshoe

Metropolitan Toronto, Ontario

In 2005, Ontario passed the *Places to Grow Act* to help the Ontario government plan for expected growth in a “coordinated and strategic way.”\(^{54}\) The purpose of the act is to accommodate growth while balancing the needs of the economy with environmental sensitivity.

The plan gives the provincial government to:

- designate any geographic region of the province as a growth plan area
- create a growth plan in consultation with local officials, stakeholders, public groups, and members of the public
- develop growth plans in any part of Ontario

In accordance with the *Places to Grow Act* and in response to growth projections (an additional 3.7 million residents and 1.8 million jobs by 2031\(^{55}\)), the provincial government embarked on creating a growth plan for the Toronto region – the province’s most populous and economically vital region. The plan, called *Growth Plan for the Greater Golden Horseshoe* (2006), sets for the vision for growth in the region for a 25-year period that ends in 2031.

Much like the Act itself, the *Growth Plan* seeks to secure the region’s future by managing growth in a way that protects the area’s natural resources while ensuring that conditions are ripe for economic growth. To achieve this vision, the plan calls for concentrating growth and development in three areas: urban growth centers, major transit station areas and intensification corridors, and designated greenfield areas.\(^{56}\)


\(^{56}\) For it’s “visionary and pragmatic” vision for growth, the *Growth Plan* was awarded the American Planning Association’s Daniel Burnham Award for a Comprehensive Plan in 2007. http://www.planning.org/newsreleases/2006/dec19-10.htm
In particular, employment growth is to be concentrated in existing centers and in transit station areas. The plan maintains downtown Toronto as the “primary centre for international finance and commerce.” The plan sets density goals (for resident and jobs per hectare) for centers. There are three classifications of centers (primary, secondary, and tertiary), and the density goals are reflective of these designations

- Primary: 400 residents and jobs per hectare (approximately 160 residents and jobs per acre)
- Secondary: 200 residents and jobs per hectare (approximately 80 residents and jobs per acre)
- Tertiary: 150 residents and jobs per hectare (approximately 60 residents and jobs per acre)

These density goals consider both residential and employment targets collectively, and do not specify a desired split between the two uses.

No such targets are established for transit station area development. However, the plan calls for other actions to make employment viable and attractive in transit areas. First, lands should be provided to accommodate a “variety” of employment types – industrial, commercial, and institutional. Second, employment areas should be planned and preserved. Criteria are established to limit municipalities’ ability to re-zone employment lands for other purposes.

To further explore the issue of employment in the Greater Golden Horseshoe, the province released a background paper called Planning for Employment in the Greater Golden Horseshoe (2008). Whereas the Growth Plan provided an overall vision for the future of the GGH, the background paper focuses in particular on employment and economic development from a land-use perspective. The purpose of this paper was to “generate further discussion and feed into the assessment” of how to best plan for jobs and economic development in metropolitan Toronto within the context of the Growth Plan.

The paper makes proposes several strategies for how the province should act in order to better plan for future jobs.

Strategy #1: Perform better analysis of how future economic trends will impact land-use planning for employment areas.

Analysis includes:

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• Working with municipalities to develop a database of existing and future planned employment areas
• Working with municipalities to match industry spatial needs with municipalities’ strengths and attributes

Strategy #2: Develop and enhance incentives and land use controls or require municipalities to act in accordance with the regional/provincial vision for job growth.

This includes:
• Developing guidelines to support better planning for employment uses
  o Develop general urban design principles that support dense, walkable, transit-served employment centers.
  o Ensure flexible employment areas to adapt to changing economic realities
  o Revise parking standards to support transit in employment areas
  o Developing new tools and incentives to promote better urban form and design in employment centers (see below for existing policies).
• Locating institutional uses and other government offices in specified priority employment areas in centers and around transit stations.
• Supporting municipalities in planning for offices
  o Ensure that the transit agency (Metrolinx) prioritize transit investments that connect major employment centers
  o Use government land holdings for developing major office uses
  o Develop guidelines in conjunction with municipalities to support better office planning
    ▪ Efficient use of land with transit-supportive developments
    ▪ Encouraging job clustering

The paper also generated a list of criteria by which employment centers should be evaluated. The criteria include:

• Inter-regional economic significance.
• Significant scale and cluster of employment activity
• Close proximity to major infrastructure
• Proximity to major markets
• Support overarching growth management objectives of the Growth Plan
• Skilled Labor Force
• Research and Development
• Innovative and forward-looking
• Multi-Level Collaboration
Planning for Employment was released for public input in Spring 2008. The process of incorporating feedback into a formal policy document adopted by the province is still underway. When the process is complete, what will result is likely to involve a variety of policies and procedures to support better planning for employment, including: better mapping, planning guidelines, a database of employment lands, or amended Growth Plan policies.

Implementation Tools

The planning process in GGH has many positive attributes, not the least of which is proposing a vision for accommodating future population and employment growth through compact development in existing centers, current and future TODs, and more sustainable greenfield development. However, although it is a solid plan that understands the complexities of planning for employment at a regional scale, it remains to be seen if the necessary policies and programs needed to implement the plan will be available to planners, policy makers, and other stakeholders.

