

MEMORANDUM

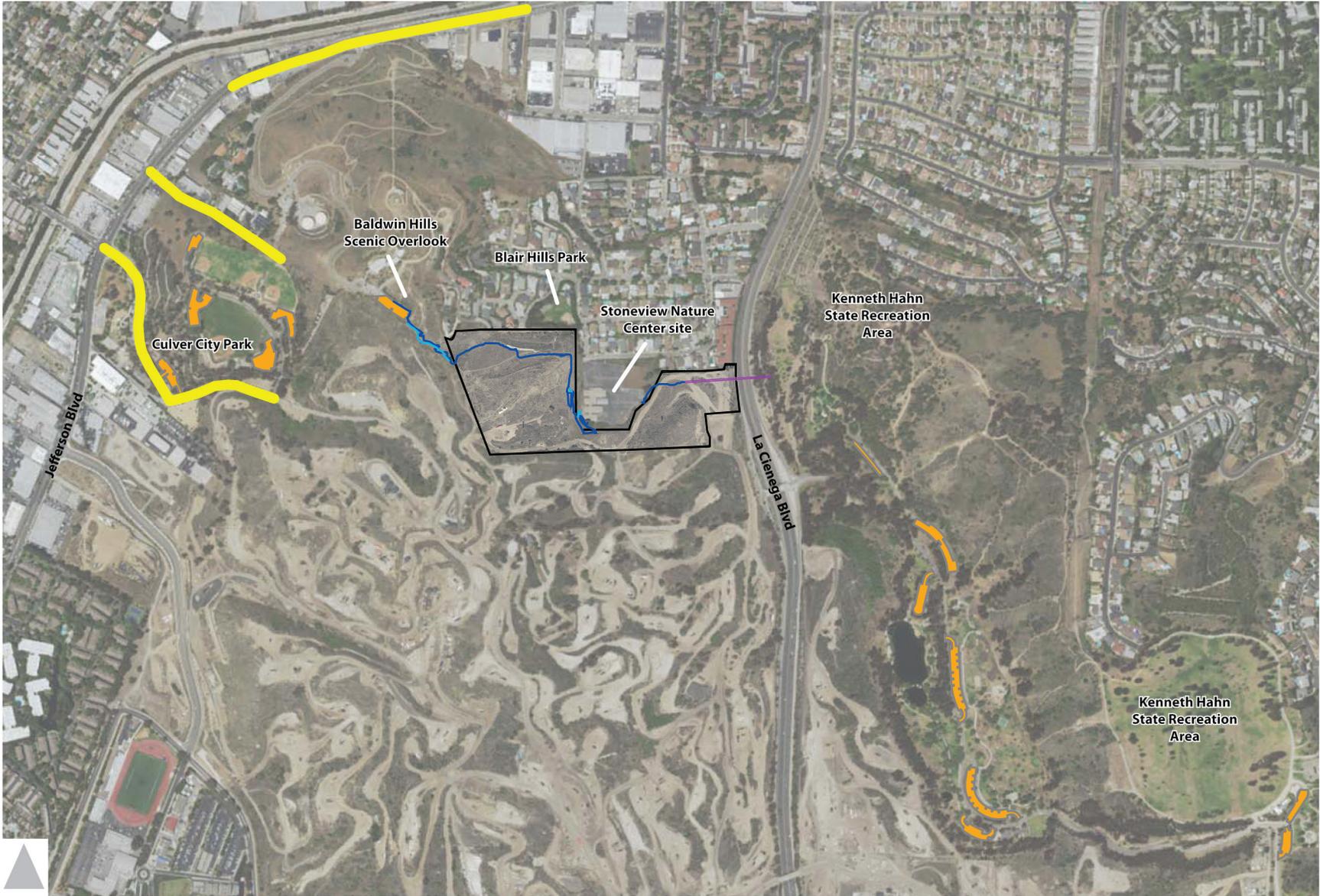
Date: Friday, July 08, 2016
To: Josephine Alido, BonTerra Psomas
From: Michael Sahimi, Fehr & Peers
Subject: **DRAFT Park to Playa Trail Segment C Parking Study**

LA16-2840

Fehr & Peers has completed a parking demand and supply assessment for the planned Segment C Trail Alignment as part of the Park to Playa Project. This assessment examined the existing parking supply surrounding the project and determined that it would accommodate the expected increase in parking demand generated by new trail users visiting Alignment C. Additionally, recommendations are made to discourage trail users from parking their vehicles in the adjacent Blair Hills residential streets.

