Burlingame Parking Phase 1 Review
Parking Occupancy and Revenue Update

prepared for

CITY OF BURLINGAME

ENGINEERS
PLANNERS
ECONOMISTS
Wilbur Smith Associates

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BURLINGAME PARKING PHASE 1 REVIEW
PARKING OCCUPANCY AND REVENUE UPDATE

OVERVIEW

This report describes the findings of the Burlingame Downtown Parking Improvements Phase 1 Review, undertaken by Wilbur Smith Associates (WSA). Specifically, it reports on the results of a new post-Phase 1 Baseline Parking Survey, presents an evaluation of the impact of Phase 1 meter rate increases on parking activity and revenues, and provides revenue forecasts for a second step rate increase under eight scenarios.

SURVEYS

WSA undertook parking occupancy studies of all metered curb faces and all public off-street parking facilities in the Burlingame Avenue study area on Wednesday and Thursday, October 30 and 31, 2002 between the hours of 10:00 AM and 3:00 PM, and on Saturday, November 2, 2002 between 11:00 AM and 2:00 PM. An analysis of the hourly survey data indicated that the peak weekday hour for parking was between 1:00 and 2:00 PM on Thursday. This data was then summarized by block face and off-street facility and compared with the results of a similar survey undertaken on Thursday, November 8, 2001.

2002 VERSUS 2001 PEAK PARKING OCCUPANCY

Tables 1 and 2 present a comparison of parking occupancy rates in 2002 and 2001 for curb and off-street facilities in the commercial core and peripheral areas, respectively. Table 3 presents this information in summary form. As can be seen, parking activity at both on-street (curb) and off-street facilities in both core and peripheral areas was higher in 2002 than in 2001. It is not clear whether this was related to the increasing vitality of the Burlingame Avenue commercial district, or simply due to the agreeable weather that prevailed on the 2002 survey day. Observed curb parking activity increased in the core by approximately 60 vehicles over the previous year (including 11 vehicles in Lot B-1, which was under construction at the time of the 2001 survey), with the occupancy percentage increasing from 81 percent to 86 percent at on-street and off-street facilities combined. In the peripheral area, a 45-vehicle increase in midday peak parking was recorded, an increase from 76 percent to 82 percent in the occupancy rate. Overall, the Study Area parking occupancy rate increased from 79 percent to 84 percent.

Figure 1 graphically illustrates shifts in peak occupancy from 2001 to 2002. Curb faces and lots colored green experienced an increase in usage, while facilities coded red experienced a decrease in peak parking activity. (Facilities where the degree of parking activity was unchanged are coded in yellow.) In general, facilities south of Burlingame Avenue and west of Lorton Avenue experienced increases in usage, while usage declined at most facilities in the balance of the study area. In this sector, all off-street facilities experienced increased activity except for Lot J, which was unchanged, and all metered curb faces showed either increased activity, or no change in activity.