Planning for Employment called for the extending and strengthening existing programs that could be used to impact the spatial landscape of employment. Existing programs include:

- Community Improvement Plans (CIPs) allow municipalities to set out the municipal policy framework and programs to support the rehabilitation and revitalization of targeted areas. Through CIPs municipalities may introduce incentive-based programs that offer grants or loans for rehabilitation or energy efficiency and/or property tax assistance for environmental remediation.
- Development Charges can support development in existing built-up areas. Municipalities can also offer development charge waivers and exemptions to projects that support development and redevelopment projects in the downtown and adjacent areas.
- Development Permit System can expedite approvals for planning applications by combining elements of the existing zoning, site plan, and minor variance systems into one streamlined approach.
- Design Control Provisions in the Planning Act allow municipalities to regulate matters relating to exterior design, character, scale, appearance, and design features and sustainable design.
- Brownfields Financial Tax Incentive Program (BFTIP) supports the clean-up of contaminated sites through proportionally matching municipal tax assistance with relief from the provincial education portion of property taxes for eligible brownfield properties.

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59 IBID
• Tax Increment Financing (TIF), currently in use for certain pilot projects (West Don Lands and Toronto-York Subway Extension), enables these municipalities to help support redevelopment and public infrastructure development.

• Heritage Property Tax Relief Measures allow municipalities to provide a 10% to 40% reduction in property taxes for properties designated under the Ontario Heritage Act. The Province shares in the cost of the program by funding the education portion of the property tax relief.

It is important to note that these policies are primarily locally initiated and controlled programs. The plan, on the other hand, is an instrument of the Province. Success of implementing the vision for GGH will depend on the coordination of the planning documents with policies and programs that reconcile the different levels of government involved in the planning and implementation process.

**Update**

A combination of the economic downturn and a new unsupportive mayor of Toronto stalled the planning process.
Metropolitan Washington Council of Government’s *Priority Development Areas*

**Metropolitan Washington, DC**

In 1998, the National Capital Region Transportation Planning Board (TPB) adopted a vision for the region that included a series of goals and strategies for the region, including enhanced inter-jurisdictional coordination of transportation and land use planning. To help accomplish this goal, the region embarked on creating a regional map that consolidated local jurisdictions’ current local comprehensive plans and zoning with the regional transportation plan.⁶⁰

Perhaps the most significant outcome of the planning process for the maps is that it established activity center typologies. Each typology is determined based on job and housing criteria. The five typologies are:

- **DC Core** – The “primary focal point” of the region. The DC Core is a major governmental, office, cultural, and tourism hub for the region. It has a pedestrian-oriented sidewalk network and a grid street network. It is served by high-quality transit.

- **Mixed-Use Centers** – An area (typically 2 square miles) that is urban in character and contains a dense mix of retail, employment, and residential activity. The areas are accessible by transit and major highways. Employment criteria: Greater than 15,000 jobs and greater than 25 jobs/acre in 2030. Residential criteria: greater than 10 dwelling units/ace (DUA).

- **Employment Centers** – High density areas (up to 3.5 square miles) that contain significant concentrations of employment. Areas are urban or quickly urbanizing. Employment criteria: Greater than 20,000 jobs and greater than 30 jobs/acre in 2030.

- **Suburban Employment Centers** – More dispersed, lower-density areas (less than 6 square miles). Greater than 15,000 jobs and greater than 10 jobs/acre in 2030.

- **Emerging Employment Centers** – Rapidly developing campus-style suburban employment areas (less than 6 square miles). Employment criteria: greater than 15,000 jobs in 2030, and greater than 50 percent job growth between 2005 and 2030 OR less than 50 percent commercial buildout in 2030.

The first maps were completed in 2002, and have been updated with each major round of cooperative forecasts that update local land use plans. New activity centers can be added to the maps during each revision cycle.

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The most recent round of maps (called Round 7.0) were approved in 2007. The Activity Centers contain about 54% of the region’s current employment and 55% of future jobs. Approximately 58% of new jobs between 2005-2030 will locate within an existing Activity Center. The Activity Centers contain only 13% of current households and are projected to contain 16% percent of future households. This low share of regional households within Activity Centers is largely a product of the employment-centric criteria and process for determining Regional Activity Centers.

It is important to note that the Activity Centers and Clusters are reactionary rather than visionary. The maps serve as an attempt for the region to examine what plans are already in place on the ground rather than a formal regional transportation and land use plan. In other words, they are an attempt to throw a lasso around existing conditions, and not an attempt to plan for regional growth, per se. It is simply an exercise to better understand the current spatial makeup of the region. It sets no goals or expectations for locating future development. Nor does it have any associated policies or programs to help direct growth into certain areas.

MWCOG, however, would like to see this change and is attempting to take advantage of the HUD Sustainable Communities Grant Program to use the Activity Centers exercise as a way to better direct growth near existing and future transportation infrastructure. MWCOG submitted an application to HUD for funding to create a Regional Plan for Sustainable Development (RPSD). In essence, the RPSD calls for the creation of Complete Communities – “characterized as mixed-use, compact and walkable centers of activity...[that] welcome people from diverse backgrounds and incomes by providing a variety of places to work and live...and convenient access to good jobs, multi-modal transportation options, education and social services, recreation and entertainment, green space, and healthy local food” - throughout the region.

