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Transit Oriented Los Angeles: Envisioning an Equitable and Thriving Future

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TRANSIT ORIENTED LOS ANGELES:

ENVISIONING AN EQUITABLE AND THRIVING FUTURE

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TABLE OF CONTENTS

I. INTRODUCTION TO OUR LOS ANGELES NEIGHBORS

In the last 15 years, Los Angeles County has spent billions of dollars, and will spend billions more in the coming years, to transform the way its people move around. Backed by large voter mandates in 2008 and 2016, policymakers from across Los Angeles County, are advancing a vision for a Los Angeles that is less reliant private automobiles and in which more people move about by public transportation, walking, and cycling. Such a transformation, if achieved, will not only provide better mobility options but can potentially improve the quality of life in our cities and communities. This transformation requires that land use changes go along with transportation investments that can allow more people to live near stations, and foster amenity-rich, flourishing neighborhoods. Realizing this vision can help citizens thrive and allow the county and state to meet their ambitious carbon reduction goals.

In some ways, progress toward these goals has been impressive. In multiple elections, voters have approved higher taxes to improve the transportation system, and revenue from these taxes has been used to dramatically change the nature of transit in Los Angeles. In 1990, the region had no rail transit. Today it has over 110 miles of Metro rail, with many more miles currently planned or under construction.

In other ways, however, progress is hard to see. Zoning and other regulations prevent many station areas from adding the right mix of housing to achieve truly transit-supportive densities. Transit ridership peaked in Los Angeles County in 1985 – before a single mile of our current rail system existed. The buildout of the new transit system has been accompanied by a steady decline in per capita transit use, which in 2016 was 40 percent lower than its 1985 high water mark. The County has added transit vehicles and transit routes, and lost transit riders.

This divergence between transit supply and transit demand illustrates something planners and transportation researchers have known for a long time: the mere presence of transit cannot, by itself, change how people get around. Los Angeles remains a highly automobile-oriented region, characterized by relatively low-density development, abundant parking, and wide roads. These characteristics make driving more convenient and transit less so. Transit thrives when sufficient numbers of people live and work near transit stations, and when other ways of moving around are less rather than more convenient than riding transit. People thrive in environments that are rich in destinations that allow them to walk, be healthy, and interact with other people.

In principle, the solution to this problem is simple: allow more people to live and work close to transit. Since Los Angeles is also suffering from an acute shortage of housing, manifested in the form of crippling rent burdens for all renters and extreme hardships among the people with the least means, this strategy would seem to pay a double-dividend: it would not just give a boost to our transit system but also help alleviate the region's housing crisis.

In practice, however, the construction of additional housing near transit stations faces numerous difficulties. Some current residents worry about the pace and shape of change in their neighborhoods. People

are often concerned that higher densities will mean added congestion and worry about aesthetic changes such as taller buildings. A perhaps thornier problem is that the relationship between new housing and housing affordability, which seems unambiguous in the abstract, can look muddier and more confusing at the neighborhood level. Adding to the housing supply can certainly reduce housing prices regionally. But if the path to adding housing supply involves replacing older, less dense and less expensive housing near transit with newer and denser but more expensive housing, then although the effect might be a reduction of housing prices on a regional scale, on the local scale might have the perverse effect of making housing near transit more expensive. This puts pressure on, and runs the risk of pricing out, low income households who are the most likely to use transit from a neighborhood where transit service is best.

This perverse outcome, however, needn't come to pass. There is no way around the fact that adding density means change, and many people are wary of change. But neighborhoods can add density in ways that make neighborhoods better. Density can be added in ways that make transit more effective, that increase the housing supply, but that do not degrade existing aesthetics or displace existing residents. Growth around our transit network can be sensitive to the built environment already there, and to the cultural and socioeconomic fabric of the current neighborhoods. Further, cities could enact short-term protections for renters that try and protect people and households at the same time new housing is constructed.

This report provides a conceptual framework for thinking about how more people can live and work near transit, near the major regional investments that county residents are paying for, in ways that maximize social benefits and minimize social costs. Because neighborhoods are unique, there is no one-size-fits-all solution, and we do not profess to offer one. What we offer instead is a foundation on which informed civic conversations about different neighborhoods and ways to better our region can occur. We hope to demystify density, explain the determinants of transit ridership, and shed some light on how zoning and land use regulation influence both ridership and housing prices.

First we review the existing evidence about how housing, transportation, and land use decisions interact, and highlight the benefits of allowing more people to live near Los Angeles's growing transit system. We then examine seven Metro rail and Bus Rapid Transit (BRT) stations — five existing stations and two that are in the planning phase or under construction — and use them to illustrate the power of land use patterns on transit ridership and neighborhood quality by analyzing existing and future zoning scenarios. To help demonstrate the effects of these changes on Los Angeles county residents, we introduce a fictional character living near each station. The characters are meant to represent the diversity of Los Angeles County residents, the ways they experience land use and transportation today, and how that may change in the future as the station areas evolve.

Today's development patterns often constrain transit, but changes to those patterns have the potential to make people's lives better — both the fictional characters in this report and real life Angelenos. Through well-informed land use changes, there is the opportunity make transit more effective and maintain and enhance Los Angeles' vibrant, attractive, and inclusive neighborhoods. Re-envisioning and changing our existing land use policies can translate into more people living and working in communities connected by transit and better connected to each other. Finally, we offer a set of policy recommendations for getting to this transit-oriented future.

II. UNDERSTANDING DENSITY AND ITS EFFECTS

When we say "density", what do we mean? How does density affect how we live and the quality of our lives? Density can mean different things to different people, evoking both images of buildings being "too tall" or being "not tall enough." Overall, there are good reasons for Los Angeles to grow, allow its built environment to evolve, and to do so in a denser, more compact way. If Los Angeles grows in a more compact way, what could be expected in terms of transit ridership, housing production, neighborhood amenities and sustainability outcomes? And how does this relate to density among a variety of housing types? In this section we synthesize some of the rich body of existing research about how transit, travel, density, pollution and housing prices interrelate.

TRANSIT RIDERSHIP

ISSUE: A successful transit system needs riders who can rely on transit to meet their daily transportation needs. This is a universal need for all kinds of riders — including those with and without the means to travel other ways. Transit thrives in places where transit itself is frequent and reliable, but also where it can compete with driving. This is particularly true when transit systems are aiming to attract new transit riders who currently drive. Oftentimes, this means driving must be relatively difficult to overcome the time disadvantages of public transportation.

Driving can be difficult because the built environment makes it so (for instance, where streets are narrow and parking is scarce) or because people have very low incomes and cannot afford automobiles. In places where driving is relatively inexpensive, transit will function largely as a mode of last resort predominantly utilized by people who do not have access to private cars. This situation describes Los Angeles today. Most Metro riders are low-income: the median household income for bus riders is just above $16,000, for rail riders just above $24,000, and over 70 percent of riders report not having access to a vehicle.[1]

Without dependable, frequent transit service, current transit riders will, when they get the opportunity, migrate from transit to cars (a phenomenon that is occurring now, contributing in large part to the region's current transit ridership decline)[2]. The transit system will also be highly dependent on the location of the small minority of people who use it. If these people become less able to live near stations—if, for example, rising rents push them into outlying areas where the quantity or quality of transit is lower as is happening today)—then ridership will fall.

SOLUTIONS: People are 30 percent more likely to use transit if they live close to stations or stops, regardless of how dense their neighborhood is.[3] Thus one way to think of the relationship between transit and density is that density lets more people live near transit, and thus lets more people ride it. But this picture is incomplete. Transit is most effective when the entire experience—getting to the station, waiting for the next train or bus, actually taking the ride, and then getting to one's final destination—rivals or exceeds the experience of using some other mode. People must feel safe, their environment must be pleasant, and the trip must be both relatively fast and reasonably comfortable. A dense and safe built environment can help satisfy all these criteria. Transit excels at moving large numbers of people in straight lines. Dense clusters of people and jobs expand the number of people who potentially benefit from transit service, and let transit vehicles pick up and drop more people at fewer stops, increasing ridership without sacrificing speed. More riders also mean more people walking to and waiting at stops, both of which can enhance safety and other aspects of the user experience.

Transit planners and scholars have estimated levels of residential density at which transit will perform well in terms of ridership and cost-effectiveness. These range from 7-20 persons per acre for bus service. Based on the capital costs of fixed rail service, they estimate 67 persons per acre for light rail to 119 persons per acre for heavy rail.[4] These numbers are not definitive as the ideal transit-supportive density can vary based on regional context and culture. They are, however, reasonable targets to aim for, and many station areas in Los Angeles fail to meet these thresholds today.

Density alone, however, is not sufficient to induce transit ridership. The Los Angeles region has grown steadily denser in the last few decades, at the same time as its transit ridership has fallen. Density should be accompanied by an increase in destinations as well as improvements in accessibility, especially by foot or other non-auto modes. Neighborhoods can be considered walkable when a high percentage of people moving about do so on foot, and when those people feel safe and comfortable while walking. A neighborhood of dense yet isolated residential buildings, lacking activated storefronts and retail establishments, and separated by wide arterial streets may be dense but not walkable. If people do not feel comfortable walking to a transit station, they are likely to drive instead, leading to more congestion and pollution.

Walkable neighborhoods have a mix of uses, so people have places to walk to. These neighborhoods have streets with frequent intersections.[5] Perhaps most important, they possess relatively little off-street parking. Every city in Los Angeles County requires that developers constructing new buildings also construct off-street parking spaces. Abundant parking often inhibits density, and can be a poison pill for a walkable, transit friendly environment.[6] A neighborhood where every building has off-street parking is a neighborhood with frequent curb cuts, which create numerous potential points of collision for pedestrians on sidewalks. The need to be on-guard against vehicles crossing the sidewalk does not make for a pleasant walking experience.

More consequently, forcing developers to provide parking can encourage car ownership and use above the natural demand.[7] People are less likely to ride transit if they know they can easily find free or inexpensive parking at both the origin and destination of their trip. Furthermore, many of the costs of driving are invisible and sunk to the driver meaning people do not think about the cost of each car trip.

Moreover, requiring parking with buildings near transit means that truly transit-oriented buildings — those built specifically for people who don't own cars or have lower-levels of household car ownership whether by need or choice — are effectively illegal. These laws, as well as modern street standards that require wide roads, mean that dense walkable neighborhoods today are largely confined to older areas of the city that predate presently mandated parking minimums and street widths.[8] It is in these places, unsurprisingly, where people are most likely to use transit. Residents of 'old urban' style neighborhoods with at least medium levels of density, fewer parking spaces, and a mix of uses including housing and retail, are significantly more likely to take transit (3-5 times as likely) than all other US residents.[9] Reducing parking requirements is an excellent strategy to boost transit use since existing transit-oriented development creates half or less of the demand for parking spaces required by standard parking rules and TODs generate half as many trips as non-TOD buildings.[10]

TAKEAWAYS:

- Transit-supportive residential densities are least 10-20 people per acre for bus service, 67 people/acre for light rail, and 119 people/acre for heavy rail.[11]
- Residents living closer to transit are 30 percent more likely to ride transit.[12]
- Residents of neighborhoods with land use like 'old urban' areas will be 3-5 times more likely to use transit.[13]
- Significantly reducing or eliminating parking requirements for developments near transit can have the effect of discouraging auto-ownership by unbundling parking prices from rents, and encouraging transit ridership.[14]

HOUSING PRODUCTION

ISSUE: Density, done right, can be a boon to transit ridership. But allowing more housing production can help solve other problems as well. Los Angeles is in a housing crisis. Almost 60 percent of the county's renter households meet the federal definition of "rent burdened"—they spend more than 30 percent of their income on housing. Almost 30 percent of households spend over half of their income on rent.[15] The City of Los Angeles has lost over 20,000 rent stabilized apartments since 2001, and the some of these losses were preceded by the traumatic experience of evictions.[16] Hundreds of thousands of families live in overcrowded dwellings[17] and more than 50,000 are homeless.[18] These crises disproportionally affect people and families of color. Latino households in Los Angeles are twelve times more likely to live in crowded homes than white families.[19] The housing crisis hurts everyone in Los Angeles but it hurts low-income people the most.

High housing prices have impacts beyond the financial stress they impose. High prices impede household formation. Between 2006 and 2014, an estimated 350,000 young people reached the age where they might normally move out of their parents' homes and into housing of their own. Confronted with our region's daunting rents, they instead continued to live with their parents.[20] Others have responded to rising prices by leaving Los Angeles and even California. Both the state and county have seen a net loss in households earning less than $110,000 per year,[21] and 59 percent of voters[22] in Los Angeles County have considered moving due to housing costs. High prices could place all but the most advantaged Angelenos in a difficult position: leave our growing and dynamic region, or stay and face severe rent burdens.

SOLUTIONS: The price of housing in Los Angeles is high because the housing supply in Los Angeles has not kept pace with housing demand. Addressing Los Angeles' housing crisis will therefore require a sustained, long-term commitment to build new homes of all types paired with short-term measures to help those hurt most by the crisis. Building on this scale, in turn, will require zoning and other policy reforms to make housing development easier—less stringent regulations are one hallmark of places with lower housing costs.[23] High land use regulations are not only a barrier to this new housing production, they are also a major contributor to residential segregation by income in neighborhoods.[24]

It is important, however, to distinguish between the short- and long-term impacts of adding new homes, and also between the regional and more localized neighborhood impacts. In the short term, market rate production is more likely to stabilize rent increases than reverse them.[25] Over the long term, however, returning to the level of homebuilding that Los Angeles saw between 1940 and 1990 could be associated with a 20 percent reduction in housing prices.[26] Some neighborhoods, similarly, will always be more expensive than others, but building more housing across the region, especially in places where prices are currently highest, can lower housing prices overall and protect neighborhoods that are currently less expensive from experiencing sharp price increases.

