

III. FUTURE PARKING SUPPLY AND DEMAND

This chapter addresses the potential changes in parking supply and demand that could result from planned, programmed, or anticipated development in downtown Brentwood. The City of Brentwood Community Development Department provided information about potential future developments for inclusion in this study. Please note that these potential developments represent a possible development scenario for each parcel.

EXISTING LAND USES

Within the downtown area, there exists a wide variety of land uses, including but not limited to retail, residential, office, city offices, county owned facilities, and entertainment uses such as restaurants and a movie theater. Table 7 provides a list of all the buildings that were included in this study, their addresses, and their existing land use designation. Figure 8 shows the land uses by location in the downtown study area.

FUTURE DEVELOPMENT

According to information from the City of Brentwood Community Development Department, it is anticipated that various parcels in the downtown area may experience development or redevelopment in the future. The future land use assumptions used for this analysis are based on a worst-case build-out scenario as predicted by the City of Brentwood Community Development Department. With the development or redevelopment of parcels within the downtown, it is expected that the parking supply and demand will change as well.

A major proposed development includes a multiplex movie theater that may be located on the Second Street and Oak Street, which would take the place of all the existing uses along Second Street and Oak Street between Midway and Second Street. Fehr & Peers assumed eight screens at this theater. A multi-level parking garage is proposed at one of several potential locations including on Brentwood Boulevard between Maple and Oak Streets or on Brentwood Boulevard between Chestnut and Birch Streets if needed. Other potential developments include converting the Church and the Family Resource Center both located on First Street and Maple Street into restaurants, redeveloping the county owned Fire Station on First Street between Maple and Oak Streets into retail use, and converting the residential homes on Second Street between Chestnut and Oak Streets to retail uses.

Table 7 lists the parcels in the study area, their existing land use, their anticipated future land use, and the expected change in parking demand. Figure 9 shows the worst case future land uses by parcel. The various land uses were selected based on those used in the Downtown Brentwood Parking Study for the City of Brentwood (Watry Design, Inc., November 2004). For greater accuracy, three additional land uses were included – gas station, day care, and bank.

TABLE 7
FUTURE DEVELOPMENT AND PARKING DEMAND CHANGE

Address	Name of Building	Existing Land Use	Future Land Use (Worst Case)	Parking Demand Change
144 Oak	Cap's	Restaurant	Restaurant	No Change
134 Oak	E. Contra Costa Fire Protection	County Owned	Retail	Increase
120 Oak	City Engineering Department	City Owned	City Owned	No Change
118 Oak	Brentwood Heath Center	City Owned	City Owned	No Change
104 Oak	Brentwood Community Development	City Owned	City Owned	No Change
62 Oak	Oak Street Dental	Office	Office	No Change
708 Third	City Hall	City Owned	City Owned	No Change
857 Pine	Birthright, Ed Jones/Farmers Insurance, Bookkeeping Services	Office	Office	No Change
	Day Care	Day Care	Office	No Change
230 Pine	House	Residential	Residential	No Change
858 1st	House	Residential	Residential	No Change
849 1st	Brentwood Funeral Home	Funeral Home	Funeral Home	No Change
330D Pine	Domino's	Restaurant	Restaurant	No Change
330C Pine	Mexican and Salvadorian Food	Restaurant	Restaurant	No Change
330B Pine	Super Mercado Munzo	Retail	Retail	No Change
330A Pine	Silver Skillet Restaurant	Restaurant	Restaurant	No Change
8340 Brentwood Blvd.	Marple Associates Realtors	Office	Office	No Change
813 1st	Church	Church	Restaurant	Increase
826 1st	House	Residential	Office	Increase
818 1st	House	Residential	Office	Increase
814 1st	House	Residential	office	Increase
812A 1st	Law Office of Scott Zimmerman	Office	Office	No Change
760 1st	Family Resource Center	Office	Restaurant	Increase
740 1st	BAC	Bank	Bank	No Change
235 Oak	Not Native	Retail	Retail	No Change
241 Oak	Bank of America	Bank	Bank	No Change
248 Oak	The Press Building	Office	Retail	Increase
642 Oak	Grazie!/Fuente	Restaurant	Restaurant	No Change
626 Oak	E. Contra Costa Irrigation Dist.	County Owned	Retail	Increase
622 Oak	Minh's Vietnamese Restaurant	Restaurant	Restaurant	No Change
614 Oak	Adao & Associates Realty	Office	Retail	Increase
612 Oak	Tannemaum Insurance Service	Office	Retail	Increase
601A 1st	Brentwood Cleaners	Retail	Retail	No Change
609 1st	House	Residential	Retail	Increase
613 1st	Prudential Realty	Office	Retail	Change
613 1st	Prudential Realty	Not Yet Built	Office	Change
625 1st	Vacant	Vacant	Retail	No Change
629 1st	The Old Hardware Store	Retail	Retail	No Change

