



South Bay Cities Mixed-Use Guidebook

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Executive Summary: What South Bay Cities Should Do

Over the past three years, the South Bay Cities Council of Governments has been engaged in an effort to understand how mixed-use districts in the South Bay really work.

The purpose of the project was to identify strategies for dealing with additional growth and density that are tailored to the South Bay and its cities, rather than just adopting a cookie-cutter formula derived from principles of “smart growth” or “New Urbanism”. Our focus is on finding strategies that will allow additional housing to be accommodated while minimizing the traffic impact.

This Guidebook is based on extensive research on eight different horizontal mixed-use districts throughout the South Bay. Four districts were classified by the research team as “centers” and four were classified as “corridors”. The four centers were Riviera Village in Redondo Beach, Downtown Torrance, Downtown El Segundo, and Downtown Inglewood. The four corridors were Hawthorne Boulevard in Hawthorne, the area around Hawthorne Boulevard and Pacific Coast Highway in Torrance, Artesia Boulevard in Redondo Beach, and Gardena Boulevard in Gardena.

In each study area, the research team collected a large amount of objective data, including demographic and housing data, parcel and building data from the Los Angeles County Assessor, business data, and traffic, bus ridership, and pedestrian data .

The research team also conducted three different types of surveys: a survey of residents, a survey of employees, and a “sidewalk survey”. The responses to these surveys provide the “performance” part of the puzzle in this report.

Research Conclusions

The strategies in this Guidebook are based on conclusions we drew from the three-year research project described above. More detail is available in each of the three annual reports on the research project, which can be found on the COG’s web site. (www.southbaycities.org). The major conclusions from the research project include the following:

1. Almost Everybody Drives to Work

Typical of metropolitan Los Angeles, about three-quarters of the residents of our study areas drive to work alone, and they travel close to a half-hour to reach their jobs. Most of the remaining one-quarter of the residents either carpool or work at home. Few employees commute by public transit, bicycling, or walking. There appears to be more public transit use among lower-income residents.

2. Transportation Performance Is Improved Through A Concentration of Many Activities, Not Just Additional Housing Density

The mere introduction of more housing density does not necessarily alter people's travel habits. Our research contains considerable evidence that *a concentration of activities*, rather than just *higher housing densities*, can have an impact on transportation performance. The more that housing, employment, and certain types of retail and service activities are located in close proximity to one another, the more likely nearby residents are to patronize their local area and the more likely they are to walk, rather than drive, for their daily errands.

3. Transportation Performance Is Improved Through a Specific Mix of Retail Businesses

It is clear that the presence of retail businesses in a mixed-use district can make a mixed-use district more attractive to surrounding residents and affect both their travel patterns and the mode of transportation they use. However, it is not the mere *presence* of retail businesses that makes the biggest difference. Rather, the presence of certain *types and combinations* of retail businesses affects performance.

4. Centers and Corridors Are Different

Because the business district in a center is several blocks deep, businesses are organized in a more concentrated way. Among other things, this appears to reduce the overall "trip length" for nearby residents, because they do not have to travel up and down a corridor to reach an individual business. Corridors, by contrast, are designed to provide businesses and services primarily for those traveling up and down the arterial street.

5. Some People Will Always Drive

Remarkably, even in those mixed-use districts with high-density housing, a good mix of retail businesses, and a pedestrian-friendly environment, 25% to 40% of nearby residents still drive from their homes to the businesses in the district. In the case of corridors, most people drive to the nearby business district even when it is extremely close. The bottom line is that in both cases, a large percentage of nearby residents drive $\frac{1}{4}$ of a mile or less to their destination.

Strategies for Creating and Enhancing Mixed-Use Districts

To accommodate even a modest amount of additional residential density in the future – and minimize additional auto travel in the process – the South Bay will have to find ways to create or enhance mixed-use districts that create a concentration of activities in small geographical areas. It's important to note that the following strategies are just that –

strategies. They are *not* suggested development standards. Most discussion about accommodating density and additional development focuses on land-use regulations, development standards, and codes. Yet our research suggests that development standards themselves are only a small part of the solution. In order to build successful mixed-use districts, the South Bay cities must take a different and much broader approach, including locating civic buildings and targeting economic development efforts to a specific business mix that will reinforce the strength and attractiveness of a mixed-use district to the surrounding residents and the employees in the vicinity.

Strategy 1: Focus on concentration, not density

As we stated in the research conclusions, simply introducing housing density in either a center or a corridor will not fundamentally alter travel patterns. Instead, cities should focus on creating a dense concentration of activities of all kinds in the mixed-use district – not just housing but also employment, shopping, and recreational and civic uses. This can be accomplished through a variety of means, including:

1. *Locate new civic institutions in the mixed-use district, or leverage new projects off of the presence of such institutions already.*
2. *Intensify employment as well as housing in the mixed-use district.*
3. *Maintain a diverse mix of land uses within the mixed-use district.*

Strategy 2: Focus on “horizontal mixed use” as well as “vertical mixed use”

In the mostly suburban-scale setting in the South Bay, mixed-use buildings should not be viewed as the only solution. The whole concept of “mixed use” does not necessarily mean uses must be placed *on top of* each other. Rather, uses can also be placed *in extremely close proximity* to one another and provide similar travel benefits. The horizontal strategy is especially useful in locations where building height is a sensitive political issue, because it permits housing density and a concentration of activity without requiring tall buildings

Strategy 3: Focus on the mix of businesses and services

People are drawn to a location not only because of the physical environment, but also because of what there is to do. Again and again, we found that both trip capture and mode split – though especially trip capture – are heavily influenced by the businesses and services available in the mixed use district. There is no “magic formula” for what the retail or business mix in a mixed-use district should be, but there are rules of thumb.

No matter what the strategy is, however, South Bay cities must take a more hands-on approach to guiding the retail and business mix in these mixed-use centers. This requires moving beyond traditional planning approaches and using economic development tools in this arena.

Here are four strategies that our research suggests all cities should follow.

1. *Focus on food*
2. *Focus on neighborhood services*
3. *Understand and strengthen the role your mixed-use district plays in the subregional economy*
4. *Combine planning and economic development efforts*

Strategy 4. Find and strengthen the “center” aspect of a mixed-use district wherever possible

Most of the South Bay is located along commercial corridors. It is not possible to convert corridors into centers. But it is possible to find locations throughout the South Bay that have center-like characteristics or lend themselves to a centers-oriented approach. These include:

1. Locations where large blocks of land adjacent to a corridor hold the possibility of creating a center, as with the Hawthorne Plaza site in Hawthorne, and
2. Locations which have a corridor design but do not have much through traffic, as with Gardena Boulevard in Gardena and Narbonne Avenue in Lomita.

Strategy 5. Experiment with neighborhood vehicles and neighborhood parking strategies

Mixed-use districts – even when they are successful – will still draw a large number of drivers. Therefore, some South Bay communities may want to experiment with neighborhood vehicles – smaller vehicles designed purely for local transportation – and with alternative parking strategies that will make better use of the parking resources already available in the districts.

Neighborhood vehicles hold great potential in the area of parking. Because they are only a fraction of the size of regular cars, neighborhood vehicles effectively increase the available parking supply. However, neighborhood vehicles also require low-speed street conditions as well

Our research concluded that virtually all of the centers and corridors we studied had an ample amount of parking. Virtually all of our study areas had approximately 2,000 parking spaces or more – enough to meet standard suburban parking code requirements for a shopping center of at least 500,000 square feet. Most had low parking utilization rates most of the time.

Creating a concentration of activities will permit more drivers to use a “park once” approach within the mixed-use district. But in the South Bay, which is generally transit-poor, large numbers of visitors to the district – residents, employees, shoppers – will enter and exit the district by car. This can be accomplished in several ways, including:

1. *Encourage public use of private parking lots and garages*
2. *Unbundle parking requirements for new condominiums – EXPLAIN UNBUNDLE*
3. *Create a credit system for unused on-street parking - EXPLAIN*

Strategy 6. Consider a multijurisdictional effort to revamp corridors into boulevard-type streets more appropriate to mixed-use districts.