Table 1

COMPARISON OF 2001 and 2002 MIDDAY PARKING OCCUPANCY -- Core Area

Block Number	Block Face	Curb Face or Off-Street Facility		Total Spaces	Occupied Spaces 2001	Occupied Spaces 2002	Percent Occupied 2001	Percent Occupied 2002
1-1	E	Primrose Rd	Between Chapin and Bellevue	9	10	8	111%	89%
1-1	S	Chapin Ave	Between El Camino Real and Primrose	55	46	30	84%	55%
1-2	E	Primrose Rd	Between Chapin and Burlingame	19	18	18	95%	95%
1-2	N	Chapin Ave	Between El Camino Real and Primrose	49	42	36	86%	73%
1-2	S	Burlingame Ave	Between Primrose and El Camino Real	25	16	24	64%	96%
2-1	E	Lorton Ave	Between Bellevue and Donnelly	4	4	3	100%	75%
2-1	W	Primrose Ave	Between Donnelly and Bellevue	11	11	11	100%	100%
2-2	E	Lorton Ave	Between Donnelly and Burlingame	9	8	9	89%	100%
2-2	N	Donnelly Ave	Between Primrose and Lorton	18	18	19	100%	106%
2-2	S	Burlingame Ave	Between Lorton and Primrose	26	27	27	104%	104%
2-2	W	Primrose Rd	Between Donnelly and Burlingame	10	7	10	70%	100%
2-3	E	California Dr	Between Bellevue and Burlingame	14	16	11	114%	79%
2-3	S	Burlingame Ave	Between California and Lorton	6	6	7	100%	117%
2-3	W	Lorton Ave	Between Bellevue and Burlingame	17	17	16	100%	94%
3-1	E	Primrose Rd	Between Howard and Burlingame	15	11	16	73%	107%
3-1	N	Burlingame Ave	Between Primrose and El Camino Real	22	20	21	91%	95%
3-1	S	Howard Ave	Between Primrose and El Camino Real	5	5	5	100%	100%
4-1	E	Park Rd	Between Burlingame and Howard	27	19	28	70%	104%
4-1	N	Burlingame Ave	Between Primrose and Park	12	11	10	92%	83%
4-1	S	Howard Ave	Between Primrose and Park	10	4	9	40%	90%
4-1	W	Primrose Rd	Between Howard and Burlingame	18	13	16	72%	89%
4-2	E	Lorton Ave	Between Howard and Burlingame	15	14	16	93%	107%
4-2	N	Burlingame Ave	Between Park and Lorton	13	11	10	85%	77%
4-2	S	Howard Ave	Between Park and Lorton	15	7	13	47%	87%
4-2	W	Park Rd	Between Burlingame and Howard	23	19	22	83%	96%
5-1	E	Highland Ave	Between Howard and Burlingame	19	13	13	68%	68%
5-1	N	Burlingame Ave	Between Lorton and Highland	8	7	8	88%	100%
5-1	S	Howard Ave	Between Highland and Lorton	17	13	13	76%	76%
5-1	W	Lorton Ave	Between Burlingame and Howard	22	16	17	73%	77%
5-2	W	Highland Ave	Between Howard and Burlingame	11	4	6	36%	55%
Core On-Street Subtotal				**524**	**433**	**452**	**83%**	**86%**
1-2	-	Lot B		44	41	37	93%	84%
1-2	-	Lot B-1		24	N/A	11	N/A	46%
1-2	-	Lot K-1		27	3	28	11%	104%
2-1	-	Lot A		166	160	149	96%	90%
2-1	-	Lot A-3		26	24	26	92%	100%
2-2	-	Lot C		82	82	80	100%	98%
2-2	-	Lot D		48	47	47	98%	98%
3-1	-	Lot K		69	21	36	30%	52%
3-1	-	Lot L		20	14	16	70%	80%
4-1	-	Lot J		74	71	71	96%	96%
4-1	-	Lot W		59	30	33	51%	56%
4-2	-	Lot E		68	64	71	94%	104%
5-1	-	Lot M		26	26	21	100%	81%
Core Off-Street Subtotal				**733**	**583**	**626**	**80%**	**85%**
All Core Area Spaces				***1257***	***1016***	***1078***	***81%***	***86%***

Source: Wilbur Smith Asociates Surveys on 11/8/01 and 10/31/02

Table 2

COMPARISON OF 2001 and 2002 MIDDAY PARKING OCCUPANCY -- PERIPHERAL AREA

Block Number	Block Face	Curb Face or Off-Street Facility		Total Spaces	Occupied Spaces		Percent Occupied	
					2001	2002	2001	2002
6-1	E	Carolan	Between North Lane and East Lane	10	9	10	90%	100%
6-1	S	South Lane	W of train tracks; E of California Dr; S of Depot	4	3	2	75%	50%
6-1	W	California Dr	Between North Lane and South Lane	4	1	3	25%	75%
6-2	S	Burlingame Ave	At North Lane/ East Lane	3	3	3	100%	100%
6-2	W	Burlingame Ave	At North Lane/ East Lane	8	7	8	88%	100%
6-3	W	California Dr	Between S Lane and Howard	12	2	9	17%	75%
6-4	E	East Lane	Between North Lane and South Lane	4	3	3	75%	75%
7-3	N	Bellevue Ave	Between Almer and Primrose	13	20	10	154%	77%
10-1	W	California Dr	Between Bayswater and Howard	20	9	10	45%	50%
11-1	E	Highland Ave	Between Bayswater and Howard	20	20	19	100%	95%
11-1	N	Howard Rd	Between Highland and Lorton	19	7	16	37%	84%
11-1	W	Lorton Ave	Between Bayswater and Howard	19	13	16	68%	84%
12-1	N	Howard Ave	Between Primrose and El Camino Real	12	11	12	92%	100%
12-2	E	Park Rd	Between Bayswater and Howard	18	13	16	72%	89%
12-2	N	Howard Rd	Between Primrose and Park	17	8	15	47%	88%
12-2	W	Primrose Rd	Between Howard and Bayswater	16	13	16	81%	100%
12-3	N	Howard Rd	Between Park and Lorton	15	12	15	80%	100%
Peripheral On-Street Subtotal				**214**	**154**	**183**	**72%**	**86%**
6-1	-	Lot V		19	18	14	95%	74%
6-2	-	Lot X		55	36	42	65%	76%
9-1	-	Lot O		107	93	83	87%	78%
11-1	-	Lot N		69	68	42	99%	61%
12-2	-	Lot G		98	48	77	49%	79%
12-3	-	Lot F		98	83	97	85%	99%
14-3	-	Lot H		85	65	72	76%	85%
Peripheral Off-Street Subtotal				**531**	**411**	**427**	**77%**	**80%**
All Peripheral Area Spaces				***745***	***565***	***610***	***76%***	***82%***