Building, especially in high-priced areas, can be a bulwark against displacement. We can think of the housing market like a game of musical chairs. More new homes allow wealthier residents to 'bring their own chair' into the game, rather than out-bidding lower income residents for existing chairs.[27] Research on the San Francisco region's housing market suggests that building 1,000 new market rate homes in a census tract over ten years was associated with a two percent decrease in displacement in the decade following construction.[28]

Building new market rate homes is necessary but not sufficient to address Los Angeles' housing crisis. The region must also boost production of subsidized affordable housing. This housing is targeted specifically at lower-income residents, and is more effective at protecting them from rising housing cost pressures. The same study suggesting that 1,000 new market rate homes was associated with two percent less displacement showed that 1,000 new affordable units would be associated with five percent less displacement.[29] Stronger tenant protections also allow existing residents to stay in their homes. Rent control and public housing reduce displacement in gentrifying neighborhoods.[30]

Unfortunately, support and resources for subsidized and public housing on the national level are on the decline. This paired with the high cost of building housing means affordable housing production is lagging. The City of Los Angeles' Transit Oriented Communities (TOC) program, which offers density "bonuses" to developments near transit in exchange for affordable housing, is a good example of a policy that has expanded overall housing production, increased construction of homes affordable to the most cost-burdened residents, and focused new development in areas with better transit service.

In just the first nine months since implementation, more than 25 percent of all proposed housing development applications took advantage of the new program, for a total of 5,571 new transit-oriented housing units 1,145 of which are guaranteed affordable.[31] Compared to the previous 5 year average of only 675 affordable units permitted per year, the TOC program alone has almost doubled the affordable housing production rate.[32]

TAKEAWAYS

- Additional housing production will help slow rent increases and could even lead to small rent reductions.[33]
- Returning to past levels of home building for a sustained period will reduce home prices in Coastal California by 20 percent than the alternative of continuing the slow growth status quo.[34]
- Regional price stabilization may not equate to localized housing price stabilization and therefore vulnerable renters likely require short-term protections to ensure neighborhood stability.[35]
- Building 1,000 new market rate or 1,000 new affordable housing units could reduce displacement by two or five percent, respectively, in a given census tract.[36]
- A well-designed transit-oriented density bonus like the City of Los Angeles' TOC program can increase and possibly double affordable housing production.[37]

NEIGHBORHOOD AMENITIES

ISSUE: Every person should have the option to live in a neighborhood where he or she can enjoy life, access most daily needs safely and conveniently without needing to drive, while also having mobility options to travel throughout the region. Not all communities in Los Angeles County have walkable amenities. Los Angeles County residents have also reported a decline [38] in quality of life in the last few years. Unsurprisingly, high housing costs and bad traffic are at the top of the list of frustrations. Adding more homes near transit can help residents afford to live in the region and give people more transportation choices. Better transit access alone can't solve congestion and traffic. Road congestion is a common symptom in almost all large cities, regardless of the quality of their transit systems. But access to high-quality transit at least provides people with more choices.

SOLUTIONS: Living in cities and being close to other people brings economic, social, and quality of life benefits to individuals and regions. Our lives are enriched by ideas and contributions of our neighbors, co-workers, classmates, community organizations, and even of strangers. Concentrations of people living and working close to each other creates regional economic benefits in terms of productivity, jobs and wages.[39] Doubling a city's density increases productivity (economic output per person) by three to five percent.[40] Economists call this beneficial process of concentration and collaboration "agglomeration."

These agglomerations mean that a higher quantity and diversity of retail, service, and cultural amenities are accessible to urban residents. One study found that residents who walk to restaurants in denser San Francisco receive costs savings of 22 percent compared to their counterparts in less dense Los Angeles, as a result of more choice, shorter trips, and lower prices.[41]

Traffic congestion also increases when more people live and work in an area. This congestion can make transit with a dedicated right-of-way more competitive, but it slows down buses that must share the road with cars. In the bus-dominated Los Angeles transit system, this means buses travel at increasingly slower speeds as congestion worsens. Heavy rail, light rail, and buses with dedicated lanes or rights-of-way allow the benefits of agglomeration to spread to and be shared by more urban residents.[42]

Density is not always a bad thing for motorists, either. Although density can mean more congestion and lower speeds, it can also mean that destinations are closer together. On balance this usually means that people have an easier time accessing destinations in dense places, even when they drive. For example, research in Los Angeles demonstrates that some of the places with the highest levels of congestion, like West Hollywood, are also associated with the highest levels of job density and economic activity as well as shorter travel times and more nearby walking destinations.[43]

Measures of communities' walkability, like Walk Score®, take into account access to amenities like grocery stores and parks along with population density, street density, block size, and intersection density.[44] Even in parts of Los Angeles County that are more car-dependent, people walk more when they live near commercial areas with a wider and more concentrated range of businesses. A study in the South Bay found that people living near commercial centers took 2.7 more daily walking trips per day than people living near less retail-dense commercial corridors and took 15 percent fewer car trips daily.[45]

As with housing and ridership, design and equity matter for access to amenities. Increasing only one kind of density—more homes or more job centers—may not unlock all the potential benefits of agglomeration. The influential urbanist Jane Jacobs argued that cities need concentration but that they also need a mix of 'primary uses' so that a diverse mix of people would be present in neighborhoods at different times creating round-the-clock activity that support local businesses and transit not just during peak commuting periods.[46]

TAKEAWAYS

- Doubling population density leads to three to five percent increase in economic productivity.[47]
- Denser places have more access to jobs, places with faster traffic have worse access to jobs: A 10 percent increase in employment density = 9 percent increase in access to jobs.[48]
- People living near suburban commercial centers make 2.7 times more walking trips per day than residents near less retail-dense suburban commercial strips.[49]

SUSTAINABILITY

ISSUE: Los Angeles faces significant environmental challenges, from air pollution to drought to local impacts from global climate change. While some of the public associates growth with environmental harm, smart development and transit-oriented land use can actually lead to more sustainable patterns of living and mobility. A well-designed and human-scaled, dense neighborhood allows people to live in ways that are both beneficial for their individual health and for the environment at large.

Transportation, and driving in particular, is one of the largest sources of greenhouse gas emissions in California.[50] For many people in Los Angeles County, cars are the default mode of travel, because traveling by car is often more convenient than other modes which is a product of our built environments.

SOLUTIONS: Denser built environments allow people who would like to drive less to do so. More importantly, they can nudge people who might not otherwise have considered reducing their driving habit to try making some trips by foot or transit. People living in multi-family homes in denser areas drive less. A household in a central Los Angeles neighborhood like Koreatown drives 47 percent fewer miles per year than a similar household in the exurbs of LA.[51] Even small steps away from the compulsive use of automobiles can pay environmental dividends. Every vehicle trip diverted to another mode of transportation can potentially lead to reductions in air pollution. A person who uses public transit in conjunction with walking or biking the "last mile" is responsible for 20 times less greenhouse gases than those who drive alone.[52]

Infill development near transit also saves energy. Households living in multifamily buildings with five or more units use 56 percent less energy than households in single-family homes.[53] Letting more Los Angeles County residents live in denser, more transit-oriented parts of the County is therefore a good strategy to reduce climate impacts.

Reducing driving and energy use brings immediate benefits to our lungs and overall health. The toxic burdens of air pollution and contaminated land fall most heavily on low-income communities of color.[54] Many policies aimed at climate change and public health rightfully direct resources to these communities that need the most investment in green solutions.

Further, recent droughts provided a much-needed wake-up call to how we use water in California. There is some good news, however. Per capita water in the City of Los Angeles has declined 40 percent since 1970.[55] New transit-oriented development can help continue this trend because people living in newer homes use less water per capita than people in older homes, and people who live in multi-family housing use less water than those in single-family homes.[56]

TAKEAWAYS

- Living in a denser, transit- and jobs-rich neighborhood in Los Angeles County can cut vehicle miles travelled by up to 49%.[57]
- Transit combined with a walk or bike ride compared to driving alone reduces GHG emissions per trip by up to 95%.[58]
- Residents in multi-family housing use 56 percent less energy[59] and 2.5 times less water than those living in single-family homes.[60]

III. CASE STUDIES

METHODOLOGY

This report presents seven case studies, wherein each case study area is equal to the ½ mile radius around unique Metro rail and Bus Rapid Transit (BRT) stations. The methodology for selecting and studying these cases is described below:

Station Area Selection Criteria
A diverse set of seven station areas were selected from existing and planned Metro stations to reflect a range of physical and socio-economic conditions.

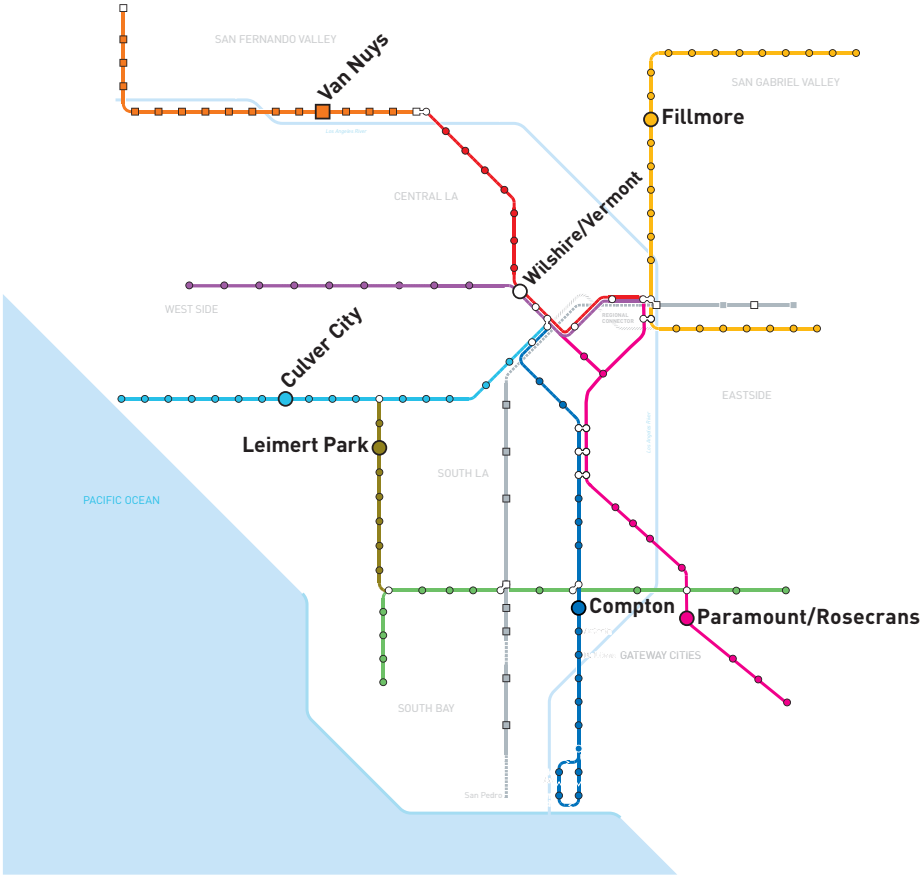
- **Planning and geography** — Each case study represents a different subregion of Los Angeles County, and was chosen with an eye towards jurisdictions or sub-jurisdictional planning areas that are currently undergoing planning efforts or that will do so in the near future.
- **Land use and urban form** — Case studies represent a variety of zoning and land uses contexts as well as a variety of built environment contexts.
- **Transportation** — Each case study represents a different line on Metro's network, along with a variety of transit service types and ages.
- **Demographics** — Case studies represent a cross-section of racial/ethnic groups, population densities, and income levels, reflecting the diversity of the Los Angeles region.
- **Displacement risk** — To reflect concerns that TOD can increase displacement pressures, case studies were chosen using the classification from the Urban Displacement Project to ensure that the report examined station areas with a range of displacement risks.

Following the above criteria, we selected the following set of stations, in order from highest to lowest existing population density. Profiles of the case studies characteristics are presented below.

1. Wilshire/Vermont — Red/Purple Lines
2. Fillmore — Gold Line
3. Culver City — Expo Line
4. Van Nuys — Orange Line/ East San Fernando Valley Line (Future)
5. Compton — Blue Line
6. Paramount/Rosecrans — West Santa Ana Branch Line (future)
7. Leimert Park — Crenshaw/LAX Line (under construction)

TABLE 1: CASE STUDY STATION CHARACTERISTICS

	Jurisdiction	County Subregion	Station Area Type	Top two land use types *(by % area)*	Line(s)	Transit Type	Line Age (years)
Wilshire / Vermont	Los Angeles	Metro Center	Urban Center	Commercial, High-rise residential	Red/ Purple	Heavy rail	22
Fillmore	Pasadena	San Gabriel Valley	Suburban neighborhood	Low-rise residential, commercial	Gold	Light rail	15
Culver City	Culver City / Los Angeles	Westside	Urban neighborhood	High-rise residential, Low-rise residential	Expo	Light rail	4
Van Nuys	Los Angeles	San Fernando Valley	Suburban neighborhood	Low-rise residential, commercial	Orange	BRT	13
Compton	Compton	Gateway Cities	Urban neighborhood	Low-rise residential, Public facilities	Blue	Light rail	28
Paramount/ Rosecrans	Paramount	Gateway Cities	Suburban neighborhood	Low-rise residential, Industrial	West Santa Ana Branch	Light rail	-
Leimert Park	Los Angeles / Unincorporated LA County	South Los Angeles	Urban neighborhood	Low-rise residential, High-rise residential	Crenshaw/ LAX	Light rail	-



EXISTING CONDITIONS DOCUMENTATION

Each of the seven case studies includes a snapshot analysis of existing conditions, including:

- Any upcoming planning efforts
- Transit ridership – average daily weekday boardings, for both rail and bus
- Housing and population characteristics – population density, employment density, housing density, and recent housing production trends
- Demographics – median household income and racial/ethnic composition
- Walk Score® - a comprehensive indicator taking into account the built environment and amenities
- Displacement risk and existing tenant protections – reported displacement risk based on the UCLA/UC Berkeley Urban Displacement project

Data sources for the existing conditions and scenario analysis can be found in **Appendix A**.