There might be some instances where corridors can be revamped so that they serve a less traditional arterial role and, instead, emerge as locations that are more oriented toward local residents. These arterials might be able to incorporate some of the design changes described above. But such corridors would have to be selected and planned carefully, and most likely would require interjurisdictional cooperation.

If a single jurisdiction chose to transform one portion of one corridor into a slower-moving, residentially oriented boulevard, the traffic impact on surrounding corridors – and on surrounding cities – could be considerable. The creation of such a corridor would have to be coordinated with a revamped traffic management system across a wide area. In addition, such a corridor might be more effective if it crossed jurisdictional boundaries.

Introduction and Background

Over the past three years, the South Bay Cities Council of Governments has been engaged in an effort to understand how mixed-use districts in the South Bay really work.

The purpose of the project was to identify strategies for dealing with additional growth and density that are tailored to the South Bay and its cities, rather than just adopting a cookie-cutter formula derived from principles of “smart growth” or “New Urbanism”. Our focus is on finding strategies that will allow additional housing to be accommodated while minimizing the traffic impact.

The South Bay is expected to accommodate about a 20% increase in population and jobs over the next 20 years, even though the subregion is almost out of vacant land. SCAG’s “2% Strategy” for growth management – which emerged from the regionwide Compass growth visioning exercise -- recommends adding housing to each subregion in the form of compact, mixed-use development projects, preferably in existing centers and along significant corridors (which make up perhaps 2% of the SCAG region’s land mass). But the South Bay has a particular type of urban form that provides both opportunities and challenges in implementing the “2% Strategy”.

Many South Bay cities date back to the late 19th and early 20th Centuries. Thus, the South Bay’s urban form, while predominantly suburban in nature, is more varied than the form of other suburban areas. The decades have left a patchwork legacy of older town centers, some well-planned pre-war residential areas, much strip commercial development, a few large shopping-only and employment-only centers, many conventional postwar subdivisions, and, increasingly, multi-family residential development. The suburban-style development – though auto-oriented – revolves around a subregional system of arterial strips, rather than freeways. Because the South Bay does not have a large network of freeways, these arterial streets often serve the same function as freeways by carrying large volumes of traffic over relatively long distances.

This variation has blessed the South Bay with a large number of village-scale town centers, as well as a large number of arterial strips and intersections. Generally speaking, these areas have not evolved into large regional entertainment or employment centers; rather, they have tended to remain local centers. But they do represent a significant and varied set of opportunities on which the next generation of development in the South Bay may be built – opportunities that could help to implement the 2% strategy. The experience of these centers and strips may also provide guidance for how best to accommodate the next generation of development – especially housing – in emerging locations throughout the South Bay, such as the employment centers surrounding the Green Line stations, which are also likely targets for the 2% strategy.

This Guidebook is based on extensive research on eight different horizontal mixed-use districts throughout the South Bay. Four districts were classified by the research team as “centers” and four were classified as “corridors”. The “centers” are generally older

downtowns with commercial and mixed-use areas that stretch several blocks deep. The “corridors” are generally older strip commercial areas along an arterial boulevard with commercial areas located only on the arterial frontage.

The four centers were Riviera Village in Redondo Beach, Downtown Torrance, Downtown El Segundo, and Downtown Inglewood.

The four corridors were Hawthorne Boulevard in Hawthorne, the area around Hawthorne Boulevard and Pacific Coast Highway in Torrance, Artesia Boulevard in Redondo Beach, and Gardena Boulevard in Gardena.

In each study area, the research team collected a large amount of objective data, including demographic and housing data, parcel and building data from the Los Angeles County Assessor, business data, and traffic, bus ridership, and pedestrian data.

The research team also conducted three different types of surveys: a survey of residents, a survey of employees, and a “sidewalk survey”. The responses to these surveys provide the “performance” part of the puzzle in this report.

The surveys covered a broad array of travel behavior questions. Of the three, the residential survey was by far the most rigorous and widely administered. More than 2,500 resident surveys in the eight study areas were completed and coded by the research team.

The background reports that accompany this Guidebook analyze these research results in detail, focusing especially on those factors that seem to increase a mixed-use district’s *trip capture* – that is, how frequently nearby residents use the study area – and those factors that seem to affect a mixed-use district’s *mode split* – that is, how these nearby residents get to the study area. We also focused on the question of *trip generation* – that is, how many walking and driving trips per day are generated by residents living in the immediate vicinity of a mixed-use district.

Research Conclusions

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1. Almost Everybody Drives to Work

Typical of metropolitan Los Angeles, about three-quarters of the residents of our study areas drive to work alone, and they travel close to a half-hour to reach their jobs. Most of the remaining one-quarter of the residents either carpool or work at home. Few employees commute by public transit, bicycling, or walking. There appears to be more public transit use among lower-income residents.

There is some evidence that large job centers in close proximity to our study areas – for example, American Honda in Torrance and Chevron in El Segundo – do employ some nearby residents, who drive a short distance to work. But these numbers appear small.

Thus, any strategy to add housing and/or job density to a mixed-use district is not likely to alter peak-hour traffic patterns significantly, especially if few alternatives to the automobile are available. Additional housing built anywhere in the South Bay – in mixed-use districts or not – will likely add to morning and afternoon peak-hour traffic. Most transportation savings will likely come from off-peak personal trips, which are scattered throughout the day and on the weekend. This is still a potentially significant source of improvement, as off-peak personal trips typically account for around 80% of all trips.

2. Transportation Performance Is Improved Through A Concentration of Many Activities, Not Just Additional Housing Density

Strategies for accommodating additional growth typically focus on increasing housing density. This is understandable because housing typically consumes most of the land in a community and, in older communities such as those in the South Bay, land for new housing is scarce. Partly because of land scarcity, the cost of providing new housing at low densities in the South Bay and elsewhere in Los Angeles is prohibitive, except in cases where a market exists for homes that will sell well into the seven figures.

The mere introduction of more housing density does not necessarily alter people's travel habits. Travel habits change when people live or work in close proximity to other activities, and the more land that is devoted to housing – even high-density housing – the less land is available for other activities. In other words, a monolithic landscape of

townhomes, apartments, and condominiums is simply replicating the typical suburban pattern of segregated uses, only at higher densities.

However, our research contains considerable evidence that *a concentration of activities*, rather than just *higher housing densities*, can have an impact on transportation performance. The more that housing, employment, and certain types of retail and service activities are located in close proximity to one another, the more likely nearby residents are to patronize their local area and the more likely they are to walk, rather than drive, for their daily errands.

Based on our research, we cannot say with certainty or precision why this is the case. As we stated above, very few people who live in or near a mixed-use district will also work in that same district. But the presence of daytime employees probably nurtures a larger and more diversified base of businesses – especially restaurants and retail businesses – that residents can then use. Thus, there is likely a synergy between employees and residents in creating a customer base for local businesses.

3. Transportation Performance Is Improved Through a Specific Mix of Retail Businesses

It is clear that the presence of retail businesses in a mixed-use district can make a mixed-use district more attractive to surrounding residents and affect both their travel patterns and the mode of transportation they use. However, it is not the mere *presence* of retail businesses that makes the biggest difference. Rather, the presence of certain *types and combinations* of retail businesses affects performance.

Our travel behavior surveys consistently found that retail businesses associated with food are attractive to surrounding residents and often seem to be associated not only with higher trip capture but also with more walking trips, especially in the centers. (The conversion to walking trips was not so true in corridors.) This is true for both restaurants and food markets. It may seem counterintuitive that food markets would seem to be associated with more walking trips, since food marketing is often done in bulk, but our analyses consistently found this to be the case.

We also found that the presence of certain types of neighborhood businesses and services can also affect transportation performance, but in different ways. For example, the presence of businesses that can serve people in their personal shopping – discount retail stores, for example – can increase the trip capture, but not surprisingly most of those trips will be driving trips. Similarly, a wide variety of neighborhood businesses can increase a mixed-use district's attractiveness to surrounding residents.

