### IV. Future Market Demand and Development Program

In this section ERA estimates potential future demand for residential, retail, and office development within the study areas. The projected level of demand will inform potential absorption of alternative development scenarios presented in Section V. In order to create development programs, ERA also conducted a capacity analysis of the four study areas to determine how much density (in terms of residential and commercial development) could be accommodated based on current zoning regulations. We also discuss potential issues with current retail formats as mobility becomes more constrained in the future. Finally, ERA will present the alternative development programs based on our market analysis and direction from SBCCOG to evaluate typical mixed-use projects that might be developed in the South Bay.

# Projected Future Market Demand

Using historic and long term projections from the California Department of Finance (DOF), SCAG, and the California Economic Development Department (EDD), ERA has estimated the market support for residential, retail, and office land uses in the South Bay.

### Residential

Based on DOF estimates, the cities of Hawthorne, Redondo Beach, and Torrance have represented approximately 44 percent of all residential growth in the South Bay since 2000. Torrance alone accounted for 27 percent of the regions household growth. On average, the South Bay added just over 800 households annually, with Hawthorne adding an average 77 new households annually, Redondo Beach adding an average of 65 new households annually, and Torrance adding an average of 217 new households annually (Figure 59).

### Figure 59 Historic Household Growth – Study Areas *2000 – 2008*

City/Region	2000	2008	HH Change 2000 - 2008	Avg. HH/Year 2000 - 2008	Avg. % of HH/Year 2000 - 2008
Hawthorne	28,536	29,152	616	77	9%
Redondo Beach	28,566	29,084	518	65	8%
Torrance	54,542	56,275	1,733	217	27%
South Bay	265,701	271,382	5,681	812	100%

Source: Department of Finance and Economics Research Associates

SCAG has projected residential growth in the South Bay to 2030. ERA utilized projections in year 2020 to estimate potential growth of households in the study areas respective cities. Using current DOF household estimates and projected households by SCAG, Figure 60 presents the projected growth and assumed housing

units needed to accommodate such growth under current vacancy rates in the region. Based on these projections, Hawthorne and Torrance are expected to add approximately 135 new units a year for the next 12 years, while Redondo Beach is anticipated to accommodate the most new housing units averaging approximately 360 new units annually. Together, the three cities are expected to account for just fewer than 30 percent of new housing in the South Bay region<sup>4</sup> in the near term.

## Figure 60 Projected Household Growth – Study Areas 2008 – 2020

				Avg.	Avg.	Avg. % of
			HH Change	HH/Year	HU/Year (1)	HU/Year
City/Region	2008	2020	2008 - 2020	2008 - 2020	2008 - 2020	2001 - 2008
Hawthorne	29,152	30,683	1,531	128	133	6%
Redondo Beach	29,084	33,185	4,101	342	357	17%
Torrance	56,275	57,823	1,548	129	135	6%
South Bay	303,853	328,666	24,813	2,068	2,158	100%

Source: Department of Finance, SCAG, and Economics Research Associates

### Retail

Using the most recent year-end taxable sales data (2006) from the California State Board of Equalization (BOE), ERA analyzed the estimated the contemporary square feet of retail space and sales of South Bay residents by City. The data is not specific to the spending by area residents, but rather presents the data in terms of the spending within the city jurisdiction (Figure 61).

<sup>&</sup>lt;sup>4</sup> Does not include unincorporated areas.

# Figure 61 South Bay Retail Spending Analysis *2006*

				Retail Sales					
City/Region	Population	Household	SF Retail	(\$000)	SF/Pop	\$/Pop	SF/HH	\$/HH	\$/SF
Carson	96,475	25,703	3,310,505	\$1,303,119	34	\$13,507	129	\$50,699	\$394
El Segundo	16,906	7,134	3,794,354	\$527,957	224	\$31,229	532	\$74,006	\$139
Gardena	60,580	20,688	3,246,428	\$578,881	54	\$9,556	157	\$27,981	\$178
Hawthorne	87,772	28,663	2,973,411	\$864,272	34	\$9,847	104	\$30,153	\$291
Hermosa Beach	19,282	9,472	441,983	\$200,823	23	\$10,415	47	\$21,202	\$454
Inglewood	116,493	36,888	5,298,920	\$850,905	45	\$7,304	144	\$23,067	\$161
Lawndale	33,185	9,594	1,352,917	\$222,940	41	\$6,718	141	\$23,237	\$165
Lomita	20,887	8,044	522,518	\$128,988	25	\$6,176	65	\$16,035	\$247
Manhattan Beach	36,411	14,910	1,218,518	\$575,755	33	\$15,813	82	\$38,615	\$473
Palos Verdes Estates	14,005	5,066	24,108	\$9,964	2	\$711	5	\$1,967	\$413
Rancho Palos Verdes	42,390	15,370	541,643	\$75,790	13	\$1,788	35	\$4,931	\$140
Redondo Beach	66,781	28,938	2,943,309	\$797,885	44	\$11,948	102	\$27,572	\$271
Rolling Hills	1,960	653	0	\$940	0	\$480	0	\$1,440	-
Rolling Hills Estates	8,060	2,852	645,212	\$124,135	80	\$15,401	226	\$43,526	\$192
Torrance	145,549	55,601	10,334,828	\$3,132,949	71	\$21,525	186	\$56,347	\$303
South Bay Total	766,736	269,576	36,648,654	\$9,395,303	48	\$12,254	136	\$34,852	\$256
Los Angeles County Total	10,223,263	3,223,223	334,180,692	\$95,554,193	33	\$9,347	104	\$29,646	\$286