The concept of Complete Communities is an evolution of the Regional Activity Centers, and intentionally moves away from an employment-centric focus to a more comprehensive approach. It broadens the criteria beyond employment numbers and employs a more sophisticated approach that also considers housing and key livability factors. This shift in focus is not, however, a judgment on the importance of planning for jobs. Job access is still very much a key component of Complete

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Communities, although at the moment it remains unclear how employment location will be handled if the HUD grant were to be awarded.

Another notable change in the RPSD is that it would be a plan that is enforceable through policies and plans that incentivizes local governments to plan for Complete Communities. After a planning process that involves stakeholders and detailed analysis of the region’s land use patterns, a preferred growth scenario featuring regional centers, corridors, and preservation areas would be developed. However, the specific mechanisms for enforcement is thus far unclear.

**Update**

MWCOG is currently waiting to hear if their proposal was selected by HUD.
The previous section discussed one approach to shifting jobs near transit that involved creating a comprehensive regional plan supplemented by a menu of policies to entice local governments to implement this vision. This section outlines a different approach to shifting more jobs near transit. Rather than establishing a regional plan for concentrating jobs in TODs, another approach focuses on creating more powerful policy levers to entice or require individual employers to locate in preferred areas.

This approach has several key differences from a plan-based approach. First, whereas regional government and planning bodies were a major player in the employment plan case studies above, these policies are instruments of the state or federal government. Second, these policies are not necessarily tied to any particular strategic regional growth plan, but rather are a response to political pressures or more general planning principles such as Smart Growth and urban revitalization.

Two of these policies – New Jersey’s Transit Hub Tax Credit Program and the Federal Government’s transit proximity requirement – are discussed below.
New Jersey’s Urban Transit Hub Tax Credit Program

Job Growth History and Logic Behind the Policy

Like many other states and regions across the county, New Jersey found the distribution of its employment centers had changed dramatically since the early 1980s. Most job growth occurred on the periphery in suburban office parks. This growth on the periphery came at the cost of the state’s historical job centers located in core, centralized locations. The state began to feel the repercussions as jobs moved from central, transit-served locations to auto-dependent suburban contexts. First, disinvestment in core urban areas was undermining cities’ ability to provide key services to its residents. Second, this process of employment decentralization, referred to a job sprawl, was resulting in greater dependence of the automobile for commuting, leading to increased congestion and fewer commute choices. Increased automobile travel is undermining state-wide greenhouse gas emissions targets.

A group of concerned residents and business leaders called New Jersey Future formed to advocate for a different approach to job spatial growth. Reversing job sprawl, they argued, was essential to the state’s economic vitality. Continuing the trend of scattered employment would increase commute times to the point where businesses and employees would be averse to the New Jersey employment market. Instead, to secure a future of economic prosperity employment investment needed to recentralize into the state’s numerous existing cores already served by high-quality transit.

The Policy

Original Criteria

With this economic landscape as a backdrop, Governor Jon Corzine of New Jersey announced a comprehensive state-wide economic growth strategy in September of 2006. The strategy targeted three main goals: create well-paying jobs; support smart, sustainable growth and infrastructure; and ensure the state’s portfolio of business incentives effectively enable job retention and growth.

One central policy tool developed to achieve these broad economic development goals was the Urban Transit Hub Tax Credit Program (UTHTC). UTHTC is intended


to spur private capital investment, business development, and employment by offering tax credits for businesses planning to expand or relocate within an urban transit hub. Urban transit hubs are defined as areas within one-half mile of a New Jersey Transit, PATH, or PATCO commuter rail stations in nine eligible municipalities:

- Camden
- East Orange
- Elizabeth
- Jersey City
- Newark
- New Brunswick
- Paterson
- Trenton
- Hoboken

The program, administered by the New Jersey Economic Development Authority (NJEDA), is available to developers, owners, or tenants making a qualified capital investment in an Urban Transit Hub. At the time the policy was implement, several criteria were established:

- Developers or owners must make a minimum $50 million capital investment in a single business facility located in one of the nine designated Urban Transit Hubs. In addition, at least 250 employees must work full-time at that facility.
- Tenants must occupy space in a qualified business facility that represents at least $17.5 million of the capital investment in the facility and employ at least 250 full-time employees in that facility. Up to three tenants may aggregate to meet the 250 employee requirement.
- Mixed-use components are part of the "qualified residential project" definition.
- Applicants must demonstrate at the time of application that the state's financial support of the proposed capital investment in a qualified business facility will yield a net positive benefit to both the state and the eligible municipality.
- S corporations, limited liability corporations and partnerships are eligible; however, tax credits cannot be applied against an individual’s New Jersey gross tax liability.

Total credits approved under this program are capped at $1.5 billion. Provided program criteria are met, tax credits can equal up to 100% of the qualified capital investments made within an eight year period, meaning all qualified capital investments could be recouped. Taxpayers may apply 10% of the total credit amount per year over a ten year period against their corporate business tax, insurance premiums tax or gross income tax liability.
Although this is primarily a business-oriented tax incentive, $150 million is allocated towards residential projects which may receive a 20% credit.