STUDY AREA

Figure 1 shows the study area and the planned Park to Playa Segment C trail alignment. Segment C of the Park to Playa Trail would connect the Baldwin Hills Scenic Overlook to the Kenneth Hahn State Recreation Area (KHSRA) east of La Cienega Boulevard. As shown in Figure 1, Phase 1 will consist of the construction of facilities west of La Cienega Boulevard, while Phase 2 will be the addition of a pedestrian footbridge connecting the Baldwin Hills facilities to an existing trail east of La Cienega Boulevard at the KHSRA. Figure 1 also shows the existing parking facilities in the study area.



- Study Segment
- BHRCA Owned Surface Property
- Study Lot
- Proposed Trail Alignment
- Proposed Pedestrian Bridge
- Proposed Steps

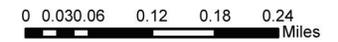


Figure 1
Study Area



EXISTING PARKING CONDITIONS

In order to establish parking supply and occupancy levels at the existing parking facilities available to future trail users, parking counts were collected at 13 off-street parking lots and 6 roadway segments with on-street parking allowed. Study lots west of La Cienega Boulevard included the paid parking lot at the Baldwin Hills Scenic Overlook, the free parking lots at Culver City Park, and street parking along Jefferson Boulevard, Lotz Lane, and Duquesne Avenue. Study lots east of La Cienega Boulevard consisted of lots at KHSRA. Parking inventory and occupancy surveys were conducted on a Saturday and Sunday between the hours of 7:00 AM and 12:00 PM in May 2016 to capture existing demand from weekend morning trail users. Additionally, the surveys were scheduled at the same time as Little League Baseball games at Culver City Park such that occupancy data reflects demand by other visitors to Culver City Park. Parking survey data is provided in **Appendix A**.

TABLE 1 – EXISTING PARKING SUPPLY AND DEMAND

	Saturday		Sunday	
	West of La Cienega (PHASE 1)	Total Area (PHASE 2)	West of La Cienega (PHASE 1)	Total Area (PHASE 2)
Total Parking Supply	513	890	513	890
Peak Hour Occupancy	345	468	305	425
Peak Hour Occupancy (%)	67%	53%	59%	48%
Remaining Available Supply	168	422	208	465
Remaining Available Supply (%)	33%	47%	41%	52%

Source: Fehr & Peers, 2016



Table 1 summarizes the total parking supply and peak parking occupancy levels on observed days. Peak parking demand for at surveyed locations was observed to occur at 12:00 PM on Saturday when out of the 890 spaces, 468 spaces were observed to be occupied and 422 spaces were available. On Sunday at 11:00 AM, peak parking occupancy of 425 spaces was observed with 465 available spaces.

Table 1 also summarizes parking supply and peak occupancy for parking resources located west of La Cienega Boulevard only (excludes parking at KHSRA). This summary provides the number of spaces expected to be available during Phase 1 of Alignment C, when the proposed pedestrian bridge across La Cienega Boulevard has not yet been constructed. Out of the 513 parking spaces west of La Cienega Boulevard, a peak parking occupancy of 345 was observed with 168 spaces available on Saturday. On Sunday, a peak parking occupancy of 305 spaces was observed with 208 spaces available.

FUTURE ALIGNMENT C PARKING DEMAND

Additional parking demand generated by new users visiting Segment C was estimated using the Institute of Transportation Engineers (ITE) *Parking Generation* (4th Edition), which provides parking generation rates for various land uses based on data collected on the field. According to ITE, the Saturday peak hourly parking demand for a City Park land use is recommended at 2.3 spaces per acre; the Sunday peak hourly demand is recommended at 2.8 vehicles per acre. **Table 2** shows the estimated increase in parking demand due to new Alignment C users on a typical Saturday and a Sunday. A project size of 25 acres was assumed, based on the extent of Segment C and the size of the Baldwin Hills Regional Conservation Authority (BHRCA) surface property surrounding the trail.