Furthermore, different mixed-use districts might serve different functions for their surrounding residents – and the residents themselves might be different – and so the same retail strategy may not work in different districts. A collection of mom-and-pop businesses might thrive in one location, because of neighborhood loyalty, but die in another, where surrounding residents would prefer the predictability of chain stores. (Of course, loyalties can change over time as well.) The presence of many hair salons may

increase a district's attractiveness to surrounding residents in one area but not another, depending on who the hair salon's clientele is.

4. Centers and Corridors Are Different

Our study areas were broken down into two categories: centers and corridors. The difference is mostly a matter of physical form.

Centers include business districts that are several blocks deep and are mostly protected from through traffic. In addition, they are best described as “inward-looking,” meaning they focus on activities within rather than connecting to activities outside the center. They are close to, but not “on,” busy arterials.

Corridors include business districts that are located along an arterial street that carries through traffic, with residences in close proximity behind the businesses. Corridors tend not to be inward looking; rather, they are focused on the linear connection to other areas, often with an auto-orientation, because of their location along busy arterials.

Although we divided our study areas into centers and corridors, each study area had – in varying degrees – some aspects of both. Nevertheless, it is possible to make generalizations.

It is much easier for centers to attract trips from surrounding neighborhoods than corridors. Because the business district in a center is several blocks deep, businesses are organized in a more concentrated way. Among other things, this appears to reduce the overall “trip length” for nearby residents, because they do not have to travel up and down a corridor to reach an individual business. (Nearby housing is likely to be located closer to a wide variety of businesses in a center than along a corridor.) It may also be true that nearby residents can reach a variety of businesses in close proximity to one another more easily. Centers also provide a better pedestrian environment. Through traffic is typically diverted around them, so even business-oriented streets – though they may be wide – are not especially busy or fast-moving. There is some evidence that the shorter trip lengths and a more pedestrian-oriented environment may lead to some “induced travel” in centers. That is, people may take more trips to the center, because of convenience and environment, than they would take to run the same errands along a corridor.

Corridors, by contrast, are designed to provide businesses and services primarily for those traveling up and down the arterial street. These patrons include residents from nearby areas, but they also include through travelers, including bus riders on heavily used bus routes. Corridors tend to draw from a broader geographical area and tend to create a driving, rather than walking, environment.

This is not to say that corridors are not capable of drawing patrons from surrounding areas. In some of our corridor study areas, trip capture from surrounding neighborhoods was very high. But the nature of those trips is likely different than in centers. They are far more likely to be taken in an automobile rather than on foot. This is not only because the

walking environment is likely to be less pleasant, but also because the businesses are further apart – strung along the corridor rather than bunched together in a center.

5. Some People Will Always Drive

Remarkably, even in those mixed-use districts with high-density housing, a good mix of retail businesses, and a pedestrian-friendly environment, 25% to 40% of nearby residents still drive from their homes to the businesses in the district. In the case of corridors, most people drive to the nearby business district even when it is extremely close. The bottom line is that in both cases, a large percentage of nearby residents drive $\frac{1}{4}$ of a mile or less to their destination.

One of the lessons here is that successful mixed-use districts are likely to create localized traffic congestion even if they reduce overall travel because they have high trip capture and a high percentage of walking trips. Even if most residents walk to a mixed-use district because it is a focus of concentrated activity, those activities are likely to draw more people who drive. And, as stated above, a larger percentage of nearby residents are likely to drive no matter what, thus adding to local traffic.

Strategies for Creating and Enhancing Mixed-Use Districts

The South Bay has a particular type of development pattern based on a one-square-mile arterial street grid with commercial on the corridors, residential in between the corridors, occasionally interrupted by the 405 Freeway. It is low-rise, auto-oriented, and focused largely around commercially based arterial streets as well as large single-use centers such as shopping malls and employment districts. Although the overall pattern is suburban in nature, there are many pockets of high-density housing, often in close proximity to employment or shopping districts.

To accommodate even a modest amount of additional residential density in the future – and minimize additional auto travel in the process – the South Bay will have to find ways to create or enhance mixed-use districts that create a concentration of activities in small geographical areas. The following strategies are intended to assist cities in the South Bay with this task.

The overall goal of a mixed-use district is to maximize the amount of human activity in a geographical area while minimizing the traffic impact. Achieving this goal requires not just a different set of strategies but a shift in thinking. A city must consider not only traditional land-use matters – use, density, parking on site – but also a variety of economic factors and district-level concerns. For example, the business mix must be attractive to surrounding residents. Parking must be available in the right amounts in the right places within the district.

A mixed-use district must also operate at the right scale. An area with a ¼-mile radius from a centerpoint is about 125 acres in size.

One way to think about a successful mixed-use district in the context of the South Bay is to think of it as a kind of multi-use mall. A retail-only mall, such as Del Amo Fashion Center or The Galleria at South Bay, draws a large number of residents from the surrounding area to a particular location and then encourages those residents to “park once” while they walk as pedestrians to many retail locations, often in a pleasant walking environment protected from traffic. In addition, mall owners manage their business tenants very carefully, usually allocating their retail square footage according to a formula designed to maximize traffic and sales.

A mixed-use district is similar in the sense that it should be designed to allow a “park once” approach with a pleasant walking environment for people to travel to many destinations on foot. However, it also includes housing, office-based jobs, and sometimes civic services such as libraries, schools, and post offices as well, thus allowing residents to travel without their cars sometimes and have access to a much greater variety of destinations than just retail stores. As in a mall, great attention must be paid to the

allocation of land and built square footage to different land uses and different types of businesses and activities.

It's important to note that the following strategies are just that – strategies. They are *not* suggested development standards. Most discussion about accommodating density and additional development focuses on land-use regulations, development standards, and codes. Yet our research suggests that development standards themselves are only a small part of the solution. In order to build successful mixed-use districts, the South Bay cities must take a different and much broader approach, including locating civic buildings and targeting economic development efforts to a specific business mix that will reinforce the strength and attractiveness of a mixed-use district to the surrounding residents and the employees in the vicinity. This requires planning and economic development efforts to be coordinated.

Strategy 1: Focus on concentration, not density

As we stated in the research conclusions, simply introducing housing density in either a center or a corridor will not fundamentally alter travel patterns. Instead, cities should focus on creating a dense concentration of activities of all kinds in the mixed-use district – not just housing but also employment, shopping, and recreational and civic uses.

Actually implementing a “concentration” strategy, as opposed to a “density” strategy, will vary from place to place within the South Bay. But the essence of the strategy is to ensure that the concentration includes a variety of activities – housing, employment, retail, civic institutions – without surrendering the district to just one of these activities.

In many cases, the most obvious way to diversify an area’s land use will be to add housing to a commercial district – most usually a shopping center with surface parking lots. This strategy makes sense when the district contains little or no housing already. But the transportation performance of the mixed-use districts will be optimized when there is a concentration of all types of activities, not just more housing. This approach will also create more potential for successful transit alternatives.

More specific strategies include the following:

1. *Locate new civic institutions in the mixed-use district, or leverage new projects off of the presence of such institutions already.*

Cities typically seek to create mixed-use districts by leveraging their regulatory control over private development projects, especially housing. But our research suggests that the people who live in or near those mixed-use districts are more likely to actually *use* them if there are a wide variety of compelling destinations in the mixed-use district itself.

Most of our study areas – especially the centers – have a significant civic presence. Downtown El Segundo contains both City Hall and several schools, Downtown Torrance contains Torrance High School, and Downtown Inglewood contains both city hall and a county courthouse. Some of the corridors also have a civic presence, including the city hall in Hawthorne. Some of the study areas also have a post office. At least four (El Segundo, Inglewood, Hawthorne, and Gardena) in the study area or close to it.