We conducted a parcel-level analysis of each case study area to determine its potential housing capacity based on existing zoning. We found that many parcels are zoned for more housing units than are actually built. We refer to this capacity as "unbuilt capacity." A significant amount of this unbuilt capacity stems from mixed-use allowances in current zoning. For example, the City of Los Angeles allows residential development in commercial zones. However, most commercial-zoned parcels do not actually contain housing, therefore leaving a great deal of residential capacity "unbuilt."

In the City of Los Angeles, the unbuilt capacity is potentially greater than what we measured, because under the TOC program developers can increase the density of their projects in exchange for providing affordable housing units. However, because this is a decision left to private developers in the market, we did not incorporate TOC density bonuses into our existing capacity model. In some cases, this additional density bonus is available through the statewide density bonus program or SB1818. In both cases, our capacity model is focused more on existing conditions, and where housing is under-built relative to what the underlying zoning allows.

SCENARIO PROJECTIONS

Looking ahead, we sought to understand how a variety of different land use levers could change the land use mix and housing capacity in our case study areas.

We devised a set of rules or guidelines which we applied within the ½ mile radius case study areas, and created charts and maps to illustrate the potential increased housing capacity under both a "lower intensity" and "higher intensity" upzoning scenario. These rules or guidelines include:

1. *De-emphasize single family zoning:* Allow duplexes in the lower-intensity scenario and four-plexes in the higher-intensity scenario. Notably, duplexes could also represent a single family home with an accessory dwelling unit.
2. *Allow mixed-use zoning:* Permit housing development in all commercial zones.
3. *Deprioritize under-utilized industrial parcels:* Rezone legacy industrial zones which are often relics of historical freight rail service, and which are no longer important sources of jobs.
4. *Tie density to distance from transit:* Concentrate the densest level of development closest to the station itself, with density that "steps down" with increased distance from the station.
5. *Create internal consistency within the station areas:* Bring multi-family parcels to the highest level within each station area.
6. *Reduce barriers to multi-family development:* Reducing lot width, lot area, and parking requirements.

Specific applications of these six criteria by station area are found in **Appendix B**.

In the future scenarios, we estimated the following outcomes:

1. How many additional housing units could potentially be added to the station areas in the lower vs. higher-intensity scenarios?
2. What effect would these housing additions have on population? For this, we assumed that each new housing unit would be home to the Los Angeles County average household size of 2.59, then rounded down to the nearest whole number.
3. How many potential affordable units could be added under these scenarios?

Outcome #3 takes into account that the different jurisdictions covered in the case studies have different policies in place relative to affordable housing. We did not calculate affordable housing in the portions of the case studies falling in the cities of Culver City, Compton, Paramount, or unincorporated Los Angeles County because they have no inclusionary zoning ordinance or density-bonus program that includes affordable unit production. For Fillmore, we assumed 15 percent affordable units in buildings of 10+ units, based on the City of Pasadena inclusionary zoning ordinance.

The City of Los Angeles has the most developed density bonus program of the jurisdictions covered in the case studies. The upzoning scenarios propose changes in zoning which would increase housing supply regardless of a density bonus program. However, as the TOC program is already in place and actively producing affordable housing in the city, we thought it reasonable to include predictions for the portions of our case studies within the City of Los Angeles in our model. There are four "Tiers" within the TOC program based on distance from and type of transit. Tier 3 is the most common found in our case studies, coinciding with the ½ mile buffers we chose to delineate the case study boundaries. Within Tier 3, developers can choose between setting aside 23 percent of units for lower income households, 14 percent of units for very low income households, or 10 percent of units for very low income households. Early results from the program applications demonstrate a trend towards developers choosing the "extremely low income" so for this reason, this is the option (10%) to obtain our estimates.

As previously explained, the TOC program is an incentive and not a mandatory program. We would overestimate the potential for affordable housing production if we assumed that all developments chose the TOC density bonus. Therefore, we assume that only half of new development take advantage of this program. This is an arbitrary figure and the affordable unit production in the City of Los Angeles should be considered as an estimate.

CHARACTER INTRODUCTION

In addition to our empirically based case studies, we introduce a set of fictional people to illustrate how the changes in the case studies and the trends outlined in Chapter 2 may affect individuals. All of these outlined trends and changes matter because they have the power to affect the daily experiences of residents — where they live and work and as they move around Los Angeles County.

We introduce these seven characters here and then return to their stories in the case studies to show how their living situations, transportation patterns or other aspects of their quality of life have changed due to growth and evolution of the their transit-oriented neighborhoods.

AGE	42
OCCUPATION	Construction worker
RESIDENCE LOCATION	Leimert Park
JOB LOCATION	All over

DERRICK lives in South Los Angeles. He and his family rent a duplex. They are saving up to buy a home in their neighborhood, but prices have been rising even on modest houses. Because his construction job sites are in different areas, he usually drives to work. He is happy that Metro is building the Crenshaw/LAX Rail Line to better link his neighborhood with the rest of the city and region, and hopes that development along the new line will increase his job opportunities. However, he is also worried about rising rents and what will happen to his family and friends as the community changes.

AGE	20
OCCUPATION	Student
RESIDENCE LOCATION	Koreatown
JOB LOCATION	Downtown LA

CAMILA is a college student at LA Trade Tech in Downtown LA. She grew up in the city of Paramount and recently moved into an apartment with roommates near the Vermont/Wilshire subway station. She doesn't own a car and has to take a long bus ride or pay for a ride hailing service to visit her family in Paramount. Growing up in a predominantly Latino community and studying environmental justice at school have opened her eyes to the stark differences between different neighborhoods in LA. Camila hopes to help change these inequities.

AGE	45
OCCUPATION	Cook
RESIDENCE LOCATION	Paramount
JOB LOCATION	Southgate

ISABELLA is Camila's mother. She and her husband are immigrants. They live in Paramount, renting a one-bedroom apartment in a low-rise apartment building built in the early 1960s with their teenage daughter. They share a single vehicle but often have to juggle their schedules to determine who gets to use the vehicle at different times. She wishes transit was more reliable so sharing the household car wasn't such a burden.

AGE	77
OCCUPATION	Retired
RESIDENCE LOCATION	Pasadena
JOB LOCATION	Visits Koreatown often

JEONG-HO immigrated to Los Angeles in the 1980s. He used to live in Koreatown where he owned and ran a store. His business income allowed him to eventually buy a home in Pasadena. He still frequently drives to Koreatown for church, socializing, and meals, or he parks at a Gold Line Station and rides there on Metro. As he ages, Jeong-ho is still active and healthy, but he is considering moving because his home is not well-equipped for him, and he knows his family will want him to stop driving soon.

AGE	52
OCCUPATION	Human resource specialist
RESIDENCE LOCATION	Van Nuys
JOB LOCATION	West LA

AMY lives in the San Fernando Valley and works in West Los Angeles. She considers herself to be a typical LA commuter, 'putting up' with traffic because there aren't good alternatives for her commute. Her employer is relocating to Downtown LA, and Amy is exploring whether she could use the Orange and/or Red Lines to get to work. Amy likes her neighborhood but wishes that there were more restaurants, coffee shops and other amenities closer to her home so she could walk to them like she walks to stores near her job.

AGE	24
OCCUPATION	Tech developer
RESIDENCE LOCATION	Van Nuys
JOB LOCATION	Culver City

JOSH is Amy's son. He recently graduated with a computer degree and found a job at a tech company with offices in Culver City. He is currently still living at home with his parents. He sometimes commutes with his mother partway from the San Fernando Valley. Josh is eager to find his own place to live, but Culver City is expensive, and he's not sure what parts of the city or surrounding communities he should apartment hunt in.

AGE	31
OCCUPATION	Teacher
RESIDENCE LOCATION	Compton
JOB LOCATION	Compton

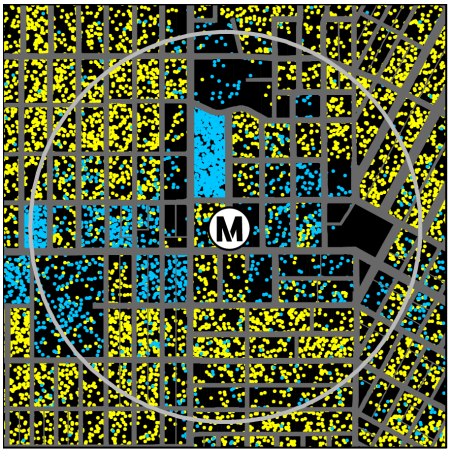
SILVIA lives in Compton where she also works as a teacher. She drives to and from school and for most of her errands and trips. Silvia is in her first year as a teacher and is getting to know her students and their families. She is concerned that several of her students seem to be on the verge of losing their homes and one has been homeless for much of the semester.

WILSHIRE/VERMONT STATION AREA

BACKGROUND

PLANNING	Wilshire Community Plan set to be updated in 2021
TRANSPORTATION	Red line station 10,477 rail boardings/day 16,145 bus boardings/day
HOUSING AND POPULATION	32,255 people 64 people/acre 18,644 housing units 37 housing units/acre 20% of housing built since 2000
DEMOGRAPHICS	$35,086 median household income 51% Latino, 37% Asian, 6% white, 5% black, 1% other
WALK SCORE®	93 — Walker's paradise
DISPLACEMENT RISK AND EXISTING TENANT PROTECTIONS	High risk, rent control for properties built before 1978 and just-cause eviction for rent-controlled properties

1924 AREA MAP



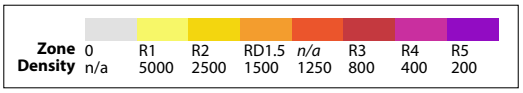
ACTIVITY DENSITY

64 people/acre *35 jobs/acre*

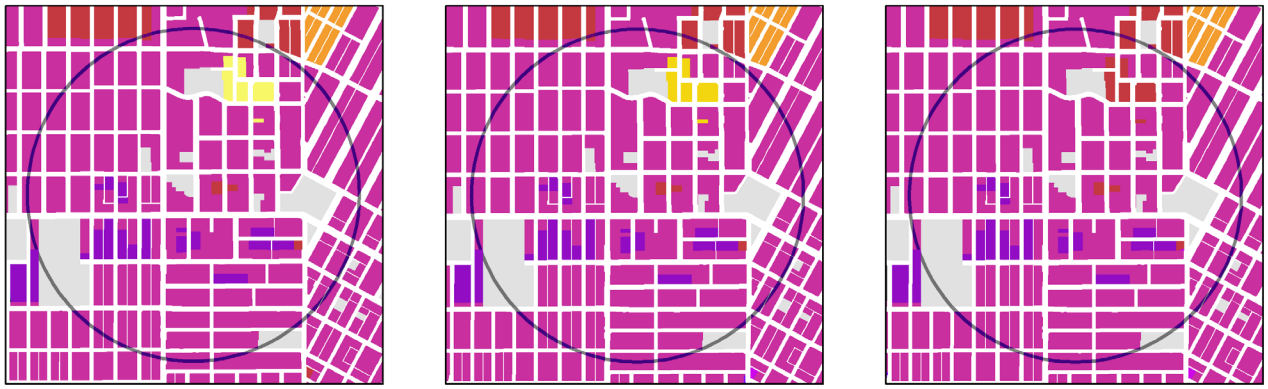
Wilshire/Vermont has the highest intensity land use of the case studies. Apart from a small number of single-family blocks, most of the station area is zoned either for medium to high density commercial or medium-to-high density residential. The area is somewhat less dense than the highest density neighborhood in Los Angeles – Downtown. Even though Wilshire/Vermont is already proximate to "transit-supportive" density (64 people and 43 jobs per acre), its current zoning allows for more than twice the amount of housing that it currently holds. This is largely because the area's commercial zones allow for high-density residential development but are mostly used for offices and other professional services, which give property owners the highest possible rents.

The existing building stock is quite old. Much of the older brick-clad walk-up apartment buildings exceed the zoned density because they have high FARs on small lots, built prior to Los Angeles' 1941 zoning ordinance. The Urban Displacement Project identified a high displacement risk in the area, mainly due to its combination of both lower income and vulnerable groups, and the fast pace of recent development. Taking this into account, and the fact that Wilshire/Vermont is already zoned for high density, our upzoning scenarios do not propose any substantial changes that would increase displacement risk in the area.

SCENARIO ANALYSIS

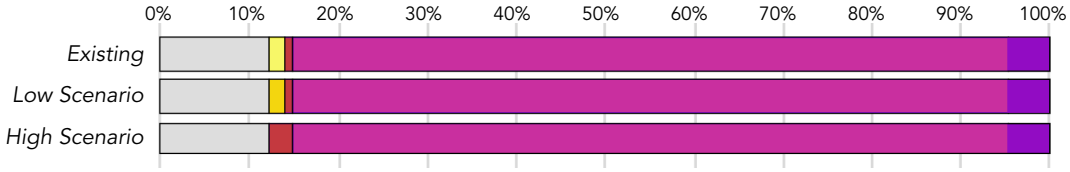


Density expressed as minimum square feet per unit
Zones are based on City of Los Angeles zone or equivalent in other jurisdictions
Los Angeles has no zone with density 1250 sf/unit.