TABLE 2 – ESTIMATED PEAK PARKING DEMAND

	Saturday	Sunday
Peak Demand Rate (vehicles per acre)[1]	2.3	2.8
Estimated Peak Demand	58	70

[1] Source: *Institute of Transportation Engineers, 2010*



PARKING SUPPLY RECOMMENDATIONS

As noted above, the estimated peak hourly demand generated by new visitors to Alignment C is estimated at 58 vehicles on Saturday and 70 vehicles on Sunday. To be conservative and to account for inefficiencies related to parking turnover, circulation and seasonal fluctuations in demand, parking demand was adjusted higher to incorporate a 15% buffer. The adjusted parking supply recommended for new visitors to the Alignment C trail is estimated at 67 parking spaces on Saturday and 81 spaces on Sunday.

Table 3 compares the recommended parking supply to the available parking supply during Phase 1 of the project, when only the parking west of La Cienega Boulevard is available to users. As shown in the table, parking availability of 168 spaces on a Saturday and 208 spaces on Sunday in proximate parking resources will be adequate to meet and exceed the recommended parking supply. **Table 4** compares the recommended parking supply to available parking during Phase 2, when the additional parking spaces east of La Cienega become available to new trail users via the proposed pedestrian bridge connection to KHSRA. As shown in the table, the available parking supply will be adequate to meet and exceed the recommended parking supply on both days.

TABLE 3 – RECOMMENDED PARKING SUPPLY (PHASE 1)

	Saturday	Sunday
Recommended Parking Supply (Estimated Demand + 15%)	67	81
Current Available Parking Supply	168	208
Does Recommended Supply Exceed Available Supply?	No	No
<i>Source: Fehr & Peers, 2016</i>		



TABLE 4 – RECOMMENDED PARKING SUPPLY (PHASE 2)

	Saturday	Sunday
Recommended Parking Supply (Estimated Demand + 15%)	67	81
Current Available Parking Supply	422	465
Does Recommended Supply Exceed Available Supply?	No	No
<i>Source: Fehr & Peers, 2016</i>		

RESIDENTIAL PARKING STRATEGIES

One concern as part of the proposed project is that with the addition of Segment C, the potential for trail users to park in the Blair Hills neighborhood bordering the trail could increase because these neighborhoods will be accessible by trail users in the future.

The most effective parking management strategy to discourage non-residents from parking in neighborhood streets is a **Parking Permit Program**. This program would require that all vehicles parked on-street in designated areas obtain a parking permit from the city or county regulating the program. For the study area, a permit program could be customized to require that permits for on-street parking be required at all times, or that permits only be required during peak parking times for recreational users. Limiting permit requirements to evening and weekend users would allow residents and their guests to park on-street during weekday daytime hours without a permit when use of recreational facilities is limited. This strategy should be coupled with enforcement to guarantee effectiveness. Input and participation from the Blair Hills neighborhood association would be critical to create a successful program that meets the needs of local residents.

There are several neighborhoods surrounding hiking trails in Los Angeles County that currently require residential permits for on-street parking. These include Franklin Avenue and Gardner Street near the popular Runyon Canyon Park and neighborhoods surrounding the entrance to the Portuguese Bend Reserve and Del Cerro Park in Rancho Palos Verdes. Through these residential permits, park and trail users are discouraged from parking intrusion into residential areas surrounding these facilities and limit the parking to designated recreational parking spaces.



Another parking management strategy that could be implemented alone or in addition to residential permits is **time limits and restrictions**. Implementing time-based parking restrictions can discourage parking intrusion in certain areas. By pairing these strategies, parking by permit only could be implemented during peak times of use for the trail facilities, while parking by trail users during off-peak times could still be regulated through the use of time-based parking restrictions. This strategy is currently in effect in the area referenced above near Runyon Canyon Park, where 2 hour on-street parking is allowed Monday through Friday between 8:00 AM and 7:00 PM for users that do not have a parking permit and weekend parking is restricted to permit holders only.