Source: Wilbur Smith Asociates Surveys on 11/8/01 and 10/31/02

Table 3

SUMMARY COMPARISON OF 2001 and 2002 MIDDAY PARKING OCCUPANCY

Block Number	Total Spaces	Occupied Spaces		Percent Occupied	
		2001	2002	2001	2002
Commercial Core On-Street	524	433	452	83%	86%
Commercial Core Off-Street	733	583	626	80%	85%
Commercial Core Subtotal	***1257***	***1016***	***1078***	***81%***	***86%***
Peripheral Area On-Street	214	154	183	72%	86%
Peripheral Area Off-Street	531	411	427	77%	80%
Peripheral Area Subtotal	***745***	***565***	***610***	***76%***	***82%***
All Spaces	**2002**	**1581**	**1688**	**79%**	**84%**

Source: Wilbur Smith Asociates Surveys on 6/2/99, 11/8/01 and 10/31/02

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Figure 1

SHIFT IN WEEKDAY PEAK PARKING OCCUPANCY, 2001-2002

385190\FIGURE 1 - 11/25/02

There are a number of possible explanations for both the overall increase in occupancy and the shifts in peak occupancies. First, making Lot F a free lot may have attracted early-rising commuters who formerly parked at free curb parking outside the study area boundaries. With Lot F filling up earlier, some of its former users would spill over to long term on-street parking in the vicinity. Second, the Free Lot F may have attracted early-rising Caltrain commuters who formerly paid to park in Lot N. As to the drop in Lot N occupancy, it may be due to the fact that Lot N's location is not as attractive to downtown Burlingame employees as other options for parkers displaced from Lot F. Another reason could due to traffic circulation considerations. If the free Lot F is approached via Lorton Avenue, drivers seeking parking spaces in Lot F would travel westward through the lot, and not finding vacant spaces would be more inclined to proceed directly across the street to Lot G, rather than "double back" and go to Lot N.

SPECIAL SURVEYS OF FREE LOTS F AND H

Although free Lots F and H are nominally 10-hour parking lots, overnight and longer parking is tolerated. However, concerns have arisen that some parkers may be using these facilities for periods longer than 24 hours, or "storage" of vehicles. In order to evaluate the extent of such practices, WSA undertook special surveys of these lots over the three-day period November 12, 13 and 14, 2002. On these three days, license plate numbers by space were recorded three times daily: before 6:30 AM, mid-day, and after 6:30 PM. These observations were tabulated to gain a picture of the parking duration characteristics in these lots. In evaluating this data, only cars parked in the same space for five or more consecutive observations were considered to have been parked for more than 24 hours in the same space. (Cars appearing in four consecutive observations may have been parked just before the first recording and moved just after the fourth recording, and therefore may have exceeded a 24-hour duration by only a few minutes.)

In Lot F, only six observations were made of cars parked more than 24 hours over the three day period; in Lot H, only three cars were observed to have parked for more than 24 hours, including one car which appeared to have occupied the same space for three consecutive days. In terms of total overnight parking, 12 cars were observed to have parked overnight in Lot F on Tuesday night, and 10 on Wednesday night. At Lot H, there were 8 overnight parkers on Tuesday night and 9 on Wednesday night.

REVENUE GROWTH

An analysis of post-rate increase parking meter revenues was undertaken to assess the success of the program, and evaluate the accuracy of revenue forecasts prepared by WSA in the 2001 report. The analysis made use of monthly meter revenue reports for 2001 and June 2002 provided by the City of Burlingame. Table 4 presents a side-by-side comparison between meter revenues by collection route for 2001 and 2002. As seen in Table 4, revenues in the Burlingame study area grew by 48 percent in the for 2002 over 2001.

WSA's 2001 study estimated a Phase 1 increase in gross meter revenues of approximately 58 percent overall under the recommended meter rate increase plan. However, the 2001 WSA analysis did not contemplate Lot F becoming a free lot. When Lot F's estimated share of

Table 4
Comparison of 2001 and 2002 Meter Revenues by Collection Route

METER ROUTE	ROUTE DESCRIPTION	2001 Actual Collections	2002[(1)] Actual Collections	Growth Rate
SLOT	Slot Box Route	$72,112	$87,035	120.7%
1	Park/Howard/Primrose	$48,203	$65,383	135.6%
2	Lots J/K/L	$37,057	$60,854	164.2%
3	Post Office/Lorton	$67,566	$92,711	137.2%
4	Lots D/E/M	$46,850	$91,299	194.9%
5	California Dr./Train Station (Incl. Lot V)	$64,820	$89,169	137.6%
6	Chapin/Alphagraphics (Incl. Lot B-1)	$49,922	$66,439	133.1%
7	Parking Structure (Incl. Lot A-3)	$48,343	$78,499	162.4%
8	Donnelly Behind Gap (Lots C/W)	$31,038	$52,952	170.6%
9	Primrose/Donnelly	$41,910	$58,191	138.8%
13	Burlingame Avenue	$82,068	$129,049	157.2%
Total		**$589,889**	**$871,581**	**147.8%**