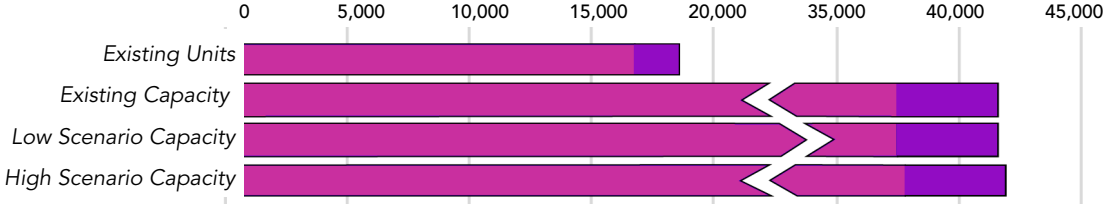
EXISTING | LOW SCENARIO | HIGH SCENARIO

DISTRIBUTION OF ZONED LAND AREA BY ZONING/DENSITY CLASS



Note: Existing capacity excluded from above figures because land use is unchanged in existing capacity scenario

DISTRIBUTION OF HOUSING UNITS BY ZONING/DENSITY CLASS



OUTCOMES

	AS BUILT	EXISTING CAPACITY ESTIMATES	LOWER-SCENARIO ESTIMATES	HIGHER-SCENARIO ESTIMATES
POPULATION	32,255	98,425	98,448	99,316
DENSITY (PEOPLE/ACRE)	64	196	196	198
HOUSING UNITS	18,644	38,201	38,192	38,527
POSSIBLE NEW AFFORDABLE UNITS			0	16
POPULATION NET INCREASE BETWEEN EXISTING CAPACITY AND FUTURE SCENARIO			23 people	891 people

*Affordable units calculated as 10% units in half of developments. Population net increase = (new housing units) * (LA county average household size)*

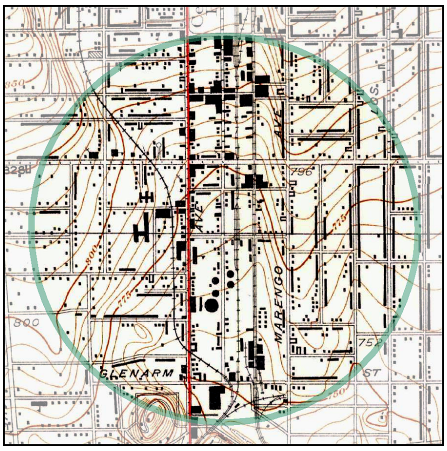
The future for Wilshire/Vermont remains the most unchanged across the case studies. Because of the high levels of density, Walk Score® and transit ridership, the area likely sees a notably low VMT per capita. Based on the existing literature cited previously in this report, current and future residents likely have lower utility bills and environmental impact because they are likely to use 2.5 times less water and 56 percent less energy than people living in single family households.

CAMILLIA is a college-student living near the Wilshire/Vermont station. Compared to the suburban home where she grew up, she can get around by foot and public transit. As a result, she feels more independent and healthier. Her apartment building doesn't have any parking so she isn't having to pay for a parking space she wouldn't use.

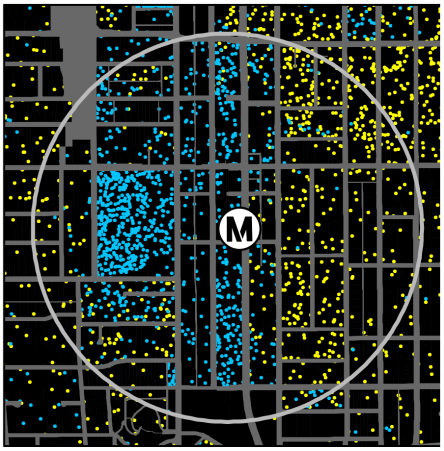
FILLMORE STATION AREA

BACKGROUND

PLANNING	General plan updated in 2015 Update to the Central District specific plan now underway
TRANSPORTATION	Gold line station 1,525 rail boardings/day 3,948 bus boardings/day
HOUSING AND POPULATION	6,480 people 13 people/acre 3,858 housing units 7 housing units/acre 10% of housing built since 2000
DEMOGRAPHICS	$77,021 median household income 19% Latino, 20% Asian, 51% white, 7% black, 4% other
WALK SCORE®	71 — Very walkable (70-89)
DISPLACEMENT RISK AND EXISTING TENANT PROTECTIONS	Low displacement risk, no rent control or just-cause eviction in Pasadena



1924 AREA MAP



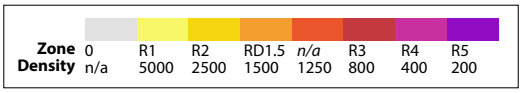
ACTIVITY DENSITY

13 people/acre | *24 jobs/acre*

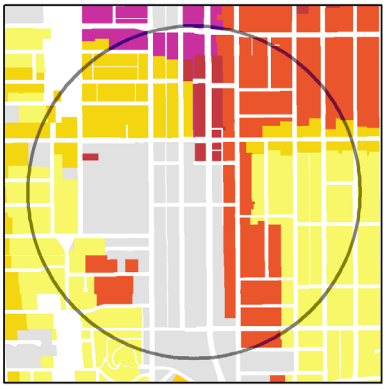
The Fillmore Station area has the lowest population density of the seven case studies at 13 people per acre. The area does have a high density of jobs at 24 per acre in sectors such as health, education, and government.

Fillmore hosts a high diversity of land uses; it is close to equal parts residential, commercial, industrial, and public facilities. However, few of these land uses are mixed, with most located in separate zones. Most of Fillmore's residential land is low-density (less than 10 people per acre) except for a corridor of multi-family housing along Marengo Avenue. Most of the station area does not currently permit housing at all. More than half of all new development is commercial or other non-housing related uses, such as a Whole Foods. Housing has not been a focus of new development in the Fillmore Station area although the area's housing supply has increased by 10 percent since 2000 with the addition of 384 units which are mostly along Marengo Avenue, two blocks east of the station.

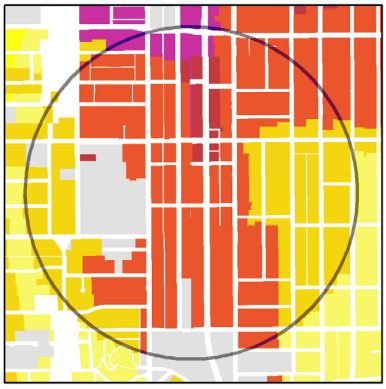
SCENARIO ANALYSIS



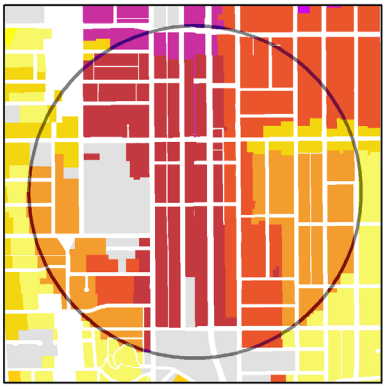
Density expressed as minimum square feet per unit
Zones are based on City of Los Angeles zone or equivalent in other jurisdictions
Los Angeles has no zone with density 1250 sf/unit.



EXISTING

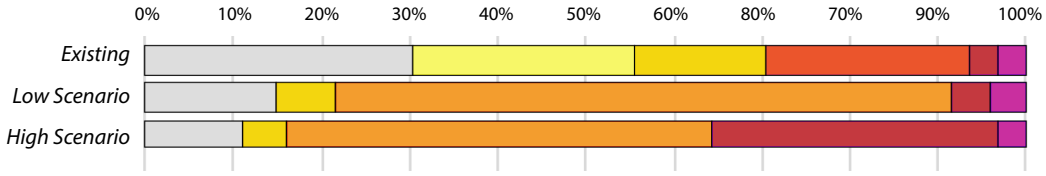


LOW SCENARIO

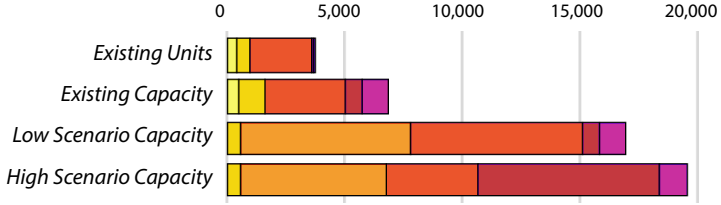


HIGH SCENARIO

DISTRIBUTION OF ZONED LAND AREA BY ZONING/DENSITY CLASS



DISTRIBUTION OF HOUSING UNITS BY ZONING/DENSITY CLASS



OUTCOMES

	AS BUILT	EXISTING CAPACITY ESTIMATES	LOWER-SCENARIO ESTIMATES	HIGHER-SCENARIO ESTIMATES
POPULATION	6,480	16,557	23,909	37,015
DENSITY (PEOPLE/ACRE)	13	33	48	74
HOUSING UNITS	3,858	6,589	9,443	14,516
POSSIBLE NEW AFFORDABLE UNITS			344	611
POPULATION NET INCREASE BETWEEN EXISTING CAPACITY AND FUTURE SCENARIO			7,352 people	20,458 people

*Affordable units based on 15% of units in 10+ unit buildings. Population net increase = (new housing units) * (LA county average household size)*

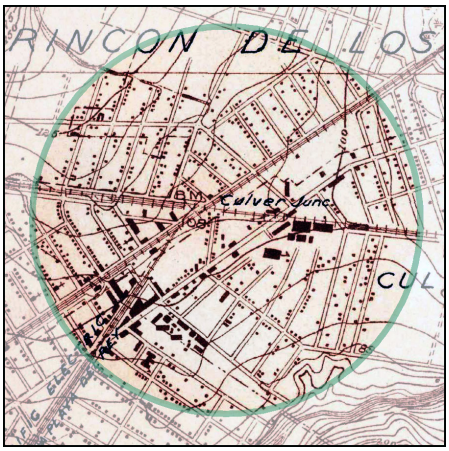
The existing population density in Fillmore is below the thresholds for high-performing transit service and likely depresses transit ridership at the station, overall. Based on research previously cited in this report, through these changes, the persons per acre could rise from 13 people/acre to 33-74 people/acre, all of which would take the station area to density levels that are supportive of effective bus and high-performing light rail service, respectively.

JEONG-HO was able to afford a small condo in a senior-housing development near the station. He learned about the new building from an ad he saw when he began volunteering at Union Station Homeless Services nearby. Because of his volunteer work, he was happy to learn that the senior-living facility included supportive housing for homeless older adults as well as him. He's easily able to take transit to visit his friends in Koreatown without driving and worrying his family.

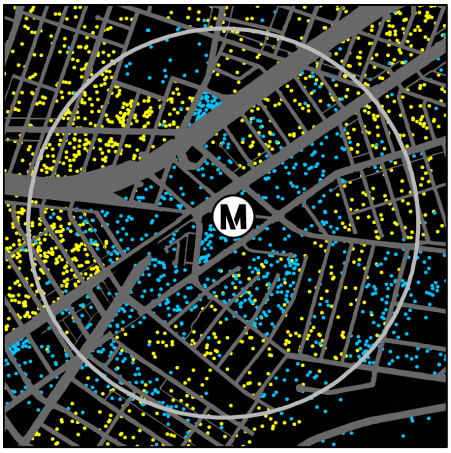
CULVER CITY STATION AREA

BACKGROUND

PLANNING	Currently updating Culver City general plan
TRANSPORTATION	Expo line station 2,929 rail boardings/day 1,919 bus boardings/day
HOUSING AND POPULATION	8,467 people 17 people/acre 4,714 housing units 9 housing units/acre 37% of housing built since 2000
DEMOGRAPHICS	$70,192 median household income 35% Latino, 16% Asian, 36% white, 9% black, 5% other
WALK SCORE®	80 — Very walkable (70-89)
DISPLACEMENT RISK AND EXISTING TENANT PROTECTIONS	No risk, no rent control or just-cause eviction on parcels in Culver City, rent control and just-cause eviction in City of LA parcels



1924 AREA MAP



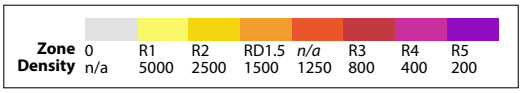
ACTIVITY DENSITY

17 people/acre *18 jobs/acre*

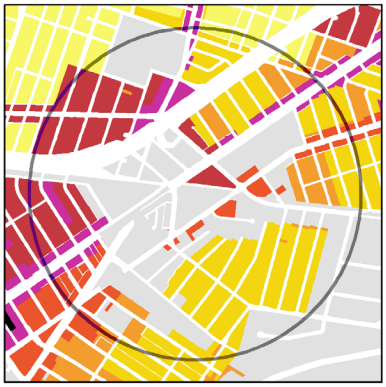
The central core of the Culver City station area is a historically industrial zone, which is used mainly for commercial purposes today. The station area is split by Venice Boulevard with the northern half belonging to the City of Los Angeles and the southern half to Culver City, which has stricter land use rules. There is a diverse array of building types and scales in the Culver City station area, from historic industrial buildings and motion picture sound stages to prewar duplexes, postwar dingbats, 21st century mixed-use megaprojects, and adaptive reuse projects. One such project, "Ivy Station" which takes its name from the historic train station, will add 200 housing units, offices, retail space, and a hotel directly adjacent to the light rail station.

Several of the area's new and under construction developments are located adjacent to the light rail station, possibly bringing more pedestrian activity and ridership to the area. There have been numerous new developments since 2000, including several commercial developments, a few large mixed-use projects, and a number of small lot apartment buildings. When Ivy Station is completed in 2020, this station area will have added 2,425 new housing units since 2000 (a 37 percent increase). Based on the assessment of the Urban Displacement Project, the people living in the station area do not current face a measurable displacement risk.