Source: DOF, BOE, CoStar, and Economics Research Associates

Based on ERA research and average sales per square foot of various retail uses, the following figure illustrates

demand factors on a per capita basis in Los Angeles County.

### Figure 62 Retail Demand Factors for Los Angeles County *2006*

Potail Liso	Square Feet
Retail USe	Fei Capila
Local Serving	
Supermarket	4.8
Convenience	1.7
Strip Retail/Miscellaneous	1.2
Service Stations	<u>1.5</u>
Subtotal	9.2
<u>Sub-Regional</u>	
Discount Stores	2.3
Super Drugstores	1.1
Home Improvement/Building Materials, Home	
Furnishings	4.5
Restaurant	4.0
Cinemas	<u>0.8</u>
Subtotal	12.7
<u>Regional</u>	
Department Stores	2.3

Apparel/Specialty Category/Other	2.8	
Automotive, Boats, Vehicular Sales	4.3	
Entertainment/Specialty Centers	<u>2.2</u>	
Subtotal	11.6	
Total	33.5	
Total (without automobile)	30.0	

#### Source: Economics Research Associates

Based on projected growth in the cities that the study areas are located within, the projected retail demand<sup>5</sup> is estimated forward to 2020. This analysis assumes that current levels of retail development continue based on the existing relationship between households and developed retail space. In total, the South Bay would need to increase its retail supply by 280,000 square feet annually. Of which, the demand by the cities would represent 26 percent of total retail space in the South Bay. Putting the demand in a historic context, according to CoStar the South Bay has added approximately by 455,000 square feet since 1999.

### Figure 63 Projected Retail Demand *2008 - 2020*

	Avg. HH/Year	SF/HH	Avg. SF/HH
City/Region	2008 - 2020	Demand	Demand
Hawthorne	128	104	13,269
Redondo Beach	342	102	34,859
Torrance	129	186	23,994
South Bay	2,068	136	281,214

Source: SCAG and Economics Research Associates

### Office

ERA utilized EDD near-term forecasts to estimate potential office demand in the region. Unlike long-term population forecasting, which is more reliable because there is a deterministic element to the process (e.g. forecasters can predict with a high level of certainty how many people may be born or will die during the next 20-years); long-term employment projections are more unreliable because of the uncertainly involved in accurately predicting future economic trends. Most long-term economic forecasts simply assume that near-term growth rates will continue at a set rate into the future. However, widespread changes in technology, politics, and foreign markets, for example, may have a profound impact on the local, state and national economy. The

<sup>&</sup>lt;sup>5</sup> Assuming historic levels of development continue.

EDD forecast suggests that "office serving"<sup>6</sup> employment will grow at a compound annual growth rate of 1.4 percent a year until 2014. ERA has assumed that the growth will continue at this rate until 2020.

Using the CoStar and EDD database, ERA examined the historic office supply and number of office serving jobs in Los Angeles County in 2000 and 2007. This data was used to set a ratio of office jobs per square foot of office space in the region. The forecasted employment growth rate (1.4 percent) by EDD was applied to contemporary job counts to quantify the additional new employment base that would require office space in the future. ERA also accounted for existing vacant space and office development to project countywide office occupancy using an 11 percent vacancy rate in 2010 and a nine percent vacancy rate in 2015 and 2020.

In order to allocate the potential demand of new office space to the South Bay, ERA used the South Bay's current share of total office space in the County as a proxy for future office development. Essentially, the analysis allocates countywide demand for office space based to the South Bay based on its existing relationship in terms of total built space in the region. Similarly, the cities demand for new office space is based on their current share of total office space in the South Bay.

Based on this analysis, ERA estimates demand in the South bay to average 415,000 square feet annually to 2020 (Figure 64). The projected demand outpaces historic development in the South Bay by a ratio of 2 to 1 since 1999. This analysis does not account for such constraints as available land or existing land use policies or the financial feasibility of new office construction.

<sup>&</sup>lt;sup>6</sup> Defined as jobs within the information, financial activities, and professional and business services industries.