[(1)]Revenue amounts for December 2002 projected from November 2002
Source: City of Burlingame, December 2002

revenues was deducted from the Phase 1 gross revenue forecasts, WSA's projected near term increase in revenues over baseline meter rates amounts to a 54 percent growth, or revenues approximately 4.4 percent higher (154 percent divided by 148 percent) than currently indicated by revenue reports. In order to provide the most accurate estimate of future revenues, parameters in the WSA forecasting model were adjusted to scale back (by 4.4 percent) raw model outputs for the longer term revenue forecasts described in the next section.

FUTURE REVENUE POTENTIAL

WSA prepared a detailed forecast of potential Step 2 rate increases for eight scenarios. Table 5 provides a key to scenario definitions, as well as a summary of the results of the analysis by scenario in terms of net future revenues. Appendix A presents this forecast broken out by off-street, on-street, gross and net revenues. Future net revenues under the various scenarios for second step rate increases are forecasted to range from $1,006,000 to $1,418,000 compared with the "status quo" level of $738,000.

These forecasts use essentially the same model documented in our earlier study, updated with new occupancy data from our 2002 surveys and current revenue data from meter collection reports for the 2002. Factors for elasticity and demand growth are incorporated into the analysis, and net revenues were derived from gross revenues using more recent data on citation revenues and operating costs provided by the City of Burlingame.

Table 5
NET REVENUES BY SCENARIO
Burlingame Parking Implementation Plan Update

ON-STREET \ OFF-STREET		1	2	3	4
		Lots increase proportionately to Burlingame Ave., F&H Remain Free	Lots increase proportionately to Burlingame Ave., Except F,H,N are Free	Lots increase proportionately to Burlingame Ave., Except F,H,N and G are Free	Peripheral Lots F,G,N,O,H and X are $1.00/Hr., all others are $2.00/Hr.
A	Burlingame Ave. Meters increase by $0.25/Hr., others increased proportionately	$1,085,000	$1,041,000	$1,006,000	$1,104,000
B	Burlingame Ave. Meters increase by $0.50/Hr., others increased proportionately	$1,418,000	$1,361,000	$1,317,000	$1,414,000

Note: Assumes citation revenues of $510,000 in addition to meter collections, and operating costs of $644,000 for on-street and off-street parking combined.
Source: Wilbur Smith Associates, December 2002

Appendix A
Future Revenues By Scenario

SCENARIO	GROSS REVENUES			CITATION REVENUES			OPERATING COSTS			NET REVENUES		
	On-Street	Off-Street	Total	On-Street	Off-Street	Total	On-Street	Off-Street	Total	On-Street	Off-Street	Total
STATUS QUO	$586,000	$286,000	**$872,000**	$247,000	$263,000	**$510,000**	$312,000	$332,000	**$644,000**	$521,000	$217,000	**$738,000**
A1	$819,000	$400,000	**$1,219,000**	$247,000	$263,000	**$510,000**	$312,000	$332,000	**$644,000**	$754,000	$331,000	**$1,085,000**
A2	$819,000	$356,000	**$1,175,000**	$247,000	$263,000	**$510,000**	$312,000	$332,000	**$644,000**	$754,000	$287,000	**$1,041,000**
A3	$819,000	$321,000	**$1,140,000**	$247,000	$263,000	**$510,000**	$312,000	$332,000	**$644,000**	$754,000	$252,000	**$1,006,000**
A4	$819,000	$419,000	**$1,238,000**	$247,000	$263,000	**$510,000**	$312,000	$332,000	**$644,000**	$754,000	$350,000	**$1,104,000**
B1	$1,042,000	$510,000	**$1,552,000**	$247,000	$263,000	**$510,000**	$312,000	$332,000	**$644,000**	$977,000	$441,000	**$1,418,000**
B2	$1,042,000	$453,000	**$1,495,000**	$247,000	$263,000	**$510,000**	$312,000	$332,000	**$644,000**	$977,000	$384,000	**$1,361,000**
B3	$1,042,000	$409,000	**$1,451,000**	$247,000	$263,000	**$510,000**	$312,000	$332,000	**$644,000**	$977,000	$340,000	**$1,317,000**
B4	$1,042,000	$506,000	**$1,548,000**	$247,000	$263,000	**$510,000**	$312,000	$332,000	**$644,000**	$977,000	$437,000	**$1,414,000**

Source: WSA forecasts of gross revenues, with citation revenues and operating cost data provided by the City of Burlingame