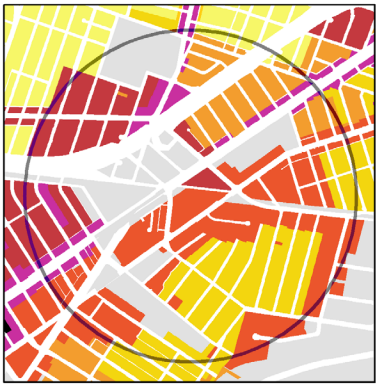
SCENARIO ANALYSIS



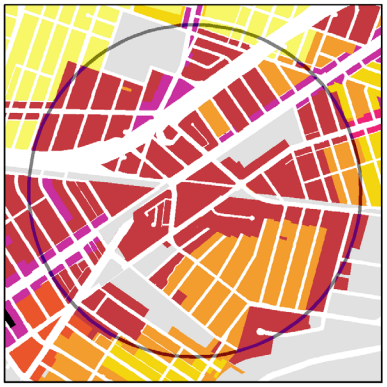
Density expressed as minimum square feet per unit
Zones are based on City of Los Angeles zone or equivalent in other jurisdictions
Los Angeles has no zone with density 1250 sf/unit.



EXISTING

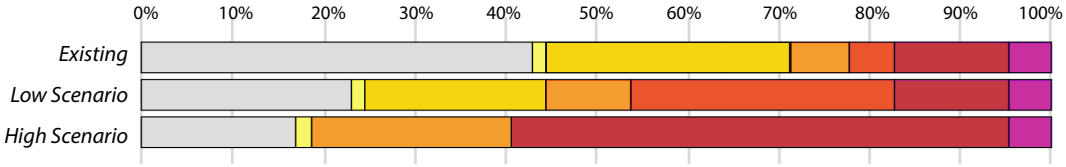


LOW SCENARIO

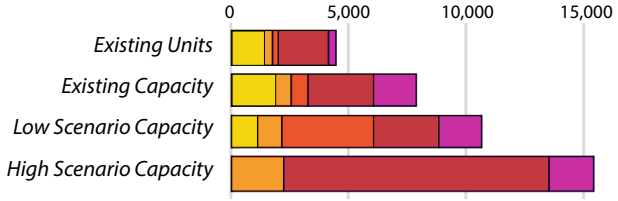


HIGH SCENARIO

DISTRIBUTION OF ZONED LAND AREA BY ZONING/DENSITY CLASS



DISTRIBUTION OF HOUSING UNITS BY ZONING/DENSITY CLASS



SCENARIO OUTCOMES

	AS BUILT	EXISTING CAPACITY ESTIMATES	LOWER-SCENARIO ESTIMATES	HIGHER-SCENARIO ESTIMATES
POPULATION	8,467	17,786	24,331	35,240
DENSITY (PEOPLE/ACRE)	17	35	48	70
HOUSING UNITS	4,714	7,143	9,705	13,952
POSSIBLE NEW AFFORDABLE UNITS			13	79
POPULATION NET INCREASE BETWEEN EXISTING CAPACITY AND FUTURE SCENARIO			6,545 people	17,454 people

Affordable units only from parcels in City of Los Angeles.
Population net increase =
*(new housing units) * (LA county average household size)*

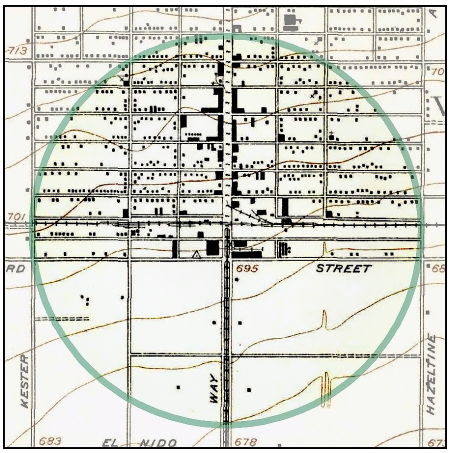
The existing land use patterns at Culver City do not allow for many people to live or work directly adjacent to the station itself. If some of these proposed changes were enacted, and more people could live directly next to or even in the station area, those new residents are 4 times more likely than the average county resident to ride transit. With more homes and less parking, thes station area would have many old-urban form characteristics that are associated with higher transit use.

After living at home with his parents for a few years, **JOSH** moved into a studio near the Culver City station convenient to his IT job. He's able to get to his job without a car and take the train to meet friends Downtown or at the beach. He hopes to get involved with planning efforts in Culver City because he likes the changes in his neighborhood and wants to learn how he can be involved in the future.

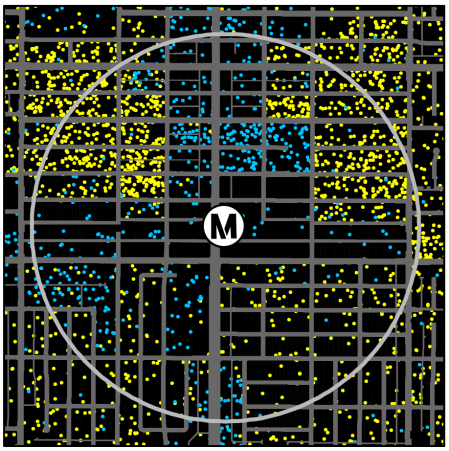
VAN NUYS STATION AREA

BACKGROUND

PLANNING	Community plan update scheduled for 2021 Transit Neighborhood Plan for Orange Line currently in progress
TRANSPORTATION	Orange line station 2,575 BRT boardings/day 3,948 bus boardings/day
HOUSING AND POPULATION	11,633 people 23 people/acre 4,141 housing units 8 housing units/acre 11% of housing built since 2000
DEMOGRAPHICS	$36,528 median household income 72% Latino, 4% Asian, 19% white, 4% black, 2% other
WALK SCORE®	72 — Very walkable (70-89)
DISPLACEMENT RISK AND EXISTING TENANT PROTECTIONS	Medium risk, rent control for properties built before 1978 and just-cause eviction for rent-controlled properties



1924 AREA MAP



ACTIVITY DENSITY

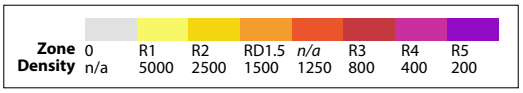
23 people/acre | *12 jobs/acre*

The Orange Line rapid busway on which the Van Nuys station follows the historic right of way of the Southern Pacific's San Fernando Valley branch line. Southern Pacific used the line for freight only and never had passenger service, so the station areas did not develop in the same fashion as "streetcar suburbs" elsewhere in Los Angeles. The Orange Line service began in 2005. Beginning in 2027-2029, Van Nuys will serve as a transfer station and the southern terminus of the East San Fernando Valley Line.

The Van Nuys station area is split: the northern half is higher-density, predominantly low income, and Hispanic and the southern half is lower density, predominantly middle income, and White. Both of these areas combine for an average density of 23 people per acre - with a modest job density of 9 jobs/acre . The Van Nuys station surpasses the standard for "transit-supportive" density for buses. But notably, when the East San Fernando Valley line begins operating, the current density is not at the ideal threshold to support effective light-rail service.

There are certain blocks made up predominantly of two-story apartments buildings which have residential densities of more than 100 people per acre. However, this is due less to building intensity and more to demographics, family size, and the fact that there are multiple families sharing apartments.

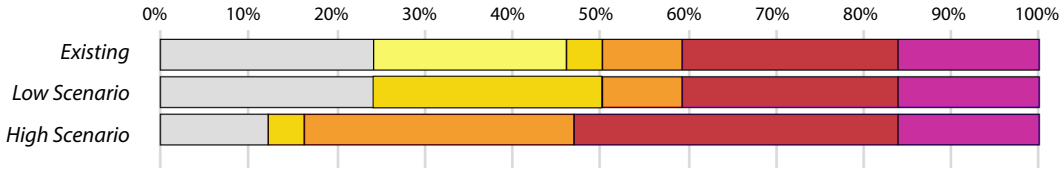
SCENARIO ANALYSIS



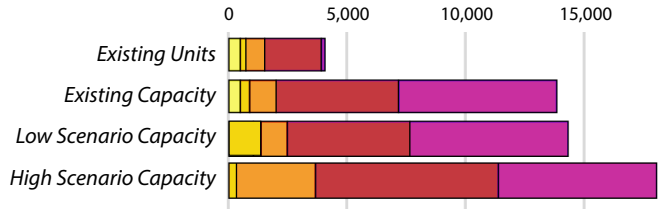
Density expressed as minimum square feet per unit
Zones are based on City of Los Angeles zone or equivalent in other jurisdictions
Los Angeles has no zone with density 1250 sf/unit.

EXISTING | LOW SCENARIO | HIGH SCENARIO

DISTRIBUTION OF ZONED LAND AREA BY ZONING/DENSITY CLASS



DISTRIBUTION OF HOUSING UNITS BY ZONING/DENSITY CLASS



SCENARIO OUTCOMES

	AS BUILT	EXISTING CAPACITY ESTIMATES	LOWER-SCENARIO ESTIMATES	HIGHER-SCENARIO ESTIMATES
POPULATION	11,633	30,783	32,333	38,095
DENSITY (PEOPLE/ACRE)	23	61	64	76
HOUSING UNITS	4,141	12,201	12,718	14,988
POSSIBLE NEW AFFORDABLE UNITS			25	167
POPULATION NET INCREASE BETWEEN EXISTING CAPACITY AND FUTURE SCENARIO			1,550 people	7,312 people

*Affordable units calculated as 10% units in half of developments. Population net increase = (new housing units) * (LA county average household size)*

The Van Nuys station area currently has a 72-point Walk Score®. This means some errands can be accomplished through walking, but a lot of trips require a car. In the future scenarios, more people could live near neighborhood amenities. More amenities may even appear because of more people nearby. The new residents to this area would likely walk 2-3 times more than currently because of the greater variety of nearby shops and destinations.

AMY is co-chair of her Neighborhood Council's sustainability committee. Some of the members have expressed concern over the impacts of the new development on water and energy use in the community, but a summary of data from LADWP was eye-opening in showing that residents of newer, multi-family building use significantly less water and energy per home than residents of older homes. She's also had more chances to walk because she likes taking her cart to the new nearby grocery store.

COMPTON STATION AREA

BACKGROUND

PLANNING	General plan updated in 2014, Transit-oriented specific plan for Compton Station underway
TRANSPORTATION	Blue line station 3,308 rail boardings/day 1,322 bus boardings/day
HOUSING AND POPULATION	10,484 people 21 people/acre 3,169 housing units 6 housing units/acre 9% of housing built since 2000
DEMOGRAPHICS	$44,671 median household income 67% Latino, 0% Asian, 1% white, 30% black, 1% other
WALK SCORE®	73 — Very walkable (70-89)
DISPLACEMENT RISK AND EXISTING TENANT PROTECTIONS	Medium risk, no rent control or just-cause eviction in the City of Compton

1924 AREA MAP

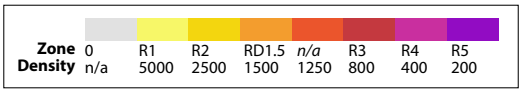
ACTIVITY DENSITY

21 people/acre *4 jobs/acre*

The Compton Station is served by the Blue line. The Compton Civic Center, home to City and County government offices, is adjacent to the Compton station. While the station area median income is only slightly below the county average, it is in the poorest quartile of Metro station areas with a poverty rate of 27%. Its demographics indicate that there is a risk of displacement although Compton has not undergone significant gentrification thus far.

Most of Compton's housing stock is prewar single-family homes. Most of the commercial and industrial buildings and planned gated communities were built in the 1980s and 1990s. Most structures in Compton are no more than 2 stories tall with the exception of some 3-4 story buildings in the planned developments and some civic buildings.

SCENARIO ANALYSIS



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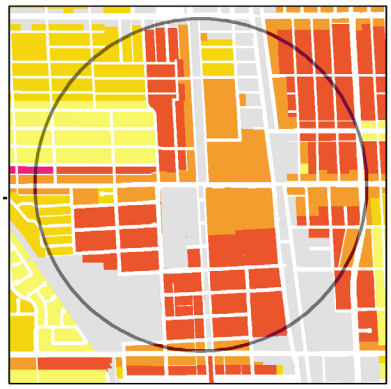
Zones are based on City of Los Angeles zone or equivalent in other jurisdictions
Los Angeles has no zone with density 1250 sf/unit.

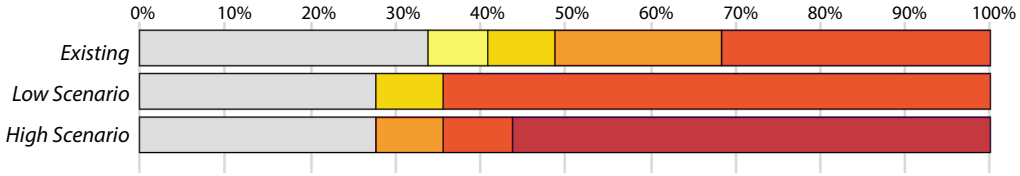


EXISTING

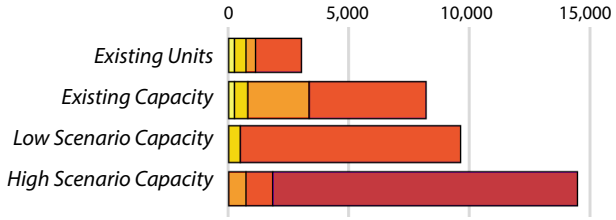
LOW SCENARIO

HIGH SCENARIO

DISTRIBUTION OF ZONED LAND AREA BY ZONING/DENSITY CLASS



DISTRIBUTION OF HOUSING UNITS BY ZONING/DENSITY CLASS



SCENARIO OUTCOMES

	AS BUILT	EXISTING CAPACITY ESTIMATES	LOWER-SCENARIO ESTIMATES	HIGHER-SCENARIO ESTIMATES
POPULATION	10,484	18,401	21,025	33,688
DENSITY (PEOPLE/ACRE)	21	37	42	67
HOUSING UNITS	3,169	7,424	8,456	13,340
POSSIBLE NEW AFFORDABLE UNITS			0	0
POPULATION NET INCREASE BETWEEN EXISTING CAPACITY AND FUTURE SCENARIO			2,624 people	15,287 people

*No affordable housing incentive program or inclusionary zoning ordinance in Compton. Population net increase = (new housing units) * (LA county average household size)*

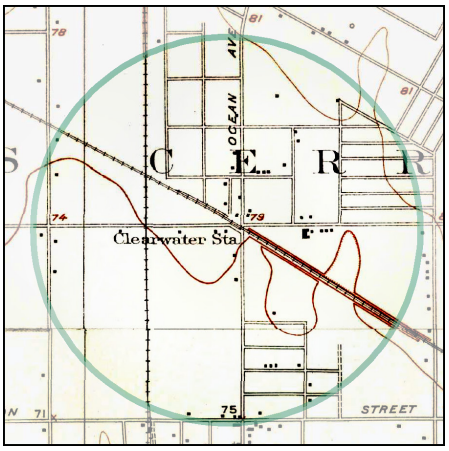
The station area currently has a low level of job opportunities. However, the area around the station has higher job and transportation access than other parts of Compton. Under the future scenarios, new residents would have 9 percent higher access to jobs than if they lived in further outlying areas. Compton has lower car access than other parts of Los Angeles County, therefore concentrating housing around the station area helps residents access jobs and other services by public transit.