# Figure 64 Projected Office Demand *2008 – 2020*

	<u>Actual</u> Project			Projected [Variable]	<u>'rojected</u>	
	2000	2007	2010	2015	2020	
Total Non-Farm Employment	4,072,100	4,115,800	4,291,095	4,526,390	4,774,588	
Percentage Office Related	25.9%	25.8%	25.7%	26.1%	26.0%	
Office <sup>1</sup> Related Employment	1,056,100	1,059,900	1,103,982	1,181,563	1,241,835	
Office Space and Employee Ratio (SF)	316	341	341	341	341	
Net Demand (SF)	333,987,948	361,604,568	376,457,794	402,913,047	423,465,661	
Average Annual Increase in Net Demand (SF)		4,602,770	4,951,075	5,291,050	4,110,523	
Average Annual Percentage Increase		1.2%	1.4%	1.4%	1.4%	
Existing Supply in Market (SF)						
Completed	374,065,599	391,258,187				
Under Construction	4,717,619	2,573,135				
Total (SF)	378,783,218	393,831,322	406,111,413	432,566,666	453,119,280	
Vacant Space (SF)	40,077,651	29,653,619	44,672,255	38,931,000	40,780,735	
Vacancy Rate	11%	8%	11%	9%	9%	
Incremental Space			10,929,281	24,074,280	18,702,879	
Incremental Space Per Period			3,643,094	4,814,856	3,740,576	
South Bay Capture @ 10.2% of County Incremental Office Space (SF) <sup>2</sup>			1,114,800	2,455,600	1,907,700	
South Bay Capture Per Year (SF)			371,600	491,100	381,500	
Redondo Beach Capture @ 5.0% of South Bay's Incremental Office Space (SF)			55,800	123,000	95,600	
Redondo Beach Capture Per Year (SF)			18,600	24,600	19,100	
Hawthorne Capture @ 7.2% of South Bay's Incremental Office Space (SF)			80,600	177,600	137,900	
Hawthorne Capture Per Year (SF)			26,900	35,500	27,600	
Torrance Capture @ 27.5% of South Bay's Incremental Office Space (SF)			306,800	675,900	525,100	
Torrance Capture Per Year (SF)			102,300	135,200	105,000	
<sup>1</sup> Defined as jobs in the information, financial activities, and professional and business services industrie	es.					
<sup>2</sup> The South Bay Market currently represents 10.2 percent of the Countywide office market.						

Source: CoStar, EDD, and Economics Research Associates

# **Constrained Mobility Considerations (Retail Development)**

Since transportation behavior is significantly influenced by retail related trip generation, ERA examined recent trends in retail development and explored how retailers may be forced to adapt their existing format as the friction of mobility increase in Southern California in the future.

CoStar data suggest that retail space has increased by 11 percent since 1996. This represents over 20 million square feet of retail space added within the County over that last 11 year time period. Since 2000, retail space has grown at a slightly slower rate than the County's population. However, since 1996, retail space in the County has grown faster than the population base. Over the last decade the format of retail space delivered has changed significantly. In 1996, approximately 34 percent of all retail development was in a configuration over 100,000 square feet. As of year-end 2007, retail space in a configuration over 100,000 square feet has grown by approximately two percent. This trend is evidenced below in Figure 65. The chart illustrates that the amount of retail space per capita has increased slightly, largely driven by increases in retail development over 100,000 square feet.





Source: Economics Research Associates

These trends are reflected in the South Bay. In comparison to the County, the South Bay has a significantly greater share of shopping centers in configurations over 100,000 square feet. In fact, the average size of shopping centers in the South Bay is approximately 330,000 square feet (Figure 66). This is 46,000 more square feet of retail space per center than the countywide average. To some extent, the size of shopping centers in the South Bay is inflated due to the presence of the Del Almo Fashion Center and South Bay Galleria. However, recent retail developments such as Plaza El Segundo and the planned Carson Marketplace, which proposes the development of 1.2 million gross square feet of retail, demonstrate the continued emphasis on delivering large scale retail formats to the region. Due to the suburban land use patterns in the South Bay, the development to date has reflected a scale that assumes people are willing to drive long distances to shop.

# Figure 66 Shopping Center over 100,000 Square Feet Comparison *2007*





### Average Size of Shopping Center over 100,000 Square Feet

Source: CoStar

As presented in Figure 67, ERA has provided a brief overview of the leading tenants, gross leasable area (in square feet), and typical market size (in minutes of drive time) to demonstrate the key differences in various types of retail configurations within the South Bay. The required market shed<sup>7</sup> needed to support a retail development in a configuration over 100,000 square feet, which is associated with Community Centers, Power Centers, Regional Mall, Lifestyle Centers, and Super Regional Malls, is typically 10 to 25 minutes. Yet, the drive times associated with the market areas are based on the assumption that traffic or the increased cost of gas will not change individuals' propensity to shop. In other words, it is assumed that such large market areas will not erode if traffic congestion worsens or gas prices continue to increase in the future.