To qualify, capital investments must be undertaken between January 13, 2008 and January 13, 2013 and must be completed by January 13, 2016. To ensure that investment decisions are a direct result of UTHTC, construction of a new building should not have progressed beyond site preparation prior to January 13, 2008. Additionally, renovation of an existing building may not have commenced construction prior to January 13, 2008.

New Jersey Economic Stimulus Act of 2009 Changes

In June 2009, several changes were made to the legislation as part of the state’s economic recovery strategy (New Jersey Economic Stimulus Act of 2009) in an effort to increase the number of businesses that could take advantage of UTHTC. The changes made the program available to projects:

- located within ½ mile of a light rail station
- located within ½ mile of one of the first two subway stops on the Newark Subway line after Penn Station
- located within one mile of rail stations if the property is in a qualified municipality under the Municipal Rehabilitation and Economic Recovery Act
- adjacent to a freight rail line. This rule applies only if the business utilizes that line for loading and unloading freight cars on trains.

Additionally, the act reduced the minimum investment to $50 million (reduced from $75 million) for an owner of a qualified business facility and $17.5 million (reduced from $25 million) for a tenant of an qualified facility. These decreases in investment thresholds mean that less expensive facilities now qualify for the incentive. While the lower threshold may entice construction during a dire economic environment, the decreased investment minimums mean that facilities are likely to be smaller (and accommodate fewer employees) and/or encourage lower-quality building types (i.e. the omission of sustainable building and operation techniques such as LEED certification).

Not all changes to the legislation were in keeping with the transit/land-use spirit of the original policy. For instance, the program radius was increased to one mile for Camden’s transit stops. This new definition of transit proximity is contrary to research that shows businesses should be located within 1/4 to 1/2 mile away from a transit station in order to attain high percentage of transit ridership to work. This policy change clearly weakens the original policy that conditions tax incentives on close proximity to transit. Instead, this amendment makes the policy function

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more like a traditional tax incentive that awards tax credits irrespective of transit access.

**NJEDA Board Changes**

A number of changes to UTCTC were approved by NJEDA board on June 8, 2010. Like the June 2009 revisions, the employment focus of the program was diluted in favor of extending a greater share of the incentives to residential and retail.

The following changes were approved:

- **Limit the Maximum HUB Award to the Capital Investment in the Project:** The HUB grant award must not exceed the capital investments used in calculating the net benefits to the State. Additionally, the present value of the project’s benefits needs to be at least 110 percent of the HUB award amount.
- **Treatment of Jobs in the Net Benefits Analysis:** Applicants are now required to submit material facts to demonstrate the at risk nature of existing jobs that are being relocated to a new location. The CEO of the applicant must certify those material facts and all information provided as part of the application. If the at risk nature of the employees is supported, those employees will be treated as new employees in the net benefits analysis.
- **Treatment of Jobs when a Company moves from Suburban to Urban HUB Location:** EDA will provide a partial job credit calculation in the net benefit test to address the cost impediment of developing in an urban location. If the existing jobs are at risk of being relocated out of State, EDA will give full credit to each of these jobs. If the jobs are not at risk, the partial credit amount will be 25 percent of the full job credit.
- **Bonus for State Priorities:** A 25 percent bonus will be provided for projects associated with logistics/freight rail and urban grocery stores. The bonus addresses the hurdle that these projects have in meeting the net benefits test due to lower direct wages paid for workers employed in these industries.
- **Increase in Urban Transit HUB Residential Cap:** Given the demand and success of the residential portion of the program, the $150 million cap has been increased to $250 million for qualified residential projects, leaving a sufficient balance to support commercial activity.

**Evaluation/Update**

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http://naiopnj.org/Resources/Documents/Summary%20of%20Changes%20to%20the%20Urban%20Transit%20Hub%20Tax%20Credit%20Program.pdf
The program got off to an undoubtedly slow start. As on Spring 2009, no development projects had yet taken advantage of the program.\textsuperscript{66} This, however, can likely be attributed to the slow economy, especially in the real estate development sectors.

Since then, the program has provided $352 million in incentives for nine projects in Newark, Elizabeth, New Brunswick, and Jersey City.\textsuperscript{67} This investment has helped attract $910 million in private capital has been attracted. Additionally, the program helped create 1,409 new permanent jobs and 3,816 construction jobs, while retaining 2,018 jobs in the cities.

However, further inspection of the specific projects that have directly benefited from the program reveals that the projects are not hugely jobs-intensive. For example, the Teachers Village project approved in Newark will include three charter schools, 60,000 square feet of retail, and workforce housing for teachers.\textsuperscript{68} Additionally, One Theater Square, also in Newark, is a 44-story mixed-use tower that will contain both market-rate and artist housing. These two projects are examples of the shift away from jobs attraction and retention that was enabled by a refocusing of the program’s requirements to allow other uses to benefit from the tax credit. Still, even with these expanded qualification criteria, the program appears to attracting development of all types to New Jersey’s urban cores.