SILVIA worries about her students' families. She knows that they face high housing costs and that if families with children had to move away it would be a harm both to her students and to the school where she works. She hopes the new housing in the neighborhood — paired with a possible rent control measure she wants to advocate for — can help reduce this displacement pressure by providing additional homes for new residents to move into and stabilizing rents for families.

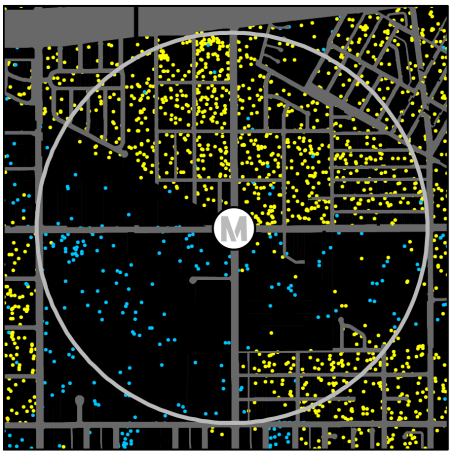
PARAMOUNT/ROSECRANS STATION AREA

BACKGROUND

PLANNING	Environmental review for the West Santa Ana Branch transit project underway, Station Area Vision and Concept Plan underway
TRANSPORTATION	West Santa Ana Branch station 592 bus boardings/day
HOUSING AND POPULATION	9,630 people 19 people/acre 2,681 housing units 5 housing units/acre 2% of housing built since 2000
DEMOGRAPHICS	$51,976 median household income 78% Latino, 3% Asian, 4% white, 13% black, 2% other
WALK SCORE®	60 — Somewhat walkable (50-69)
DISPLACEMENT RISK AND EXISTING TENANT PROTECTIONS	Medium risk, no rent control or just-cause eviction in the City of Paramount



1924 AREA MAP



ACTIVITY DENSITY

19 people/acre | *5 jobs/acre*

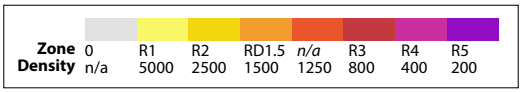
The intersection of Paramount Boulevard and Rosecrans Avenue will serve as the location of a light-rail station on the future West Santa Ana Branch Line. The project is funded under Measure M and is also on the list targeted for accelerated construction if funding is available.

The Paramount/Rosecrans station area has a population density of 19 people per acre that is unevenly geographically distributed. Large industrial swaths prohibit housing while some blocks in the multi-family zone have more than 100 people per acre. The future Paramount/Rosecrans station area is predominantly Hispanic. The population is middle class with a median household income of $51,976 and a poverty rate in the lower half of all Metro station areas.

Paramount's residential building stock consists of single-family homes built in the 1950s and 1960s and low-rise apartment buildings constructed between the 1970s and 1990s. Since 2000, most of the new development has been industrial, not residential. The existing housing stock has only increased by 2 percent since 2000. One example of the nearby industrial development is a Ralph's distribution center, which, at 560,000 square feet, makes it the largest building among our case studies. The large industrial-zoned parcel immediately southwest of the future light rail station is used for a periodic swap meet/flea market and a nightly drive-in movie.

PARAMOUNT/ROSECRANS STATION AREA

SCENARIO ANALYSIS



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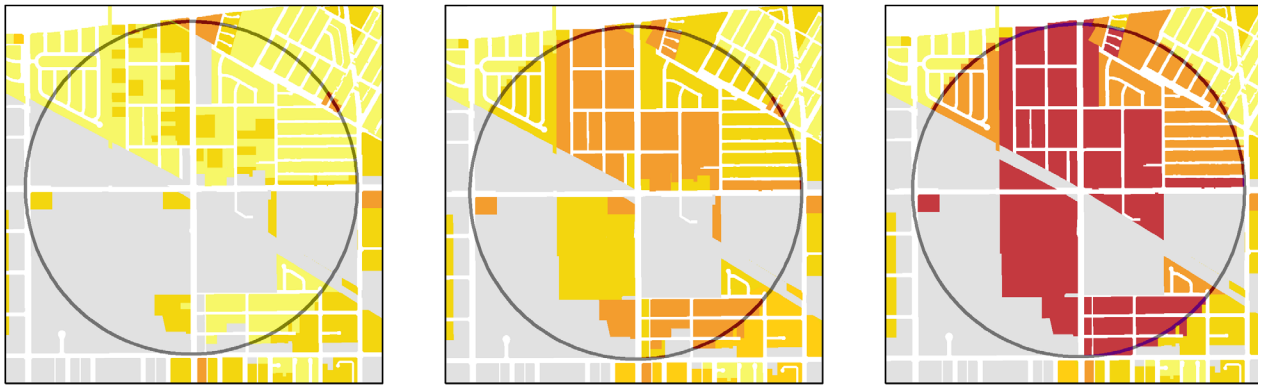
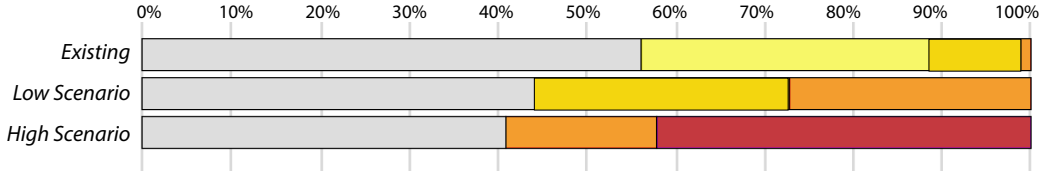
Los Angeles has no zone with density 1250 sf/unit.

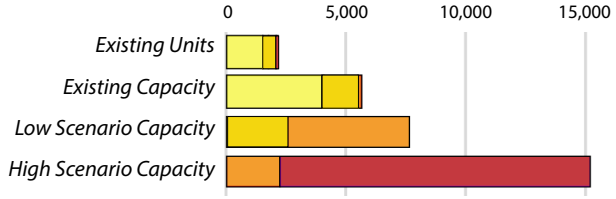


EXISTING **LOW SCENARIO** **HIGH SCENARIO**

DISTRIBUTION OF ZONED LAND AREA BY ZONING/DENSITY CLASS



DISTRIBUTION OF HOUSING UNITS BY ZONING/DENSITY CLASS



SCENARIO OUTCOMES

	AS BUILT	EXISTING CAPACITY ESTIMATES	LOWER-SCENARIO ESTIMATES	HIGHER-SCENARIO ESTIMATES
POPULATION	9,360	7,203	12,118	27,617
DENSITY (PEOPLE/ACRE)	19	20	24	55
HOUSING UNITS	2,681	3,023	4,929	10,935
POSSIBLE NEW AFFORDABLE UNITS			0	0
POPULATION NET INCREASE BETWEEN EXISTING CAPACITY AND FUTURE SCENARIO			4,915 people	20,414 people

*Affordable units calculated as 10% units in half of developments. Population net increase = (new housing units) * (LA county average household size)*

As the planning for the West Santa Ana Branch continues, this is an opportunity for the station area to evolve land use ahead of the transportation investment. This could help residents in two ways. First, by allowing more housing in the station area, the persons per acre could rise to levels that are more transit supportive for high-performing transit than currently exist today. Secondly, assuming the City of Paramount puts renter protections in place in advance of land use changes, new housing construction with affordable units could guard against future displacement and even reduce displacement risk by 11%.

ISABELLA is happy that more people can live in her community. While Isabella's landlord has raised the rent, a local community group has organized residents for more rights for tenants, and she is happy when the city passes a rent stabilization law to moderate cost increase and make it harder to evict tenants.

LEIMERT PARK STATION AREA

BACKGROUND

PLANNING	Community Area Plan updated in 2016 Crenshaw Corridor Specific Plan amended in 2017
TRANSPORTATION	Crenshaw/LAX line station 2,915 bus boardings/day
HOUSING AND POPULATION	7,414 people 15 people/acre 3,729 housing units 7 housing units/acre 2% of housing built since 2000
DEMOGRAPHICS	$45,761 median household income 13% Latino, 1% Asian, 2% white, 81% black, 4% other
WALK SCORE®	76 — Very walkable (70-89)
DISPLACEMENT RISK AND EXISTING TENANT PROTECTIONS	Medium risk, rent control and just-cause eviction in City of Los Angeles and potentially rent control in unincorporated parcels*

1924 AREA MAP

ACTIVITY DENSITY

15 people/acre | *3 jobs/acre*

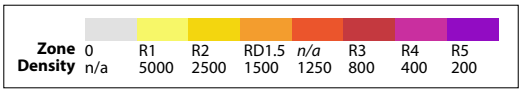
The Leimert Park station, on the soon-to-be-completed Crenshaw/LAX Line, is the second of our case studies based on a future station area. Leimert Park is also the second of our case studies in which the station is underground; although this line is light rail instead of heavy rail. Leimert Park is one of Los Angeles' best preserved historical neighborhoods, and among our case study areas, it was the last to develop.

This station is an important part of Los Angeles' African American community; the Black population in the Leimert Park station area is 81 percent of the total population. Leimert Park, with several influential community organizations, arts centers, and jazz clubs, is home to a middle class African American population with a low poverty rate. With 15 people and 3 jobs per acre, Leimert Park has the lowest overall density of our case studies.

Although the methodology used in the 2015 Urban Displacement Project did not identify significant evidence of gentrification in Leimert Park, property values and rents have begun to rise in the intervening years in anticipation of the soon-to-be-finished rail line, which has the potential to lead to displacement. Redevelopment of its historic areas or hilly residential neighborhoods is probably unlikely, but there is significant potential for new housing development in the well-defined commercial corridors that converge at the central square and future station. Leimert Park has seen little recent development with 78 new housing units added, a 2 percent increase, since 2000.

**An interim rent control ordinance was passed by the Los Angeles County Board of Supervisors in September 2018 and is expected to come up for a final vote in the near future.*

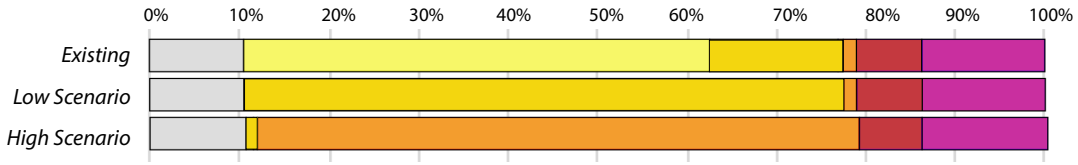
SCENARIO ANALYSIS



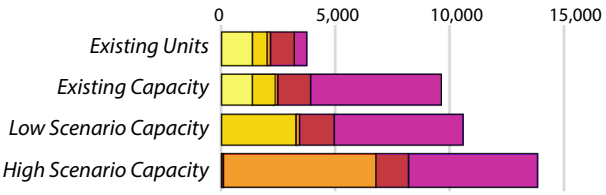
Density expressed as minimum square feet per unit
Zones are based on City of Los Angeles zone or equivalent in other jurisdictions
Los Angeles has no zone with density 1250 sf/unit.