The mere presence of a civic institution does not guarantee a change in the travel behavior of nearby residents. A school may be attractive mostly to parents, and the demographics of our study areas – especially the affluent ones – suggest that most nearby residents probably do not have children at home. Similarly, the survey results did not find that residents were traveling to the study areas for a

large number of meetings. None of the study areas contained large entertainment or cultural venues.

One factor may be the scale of some civic institutions such as city halls or civic centers, especially in the context of a geographically small mixed-use district. A civic center can consume a large amount of land. Any time one land use consumes a large percentage of a mixed-use district's land supply, it is more difficult for the center to improve its transportation performance.

Civic institutions should not be isolated but, rather, should be used to help create a concentration of activity in a mixed-use district whether it is a center or a corridor. In addition, the creation of civic institutions represents a step that cities have the ability to take. Given the difficulty in using eminent domain for economic development purposes, civic institutions provide an opportunity for cities to anchor a mixed-use district pro-actively.

2. *Intensify employment as well as housing in the mixed-use district.*

There is considerable evidence in our research that surrounding residents are more likely to conduct more of their daily activities in a mixed-use center – and even walk more frequently – if that center also contains a large number of jobs.

From the point of view of a district's commercial viability, adding employment is similar to adding residents: More people are located in close proximity to the district on a daily basis, so there will be a larger and more diverse customer base for those businesses. The buying power of employees is combined with the buying power of residents to create more business activity. This, in turn, will make the mix of businesses in the district more attractive to the residents.

The goal here is not to literally create a live/work environment – most people won't work where they live – but to create a dense concentration of different types of activities, partly so that there will be both a daytime and evening/weekend market for local businesses.

This strategy works best if, as is the case with American Honda in Torrance, the employees and the residents have similar buying power. (Both are white-collar populations.) Adding only low-paying retail jobs, for example, in a district with affluent residents is less likely to create the synergy between employees and residents that is required to make the mixed-use district more attractive to both.

3. *Maintain a diverse mix of land uses within the mixed-use district.*

The land in the mixed-use district should be devoted to a variety of different uses – residential of various densities, retail, office, civic uses, and some mixed-use

buildings as well. No single land use should occupy more than 40-45% of the mixed-use district's land. When a single land use consumes most of the land supply, it is more likely that the area will be auto oriented. A greater mixture holds the potential for more walking and may also make alternative transportation solutions – such as local transit – more viable.

This may sound like an easy logical or even easy strategy to pursue, but it is actually difficult to accomplish in the face of short-term market forces and local political considerations. In real estate, different types of development tend to become “hot” at different times. For example, in the last decade, condominium projects have been the hottest real estate properties throughout Los Angeles, meaning condo development has been able to outbid virtually all other land uses for scarce urban property. Condo developers have even been outbidding shopping center developers for property zoned for commercial development.

This has placed tremendous pressure on local governments to rezone commercial property for residential development. In many – if not most – situations, such rezoning is appropriate. Many commercial areas do not meet the needs of current retailers and more housing is needed in the market. However, the commercial uses in these areas should not be completely replaced with residential development.

The best way to monitor this situation is to monitor the amount of land devoted to different uses. (The most successful mixed-use districts in our study had between 28% and 48% of land devoted to residential use.) In some cases, the city may have to reject a developer's proposal for a new project because it is the wrong use; or else subsidize a project that the market would not otherwise provide. Nevertheless, it is essential to maintain diversity in land uses in order to achieve a concentration of activities

It is important to note that a successful mixed-use district always holds the potential to create localized traffic congestion, as people from other locations commute to work or arrive in search of restaurants or shopping. Overall driving in the city or the region will probably decrease, especially because nearby residents drive less and outside patrons can use a “park once” strategy. But there is no question that such localized traffic congestion could cause political concern.

This congestion can be handled in many ways. If parking garages are strategically located or valet parking is provided, employees or patrons can be diverted off streets quickly and are less likely to disrupt the surrounding neighborhood. Active business associations can play an important role in such parking management strategies. In addition, most successful mixed-use districts have a street configuration that requires low speeds, meaning that even when traffic is congested, it is not fast moving within the district itself. (Traffic speed will increase, of course, once drivers reach nearby arterials.)

Profile: Riviera Village

Riviera Village in Redondo Beach was the single best-performing mixed-use district in our study. It ranked second in trip capture and first in mode split (% of nearby residents who walk to the center).

There are many factors involved in Riviera Village's success, but one of them is a dense concentration of certain types of business activity in close proximity to dense housing. The Riviera Village commercial core is only about 60 acres, yet the area has 43 beauty shops and 21 clothing stores, as well as a Trader Joe's. Relatively large apartment and condo buildings facing the ocean are located only a couple of blocks away.

Obviously, many of the businesses in Riviera Village are not purely local – that is, their customer base does not consist exclusively of residents in the neighborhood immediately surrounding the commercial core. These businesses succeed partly because Riviera Village serves as a shopping center for residents “up the hill” on the Palos Verdes Peninsula. But residents of the surrounding neighborhood benefit from this fact. Riviera Village has more shopping alternatives and is more attractive to the surrounding residents because it also serves a market area that is somewhat farther away. Because both Riviera Village and the ocean nearby draw recreational walkers, this adds more patrons to the shopping experience.

Profile: Downtown Torrance

Downtown Torrance was the second most successful mixed-use district in our research. It ranked first in trip capture and second in the percentage of walkers.

In many ways, this is a surprise. Downtown Torrance had among the lowest population and housing densities of any study area. The percentage of land devoted to residential use is the lowest of any area we examined. And the retail base is weaker than in most of the other areas. Many businesses appear marginal.

Yet Downtown Torrance has lots of jobs. This is due mostly to the presence of American Honda Co., which is located right across Torrance Boulevard from the commercial core of Downtown Torrance. Although anecdotal evidence suggests that design considerations prevent many Honda workers from patronizing the downtown area (crossing the arterial on foot is not easy), clearly the close proximity of such a large daytime population expands the customer base for many businesses, especially restaurants.

Strategy 2: Focus on “horizontal mixed use” as well as “vertical mixed use”

Much smart growth theory focuses on mixed-use buildings – buildings that have retail on the ground floor with office and/or residential above. Such mixed-use buildings provide great benefits. They allow cities to make more efficient use of limited land resources by going “up instead of out”. Mixed-use buildings also hold the potential to create transportation efficiency by placing residences and offices in extremely close – often vertical – proximity to stores and other services.

However, in the mostly suburban-scale setting in the South Bay, mixed-use buildings should not be viewed as the only solution. The whole concept of “mixed use” does not necessarily mean uses must be placed *on top of* each other. Rather, uses can also be placed *in extremely close proximity* to one another and provide similar travel benefits.

The horizontal strategy is especially useful in locations where building height is a sensitive political issue, because it permits housing density and a concentration of activity without requiring tall buildings. For example, it is possible that buildings could be two stories high instead of three, or three stories high instead of four.

It should be noted that current market economics favor buildings at least three stories high for infill development in most parts of the Los Angeles area, especially for mixed-use projects on commercial strips. It is uneconomical for most developers to raze a one-story commercial building in order to replace it with a two-story building with retail on the bottom and office or residential above. Most residential-only infill developers favor three-story buildings as well, but often this is the result of parking standards. Developers build a parking deck on the ground floor with two-story units above. Residential buildings could be two stories high with no loss of density if subterranean parking is cost-effective (not typical in the South Bay) or if shared parking is used throughout the mixed-use district so that on-site parking ratios can be reduced.

Strategy 3: Focus on the mix of businesses and services

In planning for mixed-use districts, urban planners tend to focus on physical improvements – the massing and scale of buildings, streetscape improvements, and so forth. But physical improvements alone do not determine the success of a mixed-use center. People are drawn to a location not only because of the physical environment, but also because of what there is to do. Again and again, we found that both trip capture and mode split – though especially trip capture – are heavily influenced by the businesses and services available in the mixed use district. This emerged from our quantitative analysis and also from our focus groups.