# Figure 67 Shopping Center Typology Overview 2007

Type of Center	Leading Tenant	GLA (SF)	Market Size (minutes)
Convenience	Minimart	< 30	5
Neighborhood	Supermarkets	30 – 100	10
Community	Department Store	100 – 300	10 – 20
Power Centers	Category Killers, Big Box	250 - 800	15 – 30
Regional Mall	One or Two Dept.	300 – 900	15 – 30
Lifestyle	Upscale National Chain	150 – 500	25 – 30
Super Regional Mall	Three or More Dept.	500 – 1.5	15 – 60

Source: ICSC, Urban Land Institute, and Economics Research Associates

ERA believes that there are two key variables that will continue to change consumer behavior when examining mobility in the future: time and cost of transportation. As noted above, the length of time to reach a destination becomes critical for consumers when choosing to shop at various locations. Similarly, the cost variable becomes increasing important as the price of gas continues to increase. As such, ERA researched historic and projected future trends to determine how susceptible large scale retail formats are to changes in mobility for residents in the South Bay and Southern California.

As noted in Figure 68, since 1980 the vehicle miles traveled (VMT) and number of registered vehicles has grown faster than the population when indexed to 1980. Using long term forecasts by Caltrans, these trends are projected to continue to increase in the future. All the same time, as the number of people, registered vehicles,

<sup>&</sup>lt;sup>7</sup> Defined as representing 60 to 80 percent of total sales.

and statewide VMT increases, the amount of lane miles (defined as the built transportation infrastructure) is not anticipated to grow.

### Figure 68





Source: Caltrans, Department of Finance, and Economics Research Associates

Examining key measures of traffic congestion in Los Angeles County since 1994, every measurable has increased. This includes increases in the daily vehicle-hours of delay, urban area freeway congested direction miles, and the relationship between congested directional miles to total directional miles in the County. If the projected trends area realized, then the time element of transportation mobility will continue to increase in the future.





Source: Caltrans and Economics Research Associates

The cost of transportation has risen tremendously since 2000. As noted in Figure 70, the nationwide average price per gallon of unleaded premium gasoline remained relatively stable from 1985 to 2000. However, since that time the price has risen by close to \$2 a gallon. Examining year-to-date trends, the price of gas has increased another by over a dollar from January to June alone. Most experts believe that gasoline prices will continue to rise in the future based on supply constraints and instability in oil producing regions. Furthermore, California costs are typically higher than national averages.





Source: US Department of Energy

While the statewide VMT is projected to increase in the future (as previously presented), some different trends appear to be happening when examining the average distance driven in California on a household basis. In 2004, the average estimated miles per household peaked at 15,000 miles per year and have steadily declined in 2006 and 2007. This might be foreshadowing an unexpected change in terms of the distance traveled based on increased issues surrounding mobility.

While it is too early to determine if the trend will continue, other indicators associated with retail consumption patterns point to an increasing decrease in trips associated with retail purchases. Information Resources, Inc., conducts detailed surveys of consumer behavior. In 2006, the research documented over 6 million trips to better understand consumer retail shopping patterns. Based on their research, the number of retail trips made per month has declined since 2001. As noted in Figure 72, people are taking on average almost one fewer trip per month for retail related goods.

Figure 71 Average Distance Driven in California by Household *1980 - 2007* 



Source: Caltrans, Department of Finance, and Economics Research Associates

## Figure 72 Frequency of Retail Trips per Month 2001 - 2006



Source: Information Resources, Inc.

The research also investigates the nature of retail trips based on four general classifications of trips. Information Resources, Inc defines the retail trip typology as follows:

- Quick Trip: A quick trip is made when a consumer needs a particular product and has to purchase it immediately. These trips are not typically planned in advance and the amount of total spending is usually under \$40. According to the research, it is typical that 1 to 5 items are purchased per quick trip. The quick trip represents over half of all retail related trips per month, but only represents 21 percent of total retail spending. As a result, the data suggest that these trips are made within close proximity of where the consumer lives and represents goods purchased at neighborhood serving or convenience retail locations.
- Special Purpose: The special purpose retail trip is similar to a quick trip as the consumer purchases retail goods for an event that is not considered a routine purchase. However, unlike Quick Trips, some of the items may not be immediately consumed or used. On average, these purchases are \$20 to \$50 and represent approximately 17 percent of all monthly trips and 18 percent of monthly retail spending. The special purpose trip can be low in items, ranging from 2 to 10 items per trip.
- Fill In: Fill in retail trips are routine trips to preferred retailers that supply necessary goods for heavy use categories. These trips span a boarder range of retail categories and are usually less rushed, less urgent, and more planned than the Quick Trips or Special Purpose categories. These trips are come in response to missing items necessary for usual functioning within the household. The consumer typically purchases 5 to 15 that cost, in total, \$30 to \$80. These represent 16 percent of households' monthly tips and 21 percent of monthly sales.
- Pantry Stocking: Pantry stocking are planned retail trips in preparation for the upcoming week or month. These purchases typically take place at big box retailers, where the consumer purchases over 15 retail items at a cost over \$50. While fill in trips represent the fewest number of trips per month, they represent 40 percent of all retail spending. Trips to grocery retailers and supercenter stores would also be included in this category.