\textsuperscript{67} NJ’s Urban Transit Hub Tax Credit Paying Off. Mobilizing the Region. February 8, 2011. < http://blog.tstc.org/2011/02/08/njs-urban-transit-hub-tax-credit-paying-off/>\textsuperscript{70}

\textsuperscript{68} IBID
Government Location Requirements (GSA requirement in the National Capital Region?)

The Federal Government controls more than 2.7 billion square feet of office space in more than 316,000 building in the U.S. Additionally, the Federal Government is the nation’s largest employer, with 1.8 million employees. Considering these two factors together, the Federal Government has a tremendous amount of power to alter the employment landscape of the country.

Executive Orders and the Location of Federal Offices

The Federal Government has acknowledged this influence in the past, and have attempted to impact the locations of Federal offices through the issuance of an Executive Order. EO 13006, issued by President Bill Clinton on May 21, 1996, “encouraged the location of Federal facilities on historic properties in our central cities” as a way to preserve historic buildings as well as provide economic development in struggling downtowns.

A more robust EO (13514) that specifically mentions transit access was issued on October 5, 2009 by President Barack Obama. The EO, titled “Federal Leadership in Environmental, Energy and Economic Performance”, sought to leverage the tremendous Federal real estate portfolio to advance sustainability and economic development goals. The EO states that “It is the policy of the United States that Federal Agencies shall...design, construct, maintain, and operate high performance sustainable buildings in sustainable locations; strengthen the vitality and livability of the communities in which Federal Facilities are located, and inform Federal employees about and involve them in the achievement of these goals.”

To implement this vision, the U.S. Departments of Transportation, and Housing and Urban Development, the Environmental Protection Agency and the General Services Administration coordinated with the Departments of Homeland Security, and

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69 Federal Real Property Council’s FY2008 Federal Real Property Report. The largest Federal holders of real estate are the Department of Defense (70%), the General Services Administration (15%), Department of Veterans Affairs (6%), and the Department of the Interior (4%).
71 Executive Order 13006. 1996.
72 Executive Order 13514. 2009.
Defense to develop a set of recommendations addressing “sustainable location strategies for siting Federal facilities.”

The report makes recommendations for the siting of new facilities, and does not advocate for any existing offices that fail to meet the recommendations change locations in order to fulfill the criteria in the report. The report contains 10 strategies and criteria that should be used in determining the location of new Federal offices:

1. Promote efficient travel and ensure transit access
2. Locate in existing central business districts and rural town centers
3. Locate near or be accessible to affordable housing
4. Promote walkability and bikability
5. Use existing resources
6. Foster greyfield/brownfield infill development
7. Encourage adaptive reuse of historic buildings and districts
8. Preserve the natural environment
9. Achieve emissions reductions goals
10. Discuss location alternatives with local and regional planning officials and consider their recommendations

While transit access is just one of 10 criteria, it is the most prominent feature described in the report. The report’s genuine concern for transit to be a primary consideration can be seen in the specific recommendations that the report makes:

- Site selection should give priority to areas with existing and/or planned transit service located within ½ mil of a well-served transit stop that is easily accessible by pedestrians
- Transit should be at a level of convenience, speed, frequency, and overall level-of-service available via regularly scheduled, fixed route transit service that connects employees and constituents to the Federal facility
- *Priority should be given to locations where the Federal development would help to anchor TOD*, including locations already served by transit as well as locations planned for future TOD where local officials are able to provide the Federal agency with sufficient confidence that it will provide such service (italics added)

To date, no enforcement strategies are in place to ensure that these site selection considerations are indeed being considered. Despite this major shortcoming, the mere fact that the Federal government understands its influence as the nation’s largest employer, and the fact that the connections are being made between environmental sustainability goals and workplace locations (and characteristics

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such as access to transit) is a major breakthrough. Even without enforcement, the
dramatic shift in Federal policy has the potential to dramatically change the
employment landscape given the sheer number of employees and offices as well as
the national scope of the Federal government. Over time, however, the
“considerations” should act more like “requirements” and follow-up should be
performed to ensure that the most sustainable sites were selected.
Lessons from Plans and Policies Best Practices

Plans happen at a regional level. Not many policies exist to support these plans or to implement the employment vision they set forth. The few policies that do exist are at the federal or state level. So, there is incongruence between the scale that plans and policies are working. They must work in tandem and policies must support plans.

A number of patterns and common features are apparent in regional plans and policies that account for job location:

#1: A fundamental disconnect exists in the levels that plans and policies function.

The plans featured above are considered at the regional level. Most policies are controlled by local, state, or the federal government. This disconnect is not unique to jobs planning: regional planning bodies in the United States are notoriously weak, and often lack the authority to implement policies to support their planning efforts.

#2: Plans and policies that work in conjunction with one another are the most effective way to advance a vision for regional growth.

Although this point is obvious, it should be pointed out that plans do not magically come to fruition. Implementation tools must be in place that incentivize or disincentivize local jurisdictions to carry out a regional vision at a local level.

Two major factors must be in place to enable regional policy levers. First, the plan must have buy-in. Among many important considerations, buy-in is usually accomplished through an extensive visioning process that relies heavily on public input as well as data analysis and expert opinions. Second, regional planning bodies must have the power to both enact policies and enforce them.