There is no “magic formula” for what the retail or business mix in a mixed-use district should be. Much depends on the local context and the role that the mixed-use district plays in the surrounding economy. Before deciding on a mix of businesses, it is important to understand the role your mixed-use district plays. Is it mostly a neighborhood-oriented place? Does it play a specialized role in the larger subregional economy because of employment or entertainment anchors? How can a specialized role be strengthened, complemented, and sustained with the addition of new businesses or activities?

No matter what the strategy is, however, South Bay cities must take a more hands-on approach to guiding the retail and business mix in these mixed-use centers. This requires moving beyond traditionally planning approaches and using economic development tools in this arena.

Here are four strategies that our research suggests all cities should follow.

1. Focus on food

Without exception, the most popular attractions of a mixed-use district for nearby residents are food outlets. Residents are drawn to their nearby mixed-use district for food more frequently than for any other purpose, and they are also more likely to walk to the nearby district in order to obtain food.

It is possible, of course, for a mixed-use district to have too many restaurants if the restaurants drive out all other businesses and all other uses. Successful commercial districts thrive when about 15-25% of the retail floor space is devoted to restaurants. Commercial districts where restaurants approach 50% of floor space hold the potential to become entertainment districts that may be more active than cities want. Also, a single-use focus on food and drink – without complementary retail and businesses – can harm the performance of a mixed-use district. El Segundo, for example, has a strong and attractive base of restaurants but a low trip capture rate, apparently because there is not enough complementary retail.

Cities should not just focus on restaurants, however. Our research consistently found that food markets also have a big influence on both trip capture and mode split. Perhaps the

best example is Riviera Village, which has a Trader Joe's in the commercial core and a conventional supermarket on the edge. Another example is El Segundo. Though El Segundo did not do well in trip capture overall, our survey and our focus group found that Cooke's Market, a smaller specialty market located right at the centerpoint of our study area, was a major attraction.

Overall food market trends bode well for such smaller markets located in mixed-use centers. In general, the food market sector is bifurcating, with Wal-Mart and other discounters gaining market share at the low end and specialty stores such as Trader Joe's and Whole Foods gaining market share at the high end; Tesco, a British chain with a similar market niche but smaller store models, is also entering the Los Angeles market. Smaller ethnic markets are also on the rise. Traditional markets such as Vons, Albertsons, and Safeway are stagnant by comparison. The high-end markets and ethnic markets are well suited for mixed-use districts.

2. Focus on neighborhood services

All of our statistical analysis showed that mixed-use districts are more successful when they have lots of neighborhood services. That is to say, the capture rate – and, in some cases, the walking rate – will increase if a mixed-use district contains activities that people travel to most frequently. We found trip capture especially, but also mode split, to be influenced by both the geographical density of these neighborhood services (the number of neighborhood businesses per acre) and the density relative to humans (the number of neighborhood businesses per capita). There is little question that, neighborhood services play an influential role.

In our research, we built on the academic literature and provided a very specific definition of neighborhood services. It did include many of the businesses otherwise categorized as food outlets, but it also included many other types of businesses and civic services. The complete list includes:

- Drug store
- Food market
- Gas station
- Post office
- Specialty food shop
- Bank
- Medical and dental office
- Dry cleaner
- Barber shop
- Beauty salon
- Liquor/wine store
- Coffee/tea/juice shop
- Bakery or donut shop
- Shoe repair

Video rental
Church
Health club

Obviously, not all of these businesses and institutions draw from a purely local clientele. A food market, a church, or a health club may draw from a larger market area. Nor will this list be the complete list forever. With the advent of online delivery of entertainment, video stores may be on the wane, while other types of stores may emerge as essential.

Nevertheless, this neighborhood services list represents a good starting point in cataloguing the types of small businesses and services that most people require in their daily life. They are, frankly, the kinds of businesses found in the typical corner mini-mall. This is even true of convenience stores. Many neighborhoods dislike convenience stores for the same reason they dislike mini-malls – they are high-traffic, auto-oriented, and not attractively designed. But our point here is not about the design. It is that the *activities* contained in the typical mini-mall are those activities people need on a daily basis. As with food markets, it is fair to conclude that it is almost impossible for the typical mixed-use district to have too many of these kinds of businesses and services. The more there are, the better the mixed-use district will perform.

Just as important is the fact that if these businesses and services are *missing* from the typical mixed-use district, that district will not be nearly as attractive to surrounding residents and therefore will lose trip capture and draw a smaller number of walkers. Perhaps the best example here is El Segundo. Though the downtown area is beloved by local residents and the restaurants draw a large number of visitors, the overall trip capture rate is low. This appears to be because the number of other retail stores is low relative to the population and some basic neighborhood services may be missing.

So South Bay cities will have to move beyond the traditional land-use considerations in designing mixed-use centers to ensure that these essential functions are present.

3. Understand and strengthen the role your mixed-use district plays in the subregional economy

In addition to serving local residents, mixed-use districts often play a specialized role in the subregional economy. Mixed-use districts will be strengthened – and their impact on transportation improved – if cities understand that role and take steps to strengthen it.

Again Riviera Village is an important example. This mixed-use district plays an important subregional role in providing certain types of retail services (such as personal care) and professional services to a larger and mostly affluent clientele outside the immediate neighborhood and, indeed, outside the host cities of Redondo Beach and Torrance. The concentration of these activities in Riviera Village increases the area's attractiveness to surrounding residents, many of whom are similarly affluent, and our anecdotal evidence suggests that this ambiance is an attraction to homebuyers.

Hawthorne Boulevard provides a very different but nonetheless useful example. Although Hawthorne Boulevard is a classic South Bay corridor and has a low walker rate, the area has a high trip capture relative to other corridors and even some centers. This appears to be due to two reasons – the mix of businesses along the corridor and the synergy between residents and employees, especially regarding restaurants.

Hawthorne Boulevard has a large amount of retail space, but virtually all of the space is leased. Most of the businesses provide people with the opportunity to conduct workaday errands. The inner Hawthorne Boulevard study area – which includes the boulevard itself – also contains 25 restaurants. These restaurants are not high end, but they serve both the local employees (many of whom work for either the city or the school district) and nearby residents. In this case, Hawthorne Boulevard’s multiple roles as residential area, commuting corridor, and workplace help shape its role in the subregional economy, its business mix, and its high trip capture rate.

In addition to understanding the role a mixed-use center plays in the daily life of its residents, cities must also understand the subregional role each mixed-use center plays as well. This understanding should be held to undergird business recruitment and retention efforts for that particular area.

In addition, cities in the South Bay should work together to understand how their mixed-use districts complement one another if they do play a specialized economic role. In that way, the cities are less likely to compete with one another for the same businesses and more likely to work collaboratively to ensure that businesses that strengthen each mixed-use district – and thereby improve the subregion’s overall transportation performance – are located in the mixed-use district where they can have the most impact.

4. Combine planning and economic development efforts

Recruiting and retaining businesses is typically the responsibility of a city’s economic development effort, not its planning effort. Economic development efforts often tend to focus on recruiting large-scale retailers and employers or else nurturing small businesses through such techniques as small business loans and façade improvement grants.

In order for mixed-use districts to succeed in the South Bay, especially from a transportation point of view, these two functions must work closely together in implementing the strategies laid out in this report.

Because the success of mixed-use districts depends partly on a concentration of employment as well as housing, economic development efforts to recruit and retain large employers should be coordinated with efforts to create and strengthen mixed-use districts.

Because the success of mixed-use districts depends strongly on the business mix and especially the neighborhood services mix, economic development efforts targeted at

small businesses should be coordinated with efforts to create and strengthen mixed-use districts. In many cases, the very businesses required to increase trip capture and improve mode split are the targets of a city's small business efforts. In some cases, a city may even take the extraordinary step of subsidizing certain small businesses – or requiring a mixed-use developer to do so – in order to ensure that specific neighborhood services are available in a mixed-use district. The developer of the Playa Vista project near LAX has subsidized small-scale retail in the interior portions of the project where such businesses might not be viable otherwise.