Figure 73 presents a comparison summary of the difference between reported trips and spending by retail trip category. It is clear that while neighborhood serving goods, which could be located within a walkable distance of households, represent a large percent of all trips but they also represent a low percent of total spending. This is problematic because current consumer behavior favors going to big box retailers to purchase lots of goods (usually at lower prices). This behavior is supported by the automobile, instead of an alternative mode of transportation. It is apparent, however, that consumer preferences may change as mobility variables increase in the future.

# Figure 73 Consumer Trip Behavior and Spending by Retail Type 2006



Source: Information Resources, Inc.

ACNielsen also tracks household spending preferences and reported some changes that have occurred within the last couple years that might be useful to consider when evaluating future trends. Based on their research, in order to conserve money and trips individuals are combing errands and taking trips less frequently. Such behavior would support the importance of having a wide variety of retail offerings within a concentrated area. Similarly, there appears to be an increased propensity to shop on the internet. All of these factors support the notion that household spending behaviors appear to be changing, as the number of retail trips decreased based on mobility issues.

### Figure 74 Household Spending Preferences 2005 – 2006



#### Source: ACNielsen Homescan

The final illustration of how constrained mobility might change traditional assumptions about retail markets is presented in Figure 75. Based on an ERA calculation that relates a reduction of speed to its affect on the corresponding market size, a 20 percent reduction in travel speed (assuming a car mode of travel) is equivalent to a 40 percent reduction in market size. Such increases in congestion will have a profound influence on retail developments that require large market sheds. The potential problems associated with a loss of market may be acutely felt in the South Bay and other areas in the region where there is a large concentration of retail configurations over 100,000 square feet.





Source: Economics Research Associates

# **Capacity Analysis**

The summary table presented in Figure 76, illustrates the development potential for the study areas based on current zoning and development in each of the study areas. ERA analyzed parcel level data to estimate the potential amount of new development that could be accommodated. According to this analysis, Riviera Village has the least development potential with 83 percent of the allowable space currently developed. Downtown Torrance, on the other hand, has only reached half of the allowable development space. Similarly, the two corridors have less than half of the potential developable space realized. The data was intended to inform specific development options; however, at the direction of the SBCCOG, ERA was instructed to create development scenarios that did not necessarily conform to existing regulatory environment.

	Total Built	Total Allowed	% Total	Potential Buildout
Hawthorne	8,390,228	21,673,818	39%	13,283,590
Artesia	14,141,079	30,609,802	46%	16,468,723
Riviera Village	5,442,019	6,594,981	83%	1,152,962
Downtown Torrance	3,401,708	6,783,286	50%	3,381,578

Figure 76 Potential Buildout by Study Area *2007* 

Source: Economics Research Associates; Individual Cities; ESRI; County Assessor's Office of Los Angeles

## **Alternative Development Programs**

The alternative development programs were created to better understand the economics of potential mixed use programs, while also adhering to the general market trends as presented in previous sections of this report. While the particulars components of each development scenarios is presented in Figures 77 - 85 a general summary of each development is presented below.

- Alternative 1A (Corridor Node Horizontal and Vertical Mixed Use): Replace existing low density retail use with townhouses/condos residential development. The program includes subterranean parking and shared parking with a 4-storey commercial mixed use development that includes retail below and 3 stories of office space.
- Alternative 1B (Corridor Node Medium Density Residential Development): Replace existing low density retail use with townhouses/condos residential development with subterranean parking.
- Alternative 2 (Mid-Corridor Mixed Use Development): Replace existing auto related uses with a high density residential and retail mixed use development.
- Alternative 3 (Center : Mixed Use and Urban Live Work Units): Replace existing low density commercial and surface parking with live work spaces (residential above and work spaces below), condos over retail, and a townhouse development.
- Alternative 4A (Center: High Density Vertical Mixed Use): Develop existing surface parking with retail with offices above.
- Alternative 4B (Center: High Density Vertical Mixed Use): Alternative 4A development program with the inclusion of luxury condos to replace a portion of the office space.

- Alternative 5 (Stand Alone Mid-Box Retail with Surface Parking): Replace existing retail with a stand alone mid-box retailer (e.g. CVS or RiteAid) with surface parking.
- Alternative 6 (2-Storey Big Box, Additional Retail): This development program consists of a large scale corridor development with 2-Storey big box retailers and additional street level retail.
- Alternative 7 (Corridor Development: 2-Storey Retail with Podium Parking): A typical 2-storey corridor) development with retail on the ground floor and restaurant or other personal service business on the second floor.