#3: To date, regions that have had the most success with TODs in general and TOD jobs specifically can attribute their success to local policies and programs.

Consider the case of the DC region – often considered one of the most successful U.S. examples of TOD.\textsuperscript{74} In fact, the region has a number of established TODs such as the

Rosslyn-Ballston corridor, Alexandria, Bethesda, and Silver Spring as well as emerging areas of development centered around Metro stations.

However tempting it may be to attribute the region’s TOD success to strong regional planning efforts, this would be inaccurate. In reality, the region’s ability to focus development (both housing and jobs) near transit is largely a product of local planning efforts and federal policies. For example, the origin and success of the Rosslyn-Ballston corridor is due to a visionary growth plan put in place by forward thinking politicians, planners, and residents when Arlington County’s Metro stations were being planned. The strong presence of the federal government as well as transit accessibility criteria (see Policy section below) for federal offices within the National Capital Region (NCR) contributed to Arlington’s ability to attract residents and jobs to the dense developments around the Metro stations.

#4: Despite local successes, regional planning efforts and implementation tools are still worthwhile and have the potential to dramatically impact the spatial makeup of regions to support a more environmentally sustainable and economically secure and just regional economies.

The importance role of local governments and planning departments should not detract from the potential benefits that a regional approach to TOD jobs planning could have.

The DC region’s experience with TOD, although successful compared to other regions, has several shortcomings that could be aided with a more inclusive and extensive vision that only a regional effort could provide. Most notably, TODs are not evenly divided throughout the region. Instead, they are concentrated in Arlington County in Virginia and Montgomery County in Maryland. A regional approach to TOD jobs could more evenly locate TOD job centers throughout the region, thereby spreading the benefits of TOD job centers more equitably throughout a region. Such a vision would be unlikely if left solely to local decision-makers.
V. Ideas and Lessons for the Bay Area

Like the regions featured in the case studies above, the Bay Area has also had limited success in impacting the location of jobs as evidenced by regional job sprawl. Despite this failure, however, the region is actually in a position to more proactively plan for jobs because of the unique combination of plans and policies either in place or under development. At this time, the Bay Area’s plans and policies are housing focused. However, with a few tweaks and modifications that incorporate jobs planning, the Bay Area could be in a unique position to align planning and policy efforts in order to impact the landscape of job growth in the region.

The changes to plans and existing policies that need to be made are outlined below:
SB 375, Sustainable Communities Strategy, & Priority Development Areas

SB 375 is a piece of landmark legislation seeks to reduce greenhouse gases caused by regional land uses. MPOs are tasked with developing plans for more efficient land use and development for each of the state’s urban regions. These plans require that land use and transportation be integrated. These plans, called Sustainable Communities Strategies (SCS), are a more modern incarnation of regional blueprint planning, which were developed by MPOs in the 2000s to develop a series of preferred scenarios for future regional development.75

The Bay Area’s SCS is called FOCUS, “a regional development and conservation strategy that promotes a more compact land use pattern for the Bay Area...by encouraging the development of complete, livable communities in areas served by transit, and promotes conservation of the region’s most significant resource lands.”76 To achieve this vision, FOCUS calls for regional agencies and local governments to direct incentives, funds, and planning efforts into Priority Development Areas (PDAs) and Priority Conservation Areas (PCAs).

PCAs are “areas of regional significance that have broad community support and an urgent need for protection...[and serve important] agricultural, natural resource, historical, scenic, cultural, recreational, and/or ecological values.”77 While important for the region, PCAs are not directly related to TOD jobs planning.

PDAs are areas that are identified within FOCUS to be catchment areas for future regional growth. Although PDAs are locally-identified areas with infill development potential, the region developed criteria that must be met to qualify as a PDA:78

- The area must be within an existing community
- The area is near existing or planning fixed service (or served by comparable bus service)
- The area is planned or planning for more housing

Local jurisdictions needed to submit an application to the FOCUS partnership for approval to ensure that the criteria were met. In total, over 60 jurisdictions submitted applications for over 100 PDAs. Together, the PDAs comprise less than 5 percent of the Bay Areas land area. However, based on growth projections, the PDAs are projected to accommodate over half of the Bay Area’s projected housing growth by 2035.

*Source: FOCUS (2010)*
Critiques of the SCS and PDA Process

The SCS and PDA process is a moving target – exactly what the SCS will be and the exact role that PDAs play in the plans is still being determined by planners and elected officials. As the specifics are determined, decision makers should keep several points in mind to ensure that job location considerations are met. As argued earlier, considering job location is an integral part of meeting Smart Growth and GHG emission goals.

There are several critiques of the PDAs. Some of these critiques are based on concerns to how the PDAs account for future job growth while other criticisms deal more generally with all types of development.

- PDA selection criteria need to more accurately ensure that development is targeted in areas that are suitable places to concentrate development. For example, current headways in PDAs need to be every 20 minutes during peak commute hours, and even this requirement is not stringently enforced. However, studies have shown that much more frequent transit service is required in order to greatly impact mode choice.

- PDAs are locally-identified. Because of weak selection criteria, this allows areas with questionable attributes (low quality transit, uncertain transit improvements, etc.) to grow without ensuring that a high-performing transit system will supplement land use changes. It also allows areas that are prime locations for development to avoid accommodating expected increases in development.