Another strategy is to increase the supply of convenient **bicycle parking** near trail access points. Safe and secure bicycle parking can encourage trail users to bike to the trail rather than drive, reducing parking demand during peak weekend hours. Implementation would require coordination with the relevant agencies controlling land close to the trail access points.

CONCLUSIONS

A parking supply of 67 spaces on Saturdays and 81 spaces on Sundays is recommended to accommodate new users of the Park to Playa Alignment C trail. The current available parking supply will adequately meet the recommended supply for new trail users based on the availability of parking spaces in proximate on-street and off-street parking facilities during peak hours of expected recreational activities on Saturdays and Sundays. Therefore, the trail expansion need not add new parking facilities.

To counter the possibility of parking intrusion into the Blair Hills neighborhood by new trail users, we recommend a number of parking management strategies that should be considered. These strategies include a permit parking program, parking time limits and restrictions, and encouraging alternative modes of travel to the new trail.



APPENDIX A: PARKING SURVEY DATA

Parking Study

Day: Saturday

Date: 5/14/2016

Locations: Blair Hills Park & Kenneth Hahn State Recreational Area

City: Culver City

LOT/ SEGMENT	SPACE TYPE	SPACES	TIME						RESTRICTIONS	
			7:00	8:00	9:00	10:00	11:00	12:00		
Lot 1	Reg	54	0	2	14	21	22	18		
	No Parking Except EVC	6	0	0	0	1	0	0		
	HC	4	1	2	1	1	1	1		
Lot 2	Reg	24	0	0	1	4	2	6		
	HC	2	0	0	0	0	0	0		
Lot 3	Reg	66	4	8	8	11	17	17		
Lot 4	Reg	27	1	2	4	7	17	20		
	HC	2	0	0	0	0	0	0		
Lot 5	Reg	74	0	2	4	4	12	48		
	HC	4	0	0	0	0	0	2		
	Authorized vehicles only	2	0	0	0	0	0	0		
	Drop-off (White Curb)	1	0	0	0	0	0	0		
Lot 6	Reg	78	3	4	16	16	13	20		
	HC	6	0	0	1	0	0	0		
	Drop-Off (White Curb)	2	0	0	0	0	0	0		
Lot 7	Staff parking only	12	4	7	6	6	6	8		
	HC	4	0	0	0	0	0	0		
	Reg	31	1	2	1	3	6	10		
Lot 8	Reg	38	26	38	38	38	25	25		
	HC	4	1	1	3	3	1	1		
	Illegal		3	0	0	1	3	0		
Lot 9	Reg	19	0	1	7	12	16	16		
	HC	2	0	0	0	1	1	1		
Lot 10	Reg	57	2	12	12	15	21	16		
	HC	3	0	0	0	0	0	0		
	Illegal		0	0	1	0	0	0		
Lot 11	Reg	33	8	33	33	33	33	26		
	HC	3	0	2	3	3	3	0		
	Illegal		0	1	0	0	2	3		
Lot 12	Reg	46	1	12	21	31	35	24		
	HC	4	0	0	0	0	0	0		
Lot 13	2 Hr Parking	25	13	13	16	22	18	19		
	HC	1	0	0	0	0	0	0		
008E	East Side	Illegal		0	0	0	0	0	Red Curb	
	West Side	Illegal		0	0	5	4	1	Red Curb	
008W	East Side	Illegal		0	0	0	0	0	Authorized Vehicles Only	
	West Side	Illegal		0	0	0	0	0	Authorized Vehicles Only	
014	North Side	Unmarked	35	36	39	37	38	37	33	No Parking 4 A.M. to 6 A.M. Daily Street Sweeping
		Marked	15	15	15	15	15	15	15	No Parking 4 A.M. to 6 A.M. Daily Street Sweeping / 2 Hour Parking 8 A.M. to 6 P.M. Except Sunday
	South Side	Marked	15	15	15	15	15	15	13	2 Hour Parking 8 A.M. to 8 P.M. Daily
		Unmarked	24	24	24	26	28	24	22	No Parking 2 A.M. to 4 A.M.
		Illegal		0	0	0	0	0	0	Illegal
015	North Side	Marked	18	18	18	18	18	18	No Parking 4 A.M. to 6 A.M. Tuesday Street Cleaning 10 Hour Parking 8 A.M. to 6 P.M. Monday Thru Saturday	
	South Side	Metered	17	17	17	17	17	15	No Parking 4 A.M. to 6 A.M. Thursday Street Cleaning 10 Hour Parking 8 A.M. to 6 P.M. Monday Thru Saturday	
016	North Side	Unmarked	18	4	10	9	10	9	11	No Restriction
	South Side	Unmarked	10	1	4	5	3	4	6	No Restriction
017	East Side	Marked	43	3	6	12	20	22	21	10 Hour Parking 8 A.M. to 6 P.M. Except Holidays And Saturdays And Sundays
		Marked	25	3	8	8	21	15	15	2 Hour Parking 8 A.M. to 6 P.M. Except Holidays And Saturdays And Sundays
	West Side	HC	1	0	0	0	0	1	1	Handicap Parking Only
		Marked	14	3	2	4	13	10	14	10 Hour Parking 8 A.M. to 6 P.M. Except Holidays And Saturdays And Sundays
		Illegal		0	0	0	0	0	0	Illegal
018	North Side	Unmarked	16	0	1	0	4	0	0	10 Hour Parking 8 A.M. to 6 P.M. Except Holidays And Saturdays And Sundays
	South Side	Illegal		0	0	0	0	0	0	No Parking Any Time
019	West Side	Unmarked	5	0	2	2	3	3	3	2 Hour Parking 8 A.M. to 6 P.M. Except Holidays And Saturdays And Sundays
	East Side	Illegal		0	0	0	0	0	0	No Parking Any Time
GRAND TOTAL			890	207	303	363	442	445	468	