# Figure 77 Corridor Node: Horizontal and Vertical Mixed Use Program *Alternative 1a*

### Replace existing low density retail use with:

- Townhouses/Condos (Subterranean Parking/Shared Parking)
- 4 Storey commercial mixed use with retail below and 3 stories of office above

Total Land Area =	261,360	s.f. or	6.00	Acres
Existing Buildings =	130,680	s.f. or	0.50	FAR
New Development				
Residential				
Residential Land Area =	130,680	s.f. or	3.00	Acres
Target Density =	38	DU/Acre		
Total Units =	114	DUs		
Parking Ratio =	2.0	spaces/DU (S	hared	with Commercial)
Residential Parking =	228	spaces		
Mixed Commercial				
Land Area =	130,680	s.f. or	3.00	Acres
Target Density (FAR) =	2.50			
Total Building Area =	326,700	s.f.		
Ground Coverage =	65%			
Retail (1st Floor) =	84,942	s.f.		
Office (3 stories) =	241,758	s.f.		
Parking Req'd =	3.50	spaces/1,000	s.f.	
Commercial Parking =	1,143	spaces		
Surface =	131	spaces		
Subterranean =	1,012	spaces		

# Figure 78 Corridor Node: Horizontal and Vertical Mixed Use Program *Alternative 1b*

### Replace existing low density retail use with:

- Townhouses/Condos (Subterranean Parking/Shared Parking)						
Total Land Area =	261,360	s.f. or	6.00	Acres		
Existing Buildings =	130,680	s.f. or	0.50	FAR		
New Development						
<b>Residential</b> Residential Land Area = Target Density = Total Units = Parking Ratio = Residential Parking =	261,360 38 228 2.0 456	s.f. or DU/Acre DUs spaces/DU spaces (Podiu	00.6 um)	Acres		
<u>Mixed Commercial</u> Land Area = Target Density (FAR) = Total Building Area = Ground Coverage =	- 2.50 - 65%	s.f. or s.f.	-	Acres		
Retail (1st Floor) = Office (3 stories) =	-	s.f. s.f.				
Parking Req'd = Commercial Parking =	3.50 -	spaces/1,000 spaces	s.f.			
Surface = Subterranean =	-	spaces spaces				

# Figure 79 Mid-Corridor: Mixed Use Development Program *Alternative 2*

#### Replace existing Auto related uses with: - High Density residential and retail mixed use Total Land Area = 43,500 s.f. or 1.00 Acres Existing Buildings = 26,100 s.f. or 0.60 FAR **New Development** Mixed Commercial Land Area = 43,500 s.f. or 1.00 Acres Target Density (FAR) = 2.50 Total Building Area = 108,750 s.f. Ground Coverage = 65% Retail (1st Floor) = 28,275 s.f. Residential = 80,475 s.f. or 62 DUs @ 1,300 s.f./DU (Gross) Parking Reg'd = 3.5 spaces/1,000 s.f. of Commercial 1.6 space/residential DU (Shared with Commercial) Commercial Parking = 99 spaces Residential Parking = 99 spaces Surface = 44 spaces Subterranean = 154 spaces

Center: Mixed Use and Urban Live Work Units Program <i>Alternative 3</i>						
Replace existing low de	ensity com	mercial and	d surfa	ice parking v	vith	
- Live work spaces (resid - Condos over retail - Town Houses	ential abov	e and work	spaces	s below)		
Total Land Area =	100,500	s.f. or	2.31	Acres		
Existing Buildings =	60,300	s.f. or	0.60	FAR		
New Development						
Townhouses Land Area = Target Density = Total Units =	15,000 30 <b>10</b>	s.f. or DU/Acre <b>DUs</b>	0.34	Acres		
<u>Live Work Units</u> Land Area = Target Density = Total Units =	40,500 25 <b>23</b>	s.f. or DU/Acre <b>DUs</b>	0.93	Acres		
<u>Mixed Commercial</u> Land Area = Target Density (FAR) = Total Building Area = Ground Coverage =	45,000 1.50 67,500 65%	s.f. or s.f.	1.03	Acres		
Commercial = Residential =	<b>29,250</b> 38,250	<b>s.f.</b> s.f. or	29	DUs @	1,300	s.f./DU (Gross)
Parking Req'd =	3.50 1.60 2.40	spaces/1,0 space/resid	00 s.f. lential	of Commercia DU (Shared)	al	
Residential Parking = Live Work Parking = Commercial Parking = Total Parking =	62 55 102 220	spaces	, wonk			
Surface = Podium = Subterranean = Tuck Under =	60 44 74 42	spaces spaces spaces spaces				