- PDAs are all treated the same in terms of funding allocations. No funding priorities are given to downtown San Francisco as opposed to American Canyon despite the fact the transit ridership is much higher in San Francisco.

- PDAs fail to acknowledge that places are more appropriate for residential growth, while other are more prime employment areas.

Recommendations

Based on these critiques, several suggestions can be made to strengthen the SCS process and to elevate jobs planning to its rightful place in the regional sustainability planning process.

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79 Metropolitan Transportation Commission. (2009, August 5). Regional Planning Committee Summary Minutes.
First, the SCS must ensure that the PDAs are actually smart places to grow. This can be done in one of two ways. First, creating a more selective PDA process that establishes more stringent selection criteria (more stringent transit service requirements, the city and community’s capacity and appetite for higher density, market factors, etc.) and requiring that areas well-suited for increased development do their fair share to ensure a more sustainable region. Second, creating a more nuanced evaluation system for awarding money based on a more thorough evaluation of PDAs’ sustainability characteristics.

In implementing these challenges, the Bay Area’s regional agencies have to balance local buy-in with creating a plan that can realistically create a more sustainable region. Making it more difficult for outlying areas with lower quality transit service will impede buy-in. However, allowing areas to become PDAs when they clearly will not function highly in terms of non-motorized transportation is contrary to the goal of the SCS. For this reason, perhaps the most politically palatable option is to create a more nuanced evaluation system. This way, areas with lower-quality transit service will still be privy to increased capital funds. However, most financially resources will be allocated to areas that are more in keeping with the SCS’s spirit.

Second, PDAs should acknowledge that some areas are more appropriate for employment than others. Likewise, some areas are more suitable for increased housing. A classification system for PDAs should be created that acknowledges this reality. As an example, PDAs could be designated as primarily housing, primarily employment, or mixed-use centers. ABAG’s growth projections should be used to ensure that designations are consistent with growth expectations.

Creating these designations is important because it allows the region to more effectively allocate money to transportation projects that will have the biggest impact on mode choice. As discussed above, transit systems that connect destinations (such as employment centers) have higher ridership rates. Therefore, priority could be given to projects that connect multiple employment centers.
Resolution 3434: MTC’s Transit Expansion Policy

MTC’s Transit Oriented Development Policy, known officially as Resolution 3434, seeks to maximize the benefits of new transit investments by encouraging development targets along new transit corridors.

Resolution 3434 has several stated policy goals:81

1. Improve the cost-effectiveness of regional investments in new transit
2. Easing the Bay Area’s chronic housing shortage, creating vibrant new communities
3. Preserving regional open space
4. Collaboration amongst transportation agencies, local jurisdictions, members of the public and the private sector to work together to create development patterns that are more supportive of transit.

The Resolution conditions approval of MTC funds on a certain level of development be planned around each new transit station. The specific plans for areas adjacent to proposed stations must contain plans to accommodate the specified development benchmarks. The development benchmarks establish average development targets for each planned transit station. These targets must be met along a corridor level – meaning that the development targets do not need to be met for each individual station so long as, on average, development targets are met throughout the corridor. This allows development can be dispersed or concentrated throughout the corridor.

Aside from the specific corridor-level development minimums, Resolution 3434 has other benefits including:82

- Mandated comprehensive local station area plans that address future land-use changes, station access needs, circulation improvements pedestrian-friendly design, TOD-supportive parking policies and other key features in a transit-oriented development
- Increased coordination of planning and implementation through corridor working groups that bring together CMAs, city and county planning staff, transit agencies, and other key stakeholders

This policy, the first of its kind by a Metropolitan Planning Organization, was adopted in July 2005.

82 IBID
Current Targets

Current development thresholds vary depending on the type of transit. The thresholds represent planned development along the transit corridor.

It is important to note that only housing targets are established.\textsuperscript{83}

<table>
<thead>
<tr>
<th>Project Type</th>
<th>BART</th>
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<td>2,750</td>
<td>2,200</td>
<td>750</td>
</tr>
</tbody>
</table>

Jobs Thresholds in Resolution 3434

Employment targets, in addition to housing targets, were originally proposed during 2005 revision of Resolution 3434. The proposed housing and employment thresholds are below:

\textsuperscript{84}

\textsuperscript{83} Metropolitan Transportation Commission. Memorandum to Planning and Operations Committee from Planning Director: June 22, 2005. Resolution 3434, Revised: Transit Oriented Development (TOD) Policy. www.mtc.ca.gov/planning/smart_growth/tod/Resolution_3434_memo.doc

\textsuperscript{84} IBID
However, in June 2005, some members of MTC’s Planning and Operations Committee voiced concerns that quantifying jobs at the local level was cumbersome to the point that such jobs mandates would overshadow the importance of producing more housing near transit.\(^{85}\) Concern over a jobs threshold was not a universal belief amongst committee members. Others who supported the jobs threshold argued that maintaining transit-oriented employment centers was an important strategy for promoting mixed using along new transit corridors.