These efforts require innovative collaboration between planning and economic development and will also involve innovative steps, such as subsidizing specific businesses that the city believes are essential to the effective functioning of a mixed-use center. A district with a growing population that does not have a food market may have to turn to the city for facilitation or subsidy of a market in order to maximize transportation performance. Again, the business mix is just as important as the physical environment in improving the transportation performance of mixed-use centers, and so the city cannot divorce planning from economic development.

Strategy 4. Find and strengthen the “center” aspect of a mixed-use district wherever possible

One of our strongest conclusions was that centers, as we defined them, create significantly different travel behavior patterns than corridors. Centers – such as Downtown Torrance and Downtown El Segundo – are mostly characterized by a commercial district that is several blocks deep and a roadway design that diverts through traffic around the district rather than through it.

Most of the South Bay is not designed with these center-oriented features. The predominant urban pattern in the South Bay is the arterial grid, with through traffic and commercial storefronts on the arterials and residences adjacent. In most cases, the commercial property is only one parcel deep.

It is not possible to convert these corridors into centers. But it is possible to find locations throughout the South Bay that have many characteristics that lend themselves to a center-oriented approach. These include:

1. Locations where large blocks of land adjacent to a corridor hold the possibility of creating a center, as with the Hawthorne Plaza site in Hawthorne, and
2. Locations which have a corridor design but do not have much through traffic, as with Gardena Boulevard in Gardena and Narbonne Avenue in Lomita.

Large Blocks of Land Along A Corridor

A large block of land along a corridor – especially if it is deep – presents a significant opportunity to *create* a center where none exists. Most such parcels are shopping centers, though some are office complexes. Shopping centers present a greater opportunity because of the nature of retailing. Retail trends change quickly, so retail centers are more likely to be revamped or even shut down completely than office complexes. The so-called “dead mall” has become a favorite target for developers interested in building new projects (even housing projects) in crowded urban areas.

The typical large block of land along a corridor in the South Bay is not the same size or configuration as the mixed-use centers we studied in our research project. We defined our “inner” study area as a quarter-mile in each direction from a centerpoint, or a total of approximately 40 acres. Though the study areas varied, in most cases this quarter-mile radius encompassed most of the commercial core of the area (even when housing was also present).

Shopping centers tend to be long and shallow, with a maximum amount of street frontage, rather than square. They are typically bounded on at least one side -- and sometimes two or three -- by a major arterial, and they do tend to back up to a residential neighborhood nearby.

Even with these limitations, such locations hold great potential to create effective mixed-use centers that can begin to alter the travel behavior of a surrounding community. But accomplishing this goal will require more than simply adding housing to the shopping center sites, which most large mall owners are likely to do over the next decade in any event. It also requires site planning that mimics the land-use patterns of the downtown-style mixed-use centers we studied.

In this particular case, the tenets of New Urbanist-type design are appropriate. These include:

- The creation of interior streets that allow both cars and pedestrians many options for traversing the site, but at low speeds and protected from the arterial grid system.
- A variety of building types and sizes so that the district does not have a homogenous suburban character.
- A mixed-use approach, with residences in very close proximity to retail businesses and a design that permits residents to walk to those retail businesses. In some cases, mixed-use buildings might be appropriate; in others, a horizontal mixed-use approach will suffice.
- Strong connections to surrounding residential neighborhoods so that those residents as well can travel to the center on foot or in small neighborhood vehicles.

Unlike the mixed-use centers we studied, which were mostly old downtowns, these new mixed-use districts are likely to contain large-scale retail stores (“big boxes”) or other anchor businesses designed to attract customers from a large market area. In the case of a traditional South Bay downtown, this can be a problem, because patrons must drive through the center to reach their destination.

But in this case, the location along a corridor is an advantage. The mixed-use district can be designed so that patrons from outside the area can park on the edge of the district, adjacent to the big box. The big box can be auto-oriented facing the corridor and pedestrian-oriented facing the interior of the mixed-use district. This has been successfully done in a number of locations, including the prototypical Laguna West project in suburban Sacramento. But doing so presumes Hawthorne will remain a high-speed arterial. If a different approach is taken on Hawthorne, this would not be appropriate.

Opportunity: Hawthorne Plaza site

The Hawthorne Plaza in Hawthorne is probably the best current example of a large parcel along a corridor that could become a mixed-use district. It is also a good example of the

challenges cities face in working with developers to create such a district. There is little question that Hawthorne Plaza will be redeveloped with a mixture of uses. The question is whether design and function can come together in a way that maximizes the opportunities we have identified in this report.

Hawthorne Plaza includes about 25 acres of land bounded by Hawthorne Boulevard, W. 120th St., Birch Avenue, and the former location of W. 126th St. (Another 8 acres or so is located on the southern end of the side, between 126th St. and El Segundo Boulevard, but it was sold off for a conventional shopping center several years ago.) The original location of downtown Hawthorne, the site runs for about 2,000 feet along Hawthorne Boulevard and it is 600 feet (two blocks) deep. A residential neighborhood lies to the east of Birch Street.

Many necessary components for a mixed-use district are in place. Some of the old mall buildings were remodeled into office buildings. There is still abundant parking in the form of a large (if rundown) parking garage along Birch Street. A recent proposal by the property owner calls for large-scale retail along Hawthorne Boulevard and some 600 condominiums along Birch Street on top of the parking structure. Even the new shopping center just to the south is an asset to the mixed-use effort, because it contains a supermarket, which our research showed is a major factor in both trip capture and mode split.

Yet the Hawthorne Plaza property also presents major challenges to the successful creation of a mixed-use district. The biggest challenge is the presence of the existing structures – more than 1 million square feet of mall-style buildings and the parking garage. Hawthorne Plaza was built in a monolithic 1970s regional mall style, meaning street connections were closed off to allow construction of the interconnected mall buildings.

Taking full advantage of the site's potential would probably require demolition of most of the existing structures in order to permit the restoration of at least some of Hawthorne's old street grid. For example, the routes of Broadway, an east-west street, and Acacia, a north-south street, are blocked by the mall buildings. An alternative would be to restore the Broadway right of way as a paseo with a vista, rather than an actual street, as was done at Paseo Colorado (formerly Pasadena Plaza) in Pasadena.

In addition, in order to serve as an effective mixed-use center, the housing should be integrated into the street grid so that residents have easy access to the retail and to the supermarket to the south. (The old retail store converted to an office building, at the corner of Hawthorne and 120th, is well positioned as-is.)

However, the cost of so much demolition and restoring the grid streets might be prohibitive, so most developers would be unlikely to propose such a plan on their own. In addition, big box stores typically prefer to be freestanding with a large adjacent surface parking lot. Overcoming these obstacles would require close cooperation with the property owner and the big-box retail stores, and possibly a city financial investment as

well. These actions would be necessary, however, in order to realize the benefits of a mixed-use district on the Hawthorne Plaza site.

Emerging Opportunity: South Bay Galleria

A somewhat similar opportunity is likely to emerge at the South Bay Galleria in the near future. The Galleria's owner has indicated that some kind of makeover is in the offing. In addition to a retail remodeling, recent market trends would suggest that the property owner would also propose housing.

The Galleria is an even bigger site than Hawthorne Plaza (approximately 1/2 -mile long and 1/4-mile deep). But it is still unlikely that the property owner could afford to raze all the buildings on the property and "start from scratch" to create a mixed-use district. However, the Galleria has more surface parking than Hawthorne Plaza and less of the site is occupied by buildings. Therefore, the ability to change the nature of the property to be more village-style in its site plan is greater.

Opportunity: Artesia Corridor Specific Plan

Another type of opportunity for creating a center along a corridor is the area covered by the Artesia Corridor Specific Plan in Gardena. This area includes several parcels of land on the south side of Artesia between Western and Normandie. Though 44 acres in size, this area is similar in configuration to the Hawthorne Plaza site. It is about 500 feet deep (a little less than two blocks) and 3,000 feet long.