633 1st	Brentwood Wine Store	Retail	Retail	No Change
637 1st	Delta Barber	Retail	Retail	No Change
	Movie Theater	Movie Theater	Movie Theater	No Change
645 1st	Regan Management Systems	Office	Office	No Change
647/651 1st	Omni Funding Services	Office	Office	No Change
655 1st	Your Hair & Skin Care Source Dene Nichols	Retail	Retail	No Change
306 Oak	Not only Baja	Retail	Retail	No Change
316 Oak	Dene Nichols Spa	Retail	Retail	No Change
320 Oak	Sun-N-Stuff	Retail	Retail	No Change
336 Oak	Chevron	Gas Station	Gas Station	No Change
357 Oak	Geddes Music	Retail	Retail	No Change
359 Oak	Barber Shop/Hair Encounter	Retail	Retail	No Change
	La Costa Restaurant	Restaurant	Retail	Decrease
317A Oak	Visual Production Photograph	Retail	Retail	No Change
317 Oak	Morgan Stanley	Office	Office	No Change
313 Oak	Baccio Café	Restaurant	Restaurant	No Change
311 Oak	Harold Fertado Real Estate	Office	Office	Increase
301 Oak	Sweeny's Bar & Grill	Restaurant	restaurant	Increase
729 1st A	Timeless Beauty	Retail	Retail	No Change
729 1st B	Ms. Unique Boutique Apparel & Accessories	Retail	Retail	No Change
729 1st C	Books & Beans	Retail	Retail	No Change
729 1st D	Law Office	Office	Office	No Change
	Fire Station 64	County Owned	Retail	Increase
757 1st	Veterans Hall	Hall	Hall	No Change
330 Maple	House	Residential	Residential	No Change
8362 Brentwood Blvd.	Doug's Brentwood Muffler & Auto Repair	Auto Garage	Auto Garage	Decrease
Maple/Second	Methodist Church	Church	Church	No Change
761 2nd	Independent Real Estate Brokers	Office	Office	No Change
741 2nd	Mulligan's Floor Covering Design Center	Retail	Retail	No Change
2nd Street	Vicki's Sandwich Stop	Retail	Movie Theater	Increase
737 2nd	Casey's Travel	Office	Movie Theater	Increase
205 Oak	Kendall Automotive	Auto Garage	Movie Theater	Increase
214 Oak	Oak Street Crafters	Retail	Movie Theater	Increase
221 Oak	Betty's Beauty Parlor	Retail	Movie Theater	Increase
225 Oak	Weathervane Western Wear	Retail	Movie Theater	Increase
240 Oak	Chamber of Commerce	Office	Retail	Increase
238 Oak	Oak Street Boutique	Retail	Retail	No Change
236 Oak	Dimensions Salon	Retail	Retail	No Change
234 Oak	ATS Logistics	Office	Retail	Increase
234 Oak	Consumer Protection Counseling Center	Office	Retail	Increase
234 Oak	Brentwood Liquors	Retail	Retail	No Change
220 Oak	Consign & Design	Retail	Retail	No Change
Oak and Second	Not Native (storage) Parking for	Retail	Retail	Increase

	employees			
2nd Street	SBC	Office	Office	No Change
621/623 2nd	House	Residential	Retail	Increase
613 2nd	House	Residential	Retail	Increase
605 2nd	House	Residential	Retail	Increase
604 2nd	House	Residential	Retail	Increase
616 2nd	House	Residential	Retail	Increase
2nd	House	Residential	Retail	Increase
632 2nd	House	Residential	Retail	Increase
640 2nd	House	Residential	Retail	Increase
648 2nd	House	Residential	Retail	Increase

Source: Fehr & Peers, February 2005



FEHR & PEERS
TRANSPORTATION CONSULTANTS

February 2005
2125-7

Downtown Brentwood Parking Study

EXISTING LAND USE

FIGURE 7



FEHR & PEERS
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February 2005
2125-8

Downtown Brentwood Parking Study

PROPOSED FUTURE LAND USE

FIGURE 8

CHANGES IN PARKING DEMAND

In order to establish potential parking demand for proposed future land uses in the downtown at a more detailed level, various parking generation rates were analyzed. The City of Brentwood city code provides parking requirements for various uses. The Institute of Transportation Engineers (ITE) has also developed average parking generation rates which are published in the *Parking Generation Handbook, 3rd Edition* (ITE, 2004). The average rates are based on studies conducted at various locations throughout the United States. The Parking Generation Handbook also provides detailed information regarding specific rates for various hours throughout the day. The various demand rates are shown in Table 8.