MTC staff supported the housing-only thresholds for several reasons. First, they cited the “region’s severe undersupply of housing and the stronger nexus between housing and transit ridership.”\(^{86}\) It should be noted that support for the stronger relationship between housing and transit ridership was not cited or provided. Second, while acknowledging the importance of including jobs in TODs, additional

\(^{85}\) IBID

incentives for local government to plan for jobs was not necessary. Instead, MTC predicted that “[local] jurisdictions will continue to promote and permit jobs to the extent that the market will support them.”

With the exception of their position that a stronger relationship exists between housing and transit ridership, MTC’s points of opposition including employment targets are well taken. Certainly, the region does have a chronic housing shortage, especially in areas served by high quality transit. There should also be concern that planning for jobs does not mean that jobs will magically appear to occupy the space set aside for jobs.

However valid these points may be, there are equally valid counterarguments that make the case for the inclusion of jobs targets. First, in response to MTC’s contention that utilizing land around transit to provide much needed housing is the highest and best use for transit station areas: establishing employment targets does not preclude the provision of housing units. TOD studies found that office workers are willing to walk short distances from transit to their office than residents are willing to walk from their homes to transit (1/4 vs. ½ mile). These findings have implications for the land uses around transit stations. Office development should be concentrated immediately adjacent to transit while housing should be located slightly further away from the transit station. This type of spatial distribution of land uses would suggest that both housing and employment needs can be accommodated.

Second, a counter argument against the idea that the market dictates where jobs locate and, therefore, jobs should not be part of a planning effort: Resolution 3434 functions along a corridor level, which provides flexibility in terms of how development is allocated throughout the corridor. This provision provides flexibility in how development is accommodated. So, while there may not be demand of jobs around Station A, jobs thresholds can be met around Stations B. Concentrating jobs around relatively few stations in a corridor as opposed to evenly spreading jobs throughout the corridor also allows for the aforementioned agglomeration benefits for employers.

Recommendations for Resolution 3434

Resolution 3434 has the potential to be a powerful policy to impact TOD jobs. Of equal importance is the fact that the Resolution is under the domain of MTC, the Bay Area’s MPO. This policy could be effective if employed in tandem with a regional

87 IBD
plan that considers jobs planning. However, for Resolution 3434 to promote TOD jobs, the policy must be modified to include some form of a jobs threshold.

MTC, with consultant support from Strategic Economics, is currently evaluating the Resolution. As part of this evaluation process, the implications of including a jobs threshold should be explored.

Although beyond the scope of this paper, recent literature provides some basis employment thresholds necessary to support various types of transit. Guerra and Cervero’s 2010 study identified station area densities that allow for the best return on transit investments (i.e. best bang for the buck).\textsuperscript{88} In their analysis, both residential and employment densities are considered. Admittedly, thresholds are imperfect tools.\textsuperscript{89} However, despite this shortcoming, they can be valuable mechanisms for establishing ballpark figures to predict successful transit projects.

To allay concerns over rigid and inappropriate employment density requirements, a jobs threshold should be strategically and creatively designed to include flexible provisions. One possible feature of the jobs threshold is that it could only apply to certain types of transit investment such as BART and light rail. Alternatively, jobs thresholds could be based on headway standards, which would act as a proxy for transit type. The evaluation should also perform a thorough market analysis of the potential impacts of adding a jobs threshold to the Resolution.


\textsuperscript{89} IBID
VI. Conclusion

Future Research

This paper argued the case for transit oriented job centers as an important tool for addressing job sprawl. Various benefits of transit oriented job centers as well as the complexities associated with that type of development pattern were explained. Existing plans and policies that attempt to influence the spatial distribution of jobs throughout a region were analyzed in order to make suggestions for how the Bay Area can more effectively impact regional job center locations.

Many questions remain. Perhaps most glaringly, analysis of the demand that employers have for transit-oriented locations is needed. Are there particular industries that are most susceptible to policy levers that can impact firm location? What are employee preferences for transit-oriented versus highway-oriented employment locations? Are there differences amongst demographic groups?

Additionally, the market feasibility of transit-oriented job centers must be explored. Are office buildings and other employment-heavy land uses the highest and best uses for real estate developers? If not, what types of incentives or disincentives would encourage employment-intensive development near transit stations?

Clearly, the topic of transit-oriented job centers is profoundly complicated. Fortunately, the issues enumerated above and many other related topics will be discussed as part of SPUR’s larger The Future of Work in the Bay Area project. The end result will be to have a firmer grasp on how to change the employment landscape in the Bay Area, and perhaps other metropolitan areas as well.

Concluding Comments

Creating a network of job centers connected by transit is important to the economic competitiveness of the Bay Area. Especially in an increasingly competitive economic environment where the Bay Area is in rivalry with both domestic and international regions, continuing the trend of job sprawl is a path that leads to marginalization.

Surely, strategically planning for jobs around transit is a tremendously complex and difficult task. Doing so will require changing attitudes, political realities, economic and financial incentive structures, market perceptions, and numerous other factors. However, it is a battle worth fighting.
The Bay Area is well-positioned to begin planning for an increase in the number of transit-accessible jobs. The opportunities are in place. What is needed is the political foresight and will to make the necessary adjustments to existing plans and policies to elevate the role of jobs and transit planning.
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