Source: Economics Research Associates

Figure 80

# Figure 81 Center: High Density Vertical Mixed Use Program *Alternative 4a*

Develop existing Surface Parking With

Total Land Area =73,600 s.f. or1.69 AcresExisting Buildings =-s.f. or-FARNew Development-73,600 s.f. or1.69 AcresLand Area =73,600 s.f. or1.69 AcresTarget Density (FAR) =2.501.69 AcresTotal Building Area =73,600 s.f.1.69 AcresGround Coverage =47,840 s.fRetail =-s.f. or0 DUs @Residential =-s.f. or0 DUs @Office =3.0 spaces/1,000 s.f. of Retail / OfficeParking Req'd =-spacesSurface =74 spacesSutface =74 spacesSutface =74 spacesSutface =74 spacesSutface =213 spaces	- Retail with Offices Abov	e				
Existing Buildings = - s.f. or - FAR New Development $\frac{Mixed Commercial}{Land Area = 73,600 s.f. or 1.69 Acres}$ Target Density (FAR) = 2.50 Total Building Area = 65% Retail = 47,840 s.f. Ground Coverage = 65% Retail = 47,840 s.f. Residential = - s.f. or 0 DUs @ 1,500 Office = 136,160 s.f Parking Req'd = 3.0 spaces/1,000 s.f. of Retail / Office 2 space/residential DU Residential Parking = 552 spaces Surface = 74 spaces Subterranean = 478 spaces Replacement (Subt.) = 213 spaces	Total Land Area =	73,600	s.f. or	1.69	Acres	
New Development $Mixed Commercial$ Land Area =73,600 s.f. or1.69 AcresTarget Density (FAR) =2.50Total Building Area =184,000 s.f.Ground Coverage =65%Retail =- s.f. or0 DUs @ 1,500Office =136,160 s.fParking Req'd =3.0 spaces/1,000 s.f. of Retail / Office 2 space/residential DUResidential Parking =- spacesCommercial Parking =552 spacesSurface =74 spaces 213 spacesReplacement (Subt.) =213 spaces	Existing Buildings =	-	s.f. or	-	FAR	
Mixed Commercial Land Area =73,600 s.f. or1.69 AcresTarget Density (FAR) = Total Building Area = Ground Coverage =2.50184,000 s.f.Retail = Residential =47,840 s.f. - s.f. or0 DUs @1,500Office = Parking Req'd =136,160 s.f3.0 spaces/1,000 s.f. of Retail / Office 2 space/residential DU1,500Residential Parking = Commercial Parking = Subterranean =- spaces 478 spaces 213 spaces- spaces	New Development					
Land Area =73,600 s.f. or1.69 AcresTarget Density (FAR) =2.50Total Building Area =184,000 s.f.Ground Coverage =65%Retail =- s.f. or0 DUs @ 1,500Office =136,160 s.fParking Req'd =3.0 spaces/1,000 s.f. of Retail / OfficeResidential Parking =- spacesCommercial Parking =552 spacesSurface =74 spacesSubterranean =478 spacesReplacement (Subt.) =213 spaces	Mixed Commercial					
Target Density (FAR) = $2.50$ Total Building Area = $184,000 \text{ s.f.}$ Ground Coverage = $65\%$ Retail = $47,840 \text{ s.f.}$ Residential =- s.f. or $0$ DUs @ 1,500Office = $136,160 \text{ s.f}$ Parking Req'd = $3.0 \text{ spaces/1,000 s.f. of Retail / Office}$ 2 space/residential DUResidential Parking =- spacesCommercial Parking = $552 \text{ spaces}$ Surface = $74 \text{ spaces}$ Subterranean = $478 \text{ spaces}$ Replacement (Subt.) = $213 \text{ spaces}$	Land Area =	73,600	s.f. or	1.69	Acres	
Total Building Area = Ground Coverage =184,000 s.f. $65\%$ Retail = Residential =47,840 s.f. - s.f. or 136,160 s.fOffice = Parking Req'd =136,160 s.fResidential Parking = Commercial Parking =- spacesSurface = Subterranean =74 spaces 478 spacesSurface = Replacement (Subt.) =74 spaces	Target Density (FAR) =	2.50				
Ground Coverage =65%Retail =47,840 s.f.Residential =- s.f. or0 DUs @ 1,500Office =136,160 s.fParking Req'd =3.0 spaces/1,000 s.f. of Retail / Office2 space/residential DUResidential Parking =- spacesCommercial Parking =552 spacesSurface =74 spacesSubterranean =478 spacesReplacement (Subt.) =213 spaces	Total Building Area =	184,000	s.f.			
Retail = $47,840 \text{ s.f.}$ Residential =- s.f. or0 DUs @ 1,500Office =136,160 s.fParking Req'd =3.0 spaces/1,000 s.f. of Retail / Office2 space/residential DUResidential Parking =- spacesCommercial Parking =552 spacesSurface =74 spacesSubterranean =478 spacesReplacement (Subt.) =213 spaces	Ground Coverage =	65%				
Retail =47,840 s.f.Residential =- s.f. or0 DUs @ 1,500Office =136,160 s.fParking Req'd =3.0 spaces/1,000 s.f. of Retail / Office 2 space/residential DUResidential Parking =- spacesCommercial Parking =552 spacesSurface =74 spaces 2 spacesSubterranean =478 spacesReplacement (Subt.) =213 spaces	-					
Residential =       -       s.f. or       0 DUs @       1,500         Office =       136,160 s.f	Retail =	47,840	s.f.			
Office =136,160 s.fParking Req'd =3.0 spaces/1,000 s.f. of Retail / Office 2 space/residential DUResidential Parking =- spacesCommercial Parking =552 spacesSurface =74 spaces 478 spaces 213 spaces	Residential =	-	s.f. or	0	DUs @	1,500
Parking Req'd =       3.0 spaces/1,000 s.f. of Retail / Office         2 space/residential DU         Residential Parking =       - spaces         Commercial Parking =       552 spaces         Surface =       74 spaces         Subterranean =       478 spaces         Replacement (Subt.) =       213 spaces	Office =	136,160	s.f			
2 space/residential DU         Residential Parking =       - spaces         Commercial Parking =       552 spaces         Surface =       74 spaces         Subterranean =       478 spaces         Replacement (Subt.) =       213 spaces	Parking Req'd =	3.0	spaces/1,00	)0 s.f.	of Retail / C	Office
Residential Parking =-spacesCommercial Parking =552spacesSurface =74spacesSubterranean =478spacesReplacement (Subt.) =213spaces		2	space/resid	ential	DU	
Commercial Parking =552 spacesSurface =74 spacesSubterranean =478 spacesReplacement (Subt.) =213 spaces	Residential Parking =	-	spaces			
Surface =74 spacesSubterranean =478 spacesReplacement (Subt.) =213 spaces	Commercial Parking =	552	spaces			
Surface =74 spacesSubterranean =478 spacesReplacement (Subt.) =213 spaces						
Subterranean =478 spacesReplacement (Subt.) =213 spaces	Surface =	74	spaces			
Replacement (Subt.) = 213 spaces	Subterranean =	478	spaces			
	Replacement (Subt.) =	213	spaces			