EXISTING **LOW SCENARIO** **HIGH SCENARIO**

DISTRIBUTION OF ZONED LAND AREA BY ZONING/DENSITY CLASS



DISTRIBUTION OF HOUSING UNITS BY ZONING/DENSITY CLASS



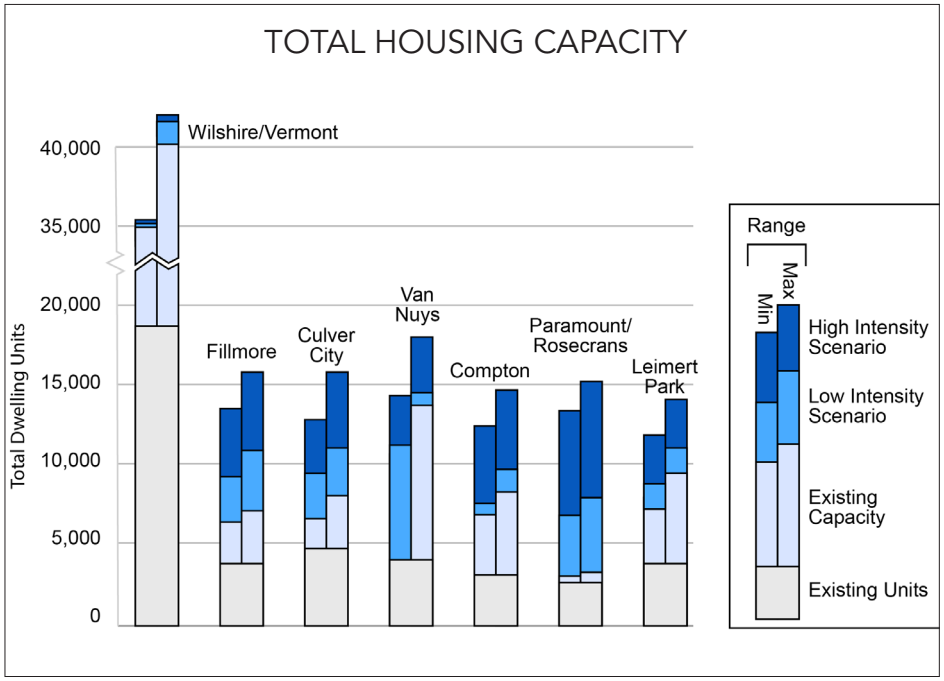
SCENARIO OUTCOMES

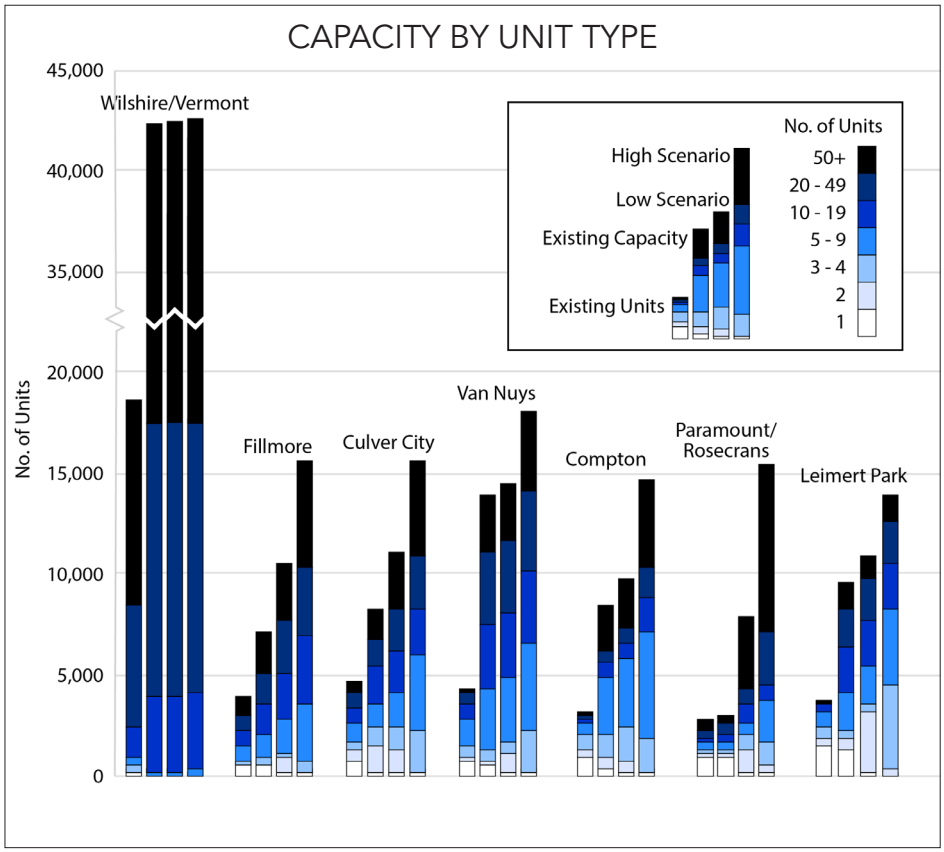
	AS BUILT	EXISTING CAPACITY ESTIMATES	LOWER-SCENARIO ESTIMATES	HIGHER-SCENARIO ESTIMATES
POPULATION	7,414	21,082	24,536	31,551
DENSITY (PEOPLE/ACRE)	15	42	49	63
HOUSING UNITS	3,729	8,585	9,722	12,645
POSSIBLE NEW AFFORDABLE UNITS			20	58
POPULATION NET INCREASE BETWEEN EXISTING CAPACITY AND FUTURE SCENARIO			3,454 people	10,469 people

Affordable units only from parcels in City of Los Angeles and not unincorporated LA parcels.
Population net increase =
*(new housing units) * (LA county average household size)*

Leimert Park currently has a Walk Score® of 76 meaning most errands can be completed by foot but some require a car. Based on these proposed scenarios and once the Crenshaw/LAX Line begins service, residents can reduce their greenhouse gas emissions and vehicle miles traveled by taking fewer trips by car and more by walking, transit and possibly bicycle. This travel behavior change could emit 95 percent fewer greenhouse gases per trip if changed from driving to other modes.

DERRICK and his wife were able to buy their duplex when their landlord decided to sell. They could afford it when they factored in the rental income from the other unit. Derrick's wife enjoys taking the train to her job and they now walk to some new shops, making his family feel comfortable with just one car.





CONCLUSION

The seven case studies show that when it comes to transit compatibility, there is tremendous variety among Metro station areas. In response, we find that increasing housing within Los Angeles's transit stations will require altering a variety of land use levers. Based on this analysis, we believe proposed changes will enhance neighborhoods outcomes and leverage the regional transportation investments. Residents worried that change must mean "Manhattan-style" high-rises can rest assured that the type of density envisioned in a future transit-oriented Los Angeles exists all around the region today.

If the scenarios are realized, the case study areas (and other LA region Metro station areas like them) could see significant increases to their housing supplies. Wilshire/Vermont today stood out among the case studies because of the current density and transit ridership levels. The other six cases could eventually resemble the housing capacity at Wilshire/ Vermont by allowing a variety of low- and mid-rise housing types to be built. Based on the review of the existing literature outlined previously, we demonstrated the related transportation, amenity, and environmental benefits that could be realized through adding to the housing supply in these transit-station areas.

Lastly, we illustrated how these benefits may affect individuals through the outcomes on our seven characters. The benefits to these characters and people in Los Angeles require land use changes that will be realized over the long term and policies that can protect people living near these stations today.

Some of the potential housing supply gains, according to our findings, come from what we call "existing capacity," or gains that are possible under existing zoning but have not yet been built. Explanations for the presence of this unbuilt capacity vary. Most parcels are privately owned, and the decision to develop them to their "full potential" based on their zoning is a personal decision up to the property owner. In some cases, it could mean that market is uninterested in redeveloping because the marginal gains from redevelopment are insufficient to justify the developer's expense. The potential appetite for redevelopment under current conditions is likely dampened by other land use constraints such as parking requirements or property owner willingness to sell or redevelop parcels. Additionally, moral and practical limitations exist for redeveloping land when people live there currently. There is reason to believe, however, that with upzoning as envisioned in the change scenarios, some of the currently zoned but unbuilt capacity would be stimulated, pushed into action by a general environment of change and gradual densification.

While we find the biggest gains in housing production in the case study station areas we studied would come in larger-scale apartment buildings of 20+ units, a great deal of additional housing can come in buildings types that are significantly smaller in scale, such as duplexes, fourplexes, or small apartment buildings of between 5 and 20 units. Major investments in our regional transportation system necessitate changes like those proposed in our scenarios to effectively house and move people and realize the growing region's full benefits.

IV. POLICY RECOMMENDATIONS

Local governments, Metro and the state of California can provide a policy framework that maximizes the potential of a transit-oriented Los Angeles. The recommendations that follow are broad and not meant as endorsements of any specific pending legislation. As policy ideas, they can help transit and land use align to advance housing choice and affordability, ridership, amenities and sustainability. Local jurisdictions can tailor these recommendations based on their residents' visions for the future of their communities.

LOCAL GOVERNMENTS

ADOPT A MIXED-USE ZONING APPROACH

Adopt mixed-use zoning* close to transit so that homes can be built in commercial zones.

Commercial zoning is predominant on land closest to many stations. To increase ridership, more people should be able to live a short walk away from rail stations. Mixed-use zoning, which allows residential uses by-right in formerly commercial zones, has the added benefit of making communities more walkable and reducing incentives to redevelop multi-family housing and displace tenants. Notably, mixed-use zoning wherein residential and commercial uses are permitted concurrently is already allowed in the City of Los Angeles but not in the other case study areas.

ALLOW DIVERSE TYPES OF HOUSING CLOSE TO TRANSIT

Within ½ mile of a transit station, multi-family housing will allow for more diverse housing types and more transit riders. A mix of detached houses, duplexes, triplexes, fourplexes, attached townhomes, small lot subdivisions, small bungalow courts and courtyard apartments fit well into the existing low-rise urban fabric and create more affordable housing options while also allowing more people to walk to transit. Legalizing accessory dwelling units can also contribute to increased density without dramatically altering the existing built environment. Form-based rules can ensure that buildings are not too tall or bulky and provide adequate open space for residents and design that adds up to an attractive streetscape.

ENCOURAGE NEW AFFORDABLE HOUSING NEAR TRANSIT

Local jurisdictions should encourage more deeded affordable homes close to transit to advance the twin goals of housing affordability and transit ridership. Density bonuses grant developers a combination of more dwelling units, more floor-area, more height, and less parking in exchange for setting aside a percentage of units as for lower income residents. While a state density bonus is available in some cases, due to the severity of the housing crisis, local governments can consider offering more bonuses to encourage denser housing with affordable units in proximity to transit service. The city of Los Angeles' Transit Oriented Communities program, which has a tiered approach, may be a good model as it appears to be adding new housing with affordable units.

**Early to mid-20th century zoning was sometimes called 'pyramidal zoning' because higher intensity zones (commercial, multi-family housing etc). usually allowed uses from the lower intensity zone further down the pyramid.*

REZONE SOME INDUSTRIAL LAND NEAR TRANSIT STATIONS FOR A MIX OF PRODUCTION, COMMERCIAL AND RESIDENTIAL USES.

Many of the County's transit lines follow former freight rail corridors and include large amounts of industrially zoned land within the ½ mile station area. Some industrial zones contain important sources of employment; these uses should be protected. A good deal of the region's industrial land, however, is either used for commercial purposes or by industries that now employ few people. These parcels present an opportunity to build new housing. Zoning can be changed to "live-work" which would prioritize light industrial and other production uses while allowing some live-work housing units. Finally, some industrial land is simply a relic of past economic eras, with remnants of the type of heavy manufacturing that is unlikely to return to Los Angeles. In these cases, cities can change their zoning to mixed-use to allow both commercial and residential development.

ALLOW ADEQUATE RESIDENTIAL DENSITY IN MIXED-USE AND MULTI-FAMILY ZONES CLOSE TO STATIONS.

To encourage ridership, zoning close to transit stations should allow at least medium density residential or mixed-use zoning, aiming for an average of 75 units/acre within ¼ mile of stations and 25-50 units/acre between ¼ and ½ mile. These medium-high to medium-low levels of dwelling density can be met through a wide variety of low and mid-rise building types. Notably, these levels of density already exist in Los Angeles. It is not necessary to build "Manhattan in Los Angeles" in order to achieve transit-supportive density. Parts of the Van Nuys station area already have blocks at 40-50 units/acre levels. In already intensive locations, governments should consider removing unit density limits in multi-family and mixed-use zones within a ¼ mile of stations. Increasing density limits to that of the densest existing zone within this area is another strategy that ensures changes fit within existing urban fabric. An important caveat to this recommendation is that local governments should preserve existing rent-stabilized apartments and more affordable older, medium density apartments. One way to do this is to focus zoning changes on commercial and single-family areas when medium density apartments already exist close to a station.

STRENGTHEN TENANT PROTECTIONS IN STATION AREAS

Improved tenant rights and protections are essential to protect renters now and to anticipate any increase in development pressures that might occur from the expansion of transit. Since lower income renters make up the majority of Metro riders, tenant protections are similarly essential to ensure existing riders can keep living near and using buses and trains. Example tenant protections to consider:

- Just cause eviction protections
- Right to return policies for new developments that replace existing homes and tenants
- Deed restricted affordable housing in new development
- Rent control

REDUCE MINIMUM LOT AREA REQUIREMENTS NEAR TRANSIT

Allowing development on fairly small lots encourages incremental growth, smaller buildings, fine-grained urban form, and allows more small and medium scale developers to participate in building near transit stops. While there is no exact right size for lots, based on existing land-use patterns with adequate levels of housing and businesses, we recommend that minimum lot size should be no more than 5000 square feet and 50 feet wide. Where small shops and mixed-use buildings and townhomes or row houses would fit well, this minimum should be every smaller, closer to 2,000 square feet and 20 feet wide.

REDUCE VEHICLE PARKING REQUIREMENTS NEAR TRANSIT

Excessive parking requirements make it difficult or impossible to build well-designed buildings on many lots, raise the cost of development and housing, and paradoxically encourage residents of transit-oriented developments to rely on cars. In areas still transitioning to transit-orientedness, requirements should be no more than one per home and less for affordable and senior residences. No new parking should be required for changes of use or adaptive reuse of old buildings, developers should be allowed to provide required parking off-site if it is within 1,000 feet of buildings, and the cost of parking should be unbundled from rent.[61]

LA METRO

DESIGN STATIONS TO ENCOURAGE RIDERSHIP AND ACCESS

To encourage transit-supportive land use, rail and BRT stations are the most important places to start. New and redesigned Metro stations should prioritize the highest and best use of land (which is typically not parking). Parking lots are appropriate for commuter rail systems but less so for the subway, light rail and BRT lines that Metro is expanding.[62] Space at rail stations should prioritize safe pedestrian passage, joint development opportunities for mixed-use building with affordable housing, bicycle parking, and convenient transfers to bus services. At some stations it may make sense to include vehicle drop-off zones as well as underground parking. The location and design of stations must be oriented with a safe walking environment to and from the station. Presently, Metro riders often face hostile and dangerous walking environments when leaving many stations. These conditions detract from the transit experience and discourage people from using transit. Metro has adopted a First/Last Mile Strategic Plan and a policy requiring that access improvements are implemented as part of future transit corridor investments.