Fehr & Peers compared the City's parking generation rates to those published by ITE, and determined that ITE rates for the midday (11:00AM) and evening (5:00 PM) periods would be the most representative of the parking demand in Downtown Brentwood, which has existing occupancy peaks during those two periods. The only exception was for residential land uses, where the City of Brentwood parking generation rates were used. Our analysis assumed that all residents parked off-street in private parking driveways/garages.

The actual existing parking demand was compared to the theoretical existing parking demand calculated using the midday and evening ITE rates in order to calibrate the rates before they were used to determine future parking demand. The existing parking demand was found to be 50 percent less than the parking demand estimated by ITE. This difference can be attributed to the fact that the existing uses may not be operating at their full capability, or that visitors are combining their trips (trip chaining).

These calibrated midday and evening parking demand rates were applied to the future land uses to determine the future parking demand in the downtown area. Of the parcels that are projected to change, the calibrated results were calculated to show an increase in parking demand of 153 parking spaces during the midday peak, and an increase of parking demand of 594 parking spaces during the evening peak. Our analysis assumed that the parking demand generated by the new movie theater, as determined using the ITE rates, was correct, and was therefore not reduced as part of the calibration. Most of the increase in evening peak period demand can be attributed to the proposed entertainment uses, such as the multiplex movie theater and the conversion of the church located on First Street and Maple to a restaurant. Table 9 shows the breakdown for the change in demand during the two peak periods.

**TABLE 8
PARKING RATES**

Land Use	Unit	City of Brentwood Rates ¹	ITE Average Rates	ITE Midday Rates (11:00 AM – 12:00PM)	ITE Evening Rates (5:00 -6:00 PM)
Retail	1000/sf	5	4.01	3.69	3.41
Office ⁵	1000/sf	4	2.84	2.78	1.22
Auto Service	1000/sf	12.5	0	0	0
Residential ²	1/du	0	1.83	1.83	1.83
Hall ⁵	1000/sf	20	3	3	3.83
Church	1000/sf	20	1.17	1.17	1.17
Restaurant ⁵	1000/sf	10	10.1	10.1	8.18
County Owned	1000/sf	0	0	0	0
City Owned ³	1000/sf	4	4.15	3.82	0
Movie Theater ⁴	1/seat	.2	0.26	0	0.2
PT&T	1000/sf	0	0	0	0
Funeral Home	1/seat	.25	0	0	0
Library	1000/sf	12.5	2.61	1.98	1.20
Gas Station	1000/sf	5	0	0	0
Day Care	1000/sf	5	3.16	3.16	3.16
Bank	1000/sf	4	2.3	1.82	2.3

Notes:

1. City of Brentwood Code rates per 1000 sf.
2. Residential development assumed to provide sufficient off-street parking and not generate demand for on-street parking even though ITE average rates suggest 1.83 parking spaces/unit.
3. Government offices were included in the City Owned category.
4. Movie theater parking rates were based on number of seats. 300 seats were assumed per screen, and the proposed movie theater was assumed to have eight screens.
5. Suburban ITE rates were used.