Gardena recently worked collaboratively with the property owners in devising a Specific Plan for the area. The plan calls for anchoring the east and west ends of the property with auto-oriented retailers (including a popular Japanese supermarket) and creating a linear park on the south edge of the property along Dominguez Channel. In the central part of the property, the plan calls for the creation of a half-mile-long "Main Street" paralleling Artesia that would accommodate in smaller-scale retail as well as housing in mixed-use buildings.

The Artesia Boulevard Specific Plan is an excellent example of creating a center alongside a busy corridor. Unfortunately, the configuration of the site (surrounded by three arterials and a flood control channel) means that it is completely cut off from surrounding neighborhoods. Thus, the transportation benefits that might typically result from a mixed-use district will likely not be fully realized, because even nearby residents will have to drive to the district.

Corridors With Little Through Traffic

Corridors with little through traffic, such as Gardena Boulevard or Narbonne Avenue, present a different type of opportunity and a different type of challenge. On the one hand, they create a relief from traffic and therefore a small-town feeling that can form the basis of a mixed-use district. On the other hand, the commercial property is typically only one parcel deep, meaning businesses are strung along a corridor rather than concentrated in a center. These commercial strips often back up to single-family neighborhoods. Thus, while the mix of uses is present, the concentration of activities required for a successful mixed-use district can be hard to achieve.

The introduction of more density could create more concentration of activity in a low-traffic corridor. But it is extremely difficult to introduce density in a compatible way in locations characterized by shallow commercial parcels with single-family homes behind them. In these circumstances, density should be focused on those few locations where non-residential parcels are deep or where blocks of non-residential land are concentrated.

Often, these larger blocks of land are owned by public agencies and institutions – hospitals, schools, often even the city itself. The Torrance Civic Center, for example, is a dense concentration of civic activities located at the intersection of two arterials (Torrance and Hawthorne) adjacent to an area that is characterized mostly by single-family development. Yet because these civic activities – both city and county – have been developed over many years, the land is inefficiently used. Much more development – private housing, shopping, and civic uses – could be accommodated on such a site.

Similarly, the City of Gardena holds large blocks of land in between Gardena Boulevard and 162nd Street just to the west of the Gardena Boulevard study area. The city has been purchasing additional property along 162nd Street to accommodate city operations. The city is cramped for space if it maintains a one-story operation; but the city could probably accommodate its operations and add to the concentration of activity along the Gardena Corridor by partnering with private developers on housing or business buildings.

Such a transition must be carefully planned, however, because of the proximity to single-family homes. New development could be focused on deep lots with varying building heights that step down from the commercial corridor to the existing residential areas.

Just as important in a low-traffic corridor, however, is creating the right retail mix for the area. A low-rise commercial strip will have a lot of commercial space, even if it does not have mixed-use buildings or high housing density. So the lessons associated with Strategy 3, focusing on the business and retail mix, become especially important in a low-rise commercial setting. These can increase trip capture and mode split even if a major increase in density is not anticipated.

Strategy 5. Experiment with neighborhood vehicles and neighborhood parking strategies

Our survey results show that even under ideal circumstances a large percentage of the nearby population will drive. In addition, the dropoff rate for walking is steep with distance. So mixed-use districts – even when they are successful – will still draw a large number of drivers. Therefore, some South Bay communities may want to experiment with neighborhood vehicles – smaller vehicles designed purely for local transportation – and with alternative parking strategies that will make better use of the parking resources already available in the districts.

Neighborhood Vehicles, Car-Sharing, and Local Transit

As mixed-use districts are strengthened, several alternatives to conventional automobiles emerge for local transportation and connections to other locations. These include neighborhood vehicles, car-sharing, and local transit.

In the past decade, several types of small vehicles have been introduced into the marketplace, ranging from golf-cart-like “Neighborhood Electric Vehicles” to Segways. Such vehicles hold potential for widespread use in some of the South Bay’s current and emerging mixed-use districts. Our research results only reinforced this potential by finding that, even under optimum circumstances, 25% of nearby residents will drive to a mixed-use center even if they live no more than ¼-mile away (a five-minute walk).

Neighborhood vehicles hold great potential in the area of parking. Because they are only a fraction of the size of regular cars, neighborhood vehicles effectively increase the available parking supply. However, neighborhood vehicles also require low-speed street conditions as well. They are best suited for travel within a mixed-use district, or between such a district and adjacent residential neighborhoods, when they do not have to travel along busy arterial streets with fast-moving traffic. Neighborhood vehicles are permitted to cross busy arterials on streets where the posted speed limit on the street they are traveling on is less than 35 miles per hour. Neighborhood vehicles may be better suited for centers, though they could cross corridors at signaled intersections with a slow-speed street.

Riviera Village would seem to be an excellent test site for neighborhood vehicles, since the surrounding population is older and the area is accessible from many residential neighborhoods without crossing a major arterial street. By contrast, Hawthorne Boulevard would seem not to be a promising test site because it is a busy and fast-moving corridor. However, if the Hawthorne Plaza property were redeveloped as a center, nearby residents from the East could gain access to it via neighborhood vehicles.

Car-sharing services such as Flexcar and Zipcar are growing. These services permit its members to rent full-sized automobiles and other vehicles on an hourly or fixed-fee basis, reducing or eliminating the need for individuals and businesses to own full-sized cars.

These services are increasingly becoming available in older suburban areas such as the South Bay as well. Such services – especially in combination with neighborhood vehicles – could allow residents of mixed-use districts to eliminate the need for a conventional car – or at least the second conventional car that a household might otherwise require.

In addition, strong mixed-use districts can enhance the feasibility of local transit services that use small vehicles and run on relatively short routes. Such “shuttles” could connect residents and employees to mixed-use districts if they are located a little too far to walk or in single-use districts (as in El Segundo, where a lunchtime shuttle connects the high-density employment district with the downtown). They also could connect mixed-use districts to each other, creating a network of districts close to one another that provide a wider range of services and activities. Such shuttles could also connect mixed-use district with regional transit (such as the Green Line) with express service, thus making this alternative more time-competitive with driving.

Neighborhood Parking Strategies

Our research concluded that virtually all of the centers and corridors we studied had an ample amount of parking. Virtually all of our study areas had approximately 2,000 parking spaces or more – enough to meet standard suburban parking code requirements for a shopping center of at least 500,000 square feet. In many cases, we found, this parking was not always heavily used. For example, one study cited in our technical reports found that only about 55% of the parking spaces located in the Hawthorne Boulevard median are used at any given time. (A rule of thumb among traffic engineers is the 85/15 rule – the notion that parking is at equilibrium if 85% of the spaces are occupied and 15% vacant at any given time. In this situation, parking resources are efficiently used but some spaces are available.) If Neighborhood Vehicles were encouraged, some restriping could further increase parking supply. Some land could even be returned to other uses.

Smart growth advocates often argue for reducing parking ratios as a way of using land more efficiently and making an area less auto-dependent. Residential developers in particular often argue for reducing parking ratios as a way of reducing costs and making infill development more economical. Creating a concentration of activities will permit more drivers to use a “park once” approach within the mixed-use district. But in the South Bay, which is generally transit-poor, large numbers of visitors to the district – residents, employees, shoppers – will enter and exit the district by car.

Despite the abundance of parking in the centers and corridors we studied, there remains a persistent concern that parking in mixed-use districts will be inadequate if parking ratios are reduced. As South Bay cities consider introducing more housing into mixed-use districts, they may want to consider finding new ways to capture underutilized parking to serve these new developments. The goal should be to manage parking on a districtwide basis rather than expecting each parcel to provide all necessary parking onsite.

Among the strategies South Bay cities should consider are the following:

1. Encourage public use of private parking lots and garages

Some of the most important parking resources in mixed-use districts are privately owned and operated, often for the private use of an office building or a shopping center. Although these parking spaces are available to the private users at all times, as a result they are underutilized overall. In many cases, private parking can be shared – between office buildings and dinner-oriented restaurants, for example – because peak demand occurs at different times.