# Figure 82 Center: High Density Vertical Mixed Use Program *Alternative 4b*

Develop existing Surface Parking With - Retail with Offices and Luxury Condos Above Total Land Area = 73,600 s.f. or 1.69 Acres Existing Buildings = s.f. or FAR \_ -**New Development** Mixed Commercial Land Area = 73,600 s.f. or 1.69 Acres Target Density (FAR) = 2.50 Total Building Area = 184,000 s.f. Ground Coverage = 65% Retail = 47,840 s.f. Residential = 68,080 s.f. or 45 DUs @ 1,500 Office = 68,080 s.f Parking Reg'd = 3.0 spaces/1,000 s.f. of Retail / Office 1.60 space/residential DU Residential Parking = 72 spaces Commercial Parking = 348 spaces

Surface =74 spacesSubterranean =346 spacesReplacement (Subt.) =213 spaces

### Figure 83 Stand Alone Mid-Box Retail with Surface Parking Program *Alternative 5*

/ /////////////////////////////////////				
Total Land Area =	48,000	s.f. or	1.10	Acres
Existing Buildings =	24,000	s.f. or	0.50	FAR
New Development				
Mixed Commercial				
Land Area =	48,000	s.f. or	1.10	Acres
Target Density (FAR) =	0.42			
Total Building Area =	20 000	sf		
Ground Coverage =	42%	0.11		
Retail =	20,000	s.f.		
Parking Req'd =	3.5	spaces/1,00	00 s.f. (	of Retail / Office
Total Parking =	80	spaces		
Surface =	80	spaces		

Source: Economics Research Associates

# Figure 84

### 2-Storey Big Box and Additional Street Retail Program

Alternative 6				
Total Land Area =	250,000	s.f. or	5.74	Acres
Existing Buildings =	125,000	s.f. or	0.30	FAR
New Development				
Mixed Commercial				
Land Area =	250,000	s.f. or	5.74	Acres
Target Density (FAR) =	0.90			
Total Building Area =	225,000	s.f.		
Ground Coverage =	50%			
Retail =	225,000	s.f.		
Parking Reg'd =	4.0	spaces/1.00	)0 s.f.	of Retail / Office
Total Parking =	900	spaces		
Surface =	390	spaces		
Subterranean =	510	Spaces		

Figure 85				
2-Storey Big Box and Add <i>Alternative 7</i>	itional St	reet Retail F	rogra	am
Total Land Area =	30,000	s.f. or	0.69	Acres
Existing Buildings =	15,000	s.f. or	0.50	FAR
New Development				
<u>Mixed Commercial</u> Land Area = Target Density (FAR) = Total Building Area = Ground Coverage =	30,000 0.85 25,500 50%	s.f. or s.f.	0.69	Acres
Retail =	25,500	s.f.		
Parking Req'd = Total Parking =	3.5 89	spaces/1,000 spaces	) s.f. c	of Retail / C
Surface = Podium =	19 70	spaces spaces		