SF= Square footage

DU= Dwelling units

Source: Fehr and Peers, February 2005

TABLE 9
FUTURE DEVELOPMENT AND CHANGES IN PARKING DEMAND

Address	Name of Use	Existing Land Use	Future Land Use (Worst Case)	Change in Midday Parking Demand	Change in Evening Parking Demand
134 Oak	E. Contra Costa Fire Protection	County Owned	Retail	8.05	7.44
	Day Care	Day Care	Office	-0.44	-2.27
813 1st	Church	Church	Restaurant	65.78	51.64
826 1st	House	Residential	Office	4.17	1.83
818 1st	House	Residential	Office	4.17	1.83
814 1st	House	Residential	Office	4.17	1.83
760 1st	Family Resource Center	Office	Restaurant	35.87	34.12
248 Oak	The Press Building	Office	Retail	3.10	7.48
626 Oak	E. Contra Costa Irrigation Dist.	County Owned	Retail	6.71	6.20
614 Oak	Adao & Associates Realty	Office	Retail	1.36	3.29
612 Oak	Tannembbaum Insurance Service	Office	Retail	1.36	3.29
609 1st	House	Residential	Retail	5.53	5.11
613 1st	Prudential Realty	Office	Retail	2.45	5.91
613 1st	Prudential Realty	Not Yet Built	Office	7.52	3.30
625 1st	Vacant	Vacant	Retail	9.97	9.21
	La Costa Restaurant	Restaurant	Retail	-4.90	-3.65
311 Oak	Harold Fertado Real Estate	Office	Office	7.51	3.30
301 Oak	Sweeny's Bar & Grill	Restaurant	restaurant	23.31	18.88
	Fire Station 64	County Owned	Retail	9.24	8.53
2nd Street	Vicki's Sandwich Stop	Retail	(Movie Theater)	-3.49	-3.22
737 2nd	Casey's Travel	Office	(Movie Theater)	-2.63	-1.16
205 Oak	Kendall Automotive	Auto Service	(Movie Theater)	0.00	0.00
214 Oak	Oak Street Crafters	Retail	(Movie Theater)	-4.88	-4.51
221 Oak	Betty's Beauty Parlor	Retail	(Movie Theater)	-4.88	-4.51
225 Oak	Weathervane Western Wear	Retail	(Movie Theater)	-4.88	-4.51
2 nd /Oak	MultiPlex Movie Theater	Various	Movie Theater	0	468
240 Oak	Chamber of Commerce	Office	Retail	2.01	4.86
234 Oak	ATS Logistics	Office	Retail	1.18	2.84
234 Oak	Consumer Protection Counseling Center	Office	Retail	1.18	2.84
621/623 2nd	House	Residential	Retail	5.53	5.11
613 2nd	House	Residential	Retail	5.53	5.11
605 2nd	House	Residential	Retail	5.53	5.11
604 2nd	House	Residential	Retail	5.53	5.11
616 2nd	House	Residential	Retail	5.53	5.11
2 nd	House	Residential	Retail	5.53	5.11
632 2nd	House	Residential	Retail	5.53	5.11
640 2nd	House	Residential	Retail	5.53	5.11
648 2nd	House	Residential	Retail	5.53	5.11
	Library	Library	Library	9.12	5.52
Total Change in Demand				229	674
Calibrated Total Change in Demand				153	594

Notes:

1. Future land use assumptions based on discussion with City of Brentwood Community Development Staff.
2. Parking demand based on midday and evening ITE rates.
3. Government offices were included in the City Owned category.

Source: Fehr and Peers, February 2005

CHANGES IN PARKING SUPPLY

In addition to creating an increase in parking demand as a result of the proposed developments in Downtown Brentwood, several of the existing parking facilities would be removed. Table 10 summarizes the change in available parking supply that could be expected if all the proposed developments are constructed. The most significant decrease in available parking could be due to the removal of the Municipal Parking lot on Second Street, which would eliminate sixty parking spaces. It was assumed that no on-street parking would be eliminated with the future developments.

TABLE 10			
FUTURE DEVELOPMENT AND CHANGES IN PARKING SUPPLY			
Existing Parking Lot	Existing Capacity	Future Capacity	Change in Parking Supply
A	36	36	0
B	26	26	0
C1	16	0	-16
C2	11	11	0
D	31	31	0
E1	17	17	0
E2	60	0	-60
E3	12	0	-12
F	29	29	0
G	25	25	0
H	20	20	0
I	46	46	0
J	50	50	0
K	17	17	0
L	33	33	0
M	29	29	0
Totals	458	370	-88
Source: Fehr and Peers, February 2005			

FUTURE PARKING SUPPLY AND DEMAND

Currently, there are 785 parking spaces available for use in the study area. The existing parking demand is 512 spaces during the midday peak and 379 during the evening peak. Each area's period of peak demand yields a surplus of 273 and 406 parking spaces in the Downtown area, respectively. Based on the assumptions in this report for the potential future build-out in the Downtown area, the demand will increase by 153 spaces during the midday peak and 594 spaces during the evening peak. This increase in demand will yield a surplus of 32 parking spaces in the midday peak, and a deficit of 276 parking spaces during the evening peak. An area-wide surplus of 32 parking spaces during the midday peak is equivalent to a 95 percent system wide occupancy. Since this exceeds ninety percent occupancy, drivers will likely experience significant difficulty in finding a parking space. As a result, the future parking supply would be inadequate during both peak periods. Additionally, many of the available off-street parking spaces are found in private lots, further reducing the ability of drivers to find a parking space. This information is summarized in Table 11.

These future estimates assume that the land uses will continue to operate at existing performance levels. If the land uses were to operate at more intense levels, the future parking demand as calculated with the ITE rates would not be reduced, the demand increase would be more significant.

TABLE 11						
FUTURE DEVELOPMENT AND CHANGES IN PARKING SUPPLY AND DEMAND						
Peak Period	Existing			Future		
	Parking Demand	Parking Supply	Surplus/ Deficit	Parking Demand	Parking Supply	Surplus/ Deficit
Midday 11:00 AM-12:00 PM	512	785	+273	665	697	+32
Evening 5:00 PM-6:00 PM	379	785	+406	973	697	-276
Source: Fehr and Peers, February 2005						