In Downtown El Segundo, Chevron informally makes its private parking available to the general public at off-peak hours with no charge. This is an excellent example, though it is unusually generous. There is no reason why South Bay cities cannot create parking pools so that owners of private parking resources can be compensated – by the city, by businesses, or by the parking users – for better use of their spaces.

More efficient use of these spaces can also be encouraged by creating a coordinated pricing system that allows drivers to pay less on the periphery than in the center and less at off-peak times than peak times. New technology permits a city or a business improvement district to implement and adjust such a pricing system easily, and also provides more payment options for drivers (for example, paying at a meter via a credit card or cell phone).

2. Unbundle parking requirements for new condominiums

It is axiomatic in traditional planning practice that residential development must provide ample parking onsite -- usually two spaces per housing unit plus some additional spaces for guest parking. Smart growth advocates often argue in response that parking requirements for residential projects should be reduced.

But there is a third way to approach this question: Require condominium projects to meet certain parking requirements, but permit at least some of those parking spaces to be located offsite. This is known as “unbundling” parking requirements from the housing unit itself. It is common in large, dense cities such as New York and San Francisco, where residents who want to maintain a car typically must pay for a parking space separately from their condominium or apartment. But this idea is also adaptable to less dense mixed-use districts in the South Bay.

One approach would be to require housing developers to provide one parking space onsite and secure one offsite space, probably by leasing space in an existing public or private parking lot or garage. This approach assumes that the typical condominium unit will be occupied by two adults, each of whom will have a car; and that one of the two adults would not mind walking a short distance to their car. A more radical

approach would be to provide on space onsite and *allow*, but not *require*, the occupants to lease a second parking space if they need it.

3. Create a credit system for unused on-street parking

Most mixed-use districts have ample onstreet parking resources that are heavily used sometimes but underutilized at other times. Under a parking management system, it is possible to monitor the use of these onstreet spaces and create a credit system that allows new development projects to reduce parking requirements if onstreet parking is available.

Recently, the City of Los Angeles created a onstreet parking credit system for new development in Silver Lake. The city conducted an extensive parking survey to determine how much onstreet parking is available; and based on that survey created a system of available parking “credits”. The city now allows these credits to be applied to new development projects in lieu of providing onstreet parking spaces. An onstreet credit system works better for commercial projects than residential projects because parking spaces are occupied for shorter periods of time and at different times of the day or evening.

Such a system would seem viable in many mixed-use districts in the South Bay, where underutilized onstreet parking has been documented. Hawthorne recently used a variation on this approach for the mixed-use project planned for the South Bay Ford site on Hawthorne Boulevard.

These different strategies should not be implemented individually, but instead should be combined under an overall “parking management system” for the district. Such an approach, of course, requires ongoing parking management to be funded and operated either by the city or a business improvement district.

Strategy 6. Consider a multijurisdictional effort to revamp corridors into boulevard-type streets more appropriate to mixed-use districts.

As stated above, the defining urban form of the South Bay is built around the arterial grid system. Although some pockets will be found where center-like mixed-use districts can be created, most development opportunities in the future will likely be on relatively shallow commercial parcels along these arterial strips. Yet as residential development is constructed along arterials, more and more conflicts are likely to arise between local and regional concerns.

Arterials in the South Bay are vital for auto travel. With few freeways, South Bay residents and workers depend on the arterial streets more than most residents of Southern California. Traffic volume on arterials often exceeds 40,000 cars per day. The arterials are wide and, except during congested periods, speeds are high. New residents along these arterials are likely to prefer less traffic, slower speeds, and more walking opportunities, especially if – as is the case along many arterials – there are many restaurants, neighborhood businesses, and other destinations nearby. Such changes could also open up the possibility of using neighborhood vehicles along or across corridors.

Smart growth planners often envision a different kind of arterial, with mixed-use buildings, wider sidewalks, frontage or slip roads (a one-lane local street separated from through traffic by a parkway), fewer lanes of through traffic, and some road right-of-way devoted to bus rapid transit or light rail. In other words, they envision a “boulevard” rather than “arterial corridor”. Traffic engineers and others often express concern that this will reduce overall traffic capacity and degrade level of service. In addition, the preferred changes in the public realm require considerable capital investment.

However, there might be some instances where corridors can be revamped so that they serve a less traditional arterial role and, instead, emerge as locations that are more oriented toward local residents. These arterials might be able to incorporate some of the design changes described above.

But such corridors would have to be selected and planned carefully, and most likely would require interjurisdictional cooperation. If a single jurisdiction chose to transform one portion of one corridor into a slower-moving, residentially oriented boulevard, the traffic impact on surrounding corridors – and on surrounding cities – could be considerable. The creation of such a corridor would have to be coordinated with a revamped traffic management system across a wide area. In addition, such a corridor might be more effective if it crossed jurisdictional boundaries.

An obvious candidate for transformation from a corridor into a boulevard is Hawthorne Boulevard, especially in Lawndale and Hawthorne between the 405 Freeway and the Green Line station at the 105 Freeway. This corridor has a full complement of retail businesses and a dense concentration of many different types of housing behind it on both the east and west sides. It is a heavily used bus corridor and mixed-use development projects are being proposed in several locations, including the Hawthorne Plaza site.

Hawthorne Boulevard has an enormous right of way – as represented by the large median strip in the middle – that could accommodate slip roads, wide sidewalks, and a separate right-of-way for bus rapid transit.

However attractive this kind of transformation might be in theory, there are several practical obstacles. These include:

- The fact that Hawthorne Boulevard is a major auto-oriented arterial carrying 40,000 cars per day. It is likely that at least some of these drivers would choose alternative routes, especially Inglewood and Prairie, which parallel Hawthorne.
- The public capital cost required. Both Hawthorne and Lawndale have invested heavily in the median strip as it currently exists. Reorganizing the right of way to make it a boulevard would likely be beyond the financial capacity even of the two cities together.
- The sheer length of the corridor. Clearly, there is some demand for multistory mixed-use development along Hawthorne, but it is unlikely that enough development would occur in the foreseeable future to truly transform the private portions of Hawthorne into a truly attractive boulevard.

For this reason, the South Bay cities may choose a minor arterial such as Inglewood or Prairie as the first experiment. These minor arterials carry less traffic; they have some business activity; and they are more residentially oriented. There are pros and cons to selecting a major or a minor arterial. The major arterial requires a bigger transition; the minor arterial may not have the business mix required to be successful.

Nevertheless, the South Bay cities should consider the possibility of pursuing a pilot, multijurisdictional planning project along a corridor in the South Bay – either Hawthorne or somewhere else. Proposition 1B, the housing bond that passed last year, contains more than \$1 billion for transit-oriented development and infrastructure related to infill development. A multijurisdictional corridor project would be well positioned for such funding. The Metropolitan Transportation Authority may also have sources of revenue for such a planning effort, especially if it would facilitate the creation of a BRT corridor that connects to the Green Line.

Conclusion

The implementation of these strategies will not alleviate all traffic congestion in and around mixed-use districts in the South Bay. But they *will* allow South Bay cities to absorb more housing density with less traffic impact than would be the case with more conventional development.

In many cases, the implementation of these strategies will lessen the *overall* amount of traffic compared to other forms of development, which is good for the South Bay subregion as a whole. In some cases, these strategies will create some *localized* traffic congestion by concentrating people and activities more than would otherwise be the case.

If more people live and work in these districts – and they benefit from a wide range of activities and services in the vicinity – they are more likely to walk or drive very short distances. But the more activities and services are concentrated, the more likely it is that these centers will attract people from other locations as well. At the same time, once these folks have arrived in a mixed-use center, they are more likely to be able to “park once” and walk to many destinations, rather than driving from place to place.

This is the tradeoff involved in creating mixed-use districts that create the possibility of lesser traffic impact. Like it or not, the South Bay will absorb some additional housing and employment growth in the years ahead. Mixed-use districts cannot make the resulting traffic impact go away – but they can help minimize that impact as much as possible.