IMPROVE TRANSIT AS LAND USE EVOLVES

A transit-oriented Los Angeles will require that both land use and transit service improve in mutually supportive ways. As stations areas become denser and increasingly oriented toward mixed-use, Metro should evaluate existing transit service and station areas and adjust accordingly. While Metro is currently re-envisioning the bus service and network through the NextGen effort, improvements should be revisited continually as station areas gain more people, jobs, and activity. Transit-supportive land use requires high-quality transit. In many areas, buses currently do not enjoy priority over private cars, and system-wide improvements that could speed up transit such as all-door boarding are only provided on a minority of lines. If the transit system does not provide people with the best options for getting around, even new developments without parking are less likely to see transit ridership increases.

BUILD STRONGER INCENTIVES INTO TRANSIT PLANNING GRANTS

When Metro funds local governments to develop local plans, there is no guarantee that the final adopted plans will advance transit supportive land use. When awarding grants, Metro should encourage or require a minimum threshold of upzoning, land use incentives for affordable housing, and other goals. For example, a station improvement program could dedicate funds to improve access and amenities at stations for plan areas that adopt and implement certain zoning targets.

STATE OF CALIFORNIA

EXPLORE EXPANDING SPECIAL ZONING FOR BART-OWNED PROPERTIES, TRANSFERRING AUTHORITY TO OTHER REGIONAL TRANSPORTATION AGENCIES

A bill signed into law this year will apply BART's transit oriented development framework to parcels of land owned by BART. Localities have two years to change their zoning to reflect these standards or else zoning defaults to the BART guidelines. While BART may be a unique land ownership case because they own the land for park and ride lots, this concept directly mirrors the intent of SB375 and AB32 — authoritatively connecting land use and transportation. Further allowing transit agencies — many of which are expanding their transit networks — to lead by example.

REQUIRE THAT ZONING CLOSE TO TRANSIT IS AT LEAST MINIMALLY TRANSIT-SUPPORTIVE

The state of California sets basic parameters for local zoning in a variety of ways deemed to be of statewide interest, including density bonuses and requirements that localities allow accessory dwelling units as well as some parking reductions and streamlining for mixed-income infill developments. Given the state's strong targets to reduce greenhouse gas emissions and interest to addressing the housing crisis, future legislation can do more to require that zoning near stations supports ridership. Some combination of transit-adjacent density bonus enhancements like the City of Los Angeles' TOC program and transit-adjacent preemption of low density zoning combined with tenant protections, could be the building blocks of an effective approach.

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VI. APPENDIX A: DATA SOURCES

DATA SUBJECT	SOURCE	YEAR(S)
Historical urban development	USGS Topo maps	1894, 1924, 1953, and 1966
Municipal boundaries	Census "Places" shapefile	2017
Land Use (by parcel)	LA County Assessor "Parcels" shapefile	2014*
Zoning (by parcel)	LA County Planning Dept. "Zoning" shapefile	2014, (2015-2018)*
Parking lots	LARIAC "Parking" shapefile	2014*
Transit ridership (rail + bus)	Metro	2018
Population, Housing units (by block)	US Census	2010, 2010
Population, Housing units, Race, Median Household Income, Renter Status, and Tenure by Housing Type	American Community Survey	2016 (5 year average)
Jobs	Census (LEHD) "Primary Jobs" shapefile	2000, 2015
Displacement risk	UC Urban Displacement Project online map	2015
Building age and height	LARIAC "Buildings" shapefile	2014*
Recent development projects	Google Earth, Google Street View, building permit records	2018
Allowable uses and densities (by zone)	Zoning ordinances of Los Angeles, Culver City, Pasadena, Paramount, Compton, and LA County	2018
Amenity scores	Walk Score®	2018

**Buildings and parcels finished after 2014 were first identified using ZIMAS, building records, Google Earth historical satellite images, and Google Street View historic images. Unit counts were obtained in ZIMAS, Zillow, building permits, or by directly asking the developer or builder. Updated information was then manually in GIS and incorporated into all findings.*

VII. APPENDIX B: SCENARIO CHANGES BY STATION AREA

TABLE 1. GENERAL RULES APPLIED TO WILSHIRE/VERMONT CASE STUDY AREA

	Lower Intensity Scenario	Higher Intensity Scenario
Housing in commercial zone	no change	
Rezoning industrial zones	not applicable	
Increasing density in multi family residential zones	Amend Los Angeles' R4 zone to allow neighborhood-serving commercial uses.	
Increasing density in single family residential zones	Change R1 zone to R2.	Change R1 zone to R4.
Reducing minimum lot width rules	no change	
Reducing minimum lot area rules	no change	
Reducing parking requirements	no change	

TABLE 2. GENERAL RULES APPLIED TO FILLMORE CASE STUDY AREA

	Lower Intensity Scenario	Higher Intensity Scenario
Housing in commercial zone	Amend Pasadena's Central District Specific Plan to allow housing in zone CD-0 at the same density as RM-32 zone (1,360 sf/unit).	Amend Pasadena's Central District Specific Plan to allow housing in zone CD-0 at the same density as the CD-60 zone (726 sf/unit).
Rezoning industrial zones	Rezone Pasadena's IG SP-2 zone within transit areas, or amend the IG SP-2 zone to allow housing at the same density as RM-32 zone (1,360 sf/unit).	Rezone Pasadena's IG SP-2 zone within transit areas, or amend the IG SP-2 zone to allow housing at the same density as the CD-60 zone (726 sf/unit).
Increasing density in multi family residential zones	Increase the allowable density in Pasadena's Specific Plan zone CD-16 from 2,722 sf/unit to the density of the RM-32 zone (1360 sf/unit).	In addition to the lower intensity scenario changes, increase the allowable density in Pasadena's RM-32 zone from 1,360 to 800 sf/unit.
Increasing density in single family residential zones	Upzone Pasadena's single family RS-4 and RS-6 zones to allow duplexes.	Upzone RS-4 and RS-6 to allow residential development at a density of 1,500 sq ft/unit.
Reducing minimum lot width rules	Reduce the minimum required lot width for Pasadena's RS-4 zone from 75 to 50 feet, for its CO, RS-6, and RM-16 zones from 55 to 50 feet and for its PD-13, RM-16, and RM-32 zones from 60 to 50 feet.	
Reducing minimum lot area rules	Reduce the minimum required lot area for Pasadena's RS-4 zone from 12,000 to 5,000 sf, PD-13, RM-16, and RM-32 zones from 10,000 to 5,000 sf, and CO & RM-16 zones from 7,200 to 5,000 sf.	
Reducing parking requirements	For apartment units over 650 sf in area, Pasadena currently requires 2 parking spaces per studio and 1BR unit. Bring this in line with the Los Angeles standard (1 space per studio and 1.5 spaces per 1BR unit).	Pasadena currently requires only 1 parking space for apartment units less than 650 sf in area. Increase this cutoff to 1,000 sf. Eliminate guest parking requirement.

TABLE 3. GENERAL RULES APPLIED TO CULVER CITY CASE STUDY AREA

	Lower Intensity Scenario	Higher Intensity Scenario
Housing in commercial zone	no change	Increase allowable density in Culver City's CD and CG zones from 1,245 sf/unit to 800 sf/unit.
Rezoning industrial zones	Leave the M1 and M2 zones in the Los Angeles part of the neighborhood unchanged. Rezone Culver City's IG zone to CG (1,245 sf/unit).	Rezone the M1 and M2 zones in the Los Angeles part of the neighborhood to CM to allow housing (800 sf/unit). Rezone Culver City's IG zone to CG and increase the allowable density in the CG zone from 1,245 to 800 sf/unit.
Increasing density in multi family residential zones	Increase the allowable density for Culver City's RMD zone from 1,500 sf/unit to the same density as its CG zone (1,245 sf/unit). Upzone the Los Angeles RD2 zoned blocks to RD1.5.	Increase the allowable density for Culver City's RMD zone from 1,500 sf/unit to 800 sf/unit. Upzone the Los Angeles RD2 zoned blocks to R3.
Increasing density in single family residential zones	There are a few R1 parcels at the fringes of this station area, but since they are separated from the station by the freeway, leave them as is. Instead of a single-family zone, the Culver City part of the Culver City station area has a R2 duplex zone. Leave as is.	Upzone Culver City's R2 duplex zone to allow residential development at a density of 1,500 sq ft/unit (equivalent to Culver City's current RMD zone).
Reducing minimum lot width rules	no change	
Reducing minimum lot area rules	no change	
Reducing parking requirements	For apartment units over 900 sf in area, Culver City currently requires 2 parking spaces per 1BR unit. Bring this in line with the Los Angeles standard.	Culver City currently requires only 1 parking space for apartment units less than 900 sf in area. Increase this cutoff to 1,000 sf. Eliminate guest parking requirement.

TABLE 4. GENERAL RULES APPLIED TO VAN NUYS CASE STUDY AREA

	Lower Intensity Scenario	Higher Intensity Scenario
Housing in commercial zone	no change	
Rezoning industrial zones	The M1 and M2 zones in this neighborhood are an important source of local working class employment. Do not rezone them.	Rezone the M1 and M2 zones in this neighborhood to CM, allowing both existing industrial uses but also housing at density 800 sf/unit.
Increasing density in multi family residential zones	no change	
Increasing density in single family residential zones	Upzone the large R1 zone in the southern half of the station area to R2.	Upzone R1 to RD1.5.
Reducing minimum lot width rules	no change	
Reducing minimum lot area rules	no change	
Reducing parking requirements	no change	

TABLE 5. GENERAL RULES APPLIED TO COMPTON CASE STUDY AREA

	Lower Intensity Scenario	Higher Intensity Scenario
Housing in commercial zone	Amend Compton's CM zone to allow housing, and set the density equal to Compton's current max density (1250 sf/unit). Increase the allowable density in the CL zone from 1,500 to 1250 sf/unit.	Amend Compton's CM zone to allow housing, and set the density at 800 sf/unit. Increase the allowable density in the CL zone from 1,500 to 800 sf/unit.
Rezoning industrial zones	Leave Compton's ML zone as is.	
Increasing density in multi family residential zones	Increase the allowable density for Compton's RM zones, from 2,500 sf/unit to the same density as its RH zone (1250 sf/unit).	In addition to the lower intensity scenario changes, increase the allowable density for the RH zone from 1,250 to 800 sf/unit.
Increasing density in single family residential zones	Upzone Compton's RL zone to allow duplexes.	Upzone the RL zoned blocks within ½ mile of the station to a density of 1,500 sq ft/unit (equivalent to Compton's current CL zone).
Reducing minimum lot width rules	Reduce the minimum required lot width for Compton's CL zone from 70 to 50 feet.	
Reducing minimum lot area rules	Reduce the minimum required lot area for Compton's CL zone from 10,000 to 5,000 sf.	
Reducing parking requirements	Compton currently requires 1.5 parking spaces per studio unit. Bring this in line with the Los Angeles standard.	Limit parking requirement to 1 space per apartment unit less than 1,000 sf within ½ mile of the station. Eliminate guest parking requirement

TABLE 6. GENERAL RULES APPLIED TO PARAMOUNT/ROSECRANS CASE STUDY AREA

	Lower Intensity Scenario	Higher Intensity Scenario
Housing in commercial zone	Amend Paramount's zoning ordinance to allow housing in the CM and C3 zones, and set the density equal to Paramount's current max density (2,000 sf/unit).	Amend Paramount's zoning ordinance to allow housing in the CM and C3 zones, and set the density at 800 sf/unit.
Rezoning industrial zones	Targeted rezoning of Paramount's of the swap meet site and parking lot from M1 to RM, set allowable density to Paramount's current max of 2,000 sf/unit.	Expanded rezoning of Paramount's industrial zones, applied to all M1 and M2 zoned blocks less than ¼ mile from station, plus the M1 blocks on Somerset Ave. Allow housing and set density to 800 sf/unit.
Increasing density in multi family residential zones	Allowable density in Paramount's RM zone varies by lot width from 2,000 to 4,000 sf/unit. Set the density to 1,500 sf/unit for all lot widths.	Set the allowable density for RM zoned blocks within ½ mile of the station to 800 sf/unit.
Increasing density in single family residential zones	Upzone Paramount's R1 zone to allow duplexes.	Upzone Paramount's R1 zone to a density of 1,500 sq ft/unit
Reducing minimum lot width rules	Reduce the minimum required lot width for Paramount's RM zone from 60 to 50 feet.	
Reducing minimum lot area rules	Reduce the minimum required lot area for Paramount's RM zone from 10,000 to 5,000 sf.	
Reducing parking requirements	Paramount currently requires 2 parking spaces per studio and 1BR unit. Bring this in line with the Los Angeles standard.	Limit parking requirement to 1 space per apartment unit less than 1,000 sf within ½ mile of the station. Eliminate guest parking requirement.

TABLE 7. GENERAL RULES APPLIED TO LEIMERT PARK CASE STUDY AREA

	Lower Intensity Scenario	Higher Intensity Scenario
Housing in commercial zone	no change	
Rezoning industrial zones	not applicable	
Increasing density in multi family residential zones	no change	
Increasing density in single family residential zones	Upzone both the City and County of LA's respective R1 zones to R2.	Upzone the City of LA's R1 to RD1.5 and the County of LA's R1 to R3 (both have a density of 1,500 sq ft/unit). Upzone LA's R2 to RD1.5 as well.
Reducing minimum lot width rules	no change	
Reducing minimum lot area rules	no change	
Reducing parking requirements	no change	

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