Parking Study

Day: Sunday

Date: 5/15/2016

Locations: Blair Hills Park & Kenneth Hahn State Recreational Area
City: Culver City

LOT/ SEGMENT	SPACE TYPE	SPACES	TIME						RESTRICTIONS	
			7:00	8:00	9:00	10:00	11:00	12:00		
Lot 1	Reg	54	Gate Closed	0	4	5	7	7		
	No Parking Except EVC	6	Gate Closed	0	0	0	0	0		
	HC	4	Gate Closed	0	0	0	0	0		
Lot 2	Reg	24	0	0	2	1	9	4		
	HC	2	0	0	0	0	0	0		
Lot 3	Reg	66	1	1	5	6	18	25		
Lot 4	Reg	27	1	2	5	9	12	21		
	HC	2	0	0	0	0	1	0		
Lot 5	Reg	74	4	9	9	19	35	45		
	HC	4	0	0	0	0	0	1		
	Authorized vehicles only	2	0	0	0	0	0	0		
	Drop-off (White Curb)	1	0	0	0	0	1	0		
Lot 6	Reg	78	2	2	5	8	16	26		
	HC	6	0	0	1	1	1	2		
	Drop-Off (White Curb)	2	0	0	0	0	0	0		
Lot 7	Staff parking only	12	4	3	5	5	5	5		
	HC	4	0	0	0	0	0	0		
	Reg	31	1	3	0	4	5	6		
Lot 8	Reg	38	1	2	9	4	17	28		
	HC	4	0	0	0	0	0	0		
	Illegal		0	0	0	0	0	0		
Lot 9	Reg	19	0	2	12	10	12	14		
	HC	2	0	0	2	0	0	1		
Lot 10	Reg	57	0	8	14	18	23	11		
	HC	3	0	0	0	0	0	0		
	Illegal		0	0	0	0	0	0		
Lot 11	Reg	33	2	7	30	33	33	15		
	HC	3	0	2	2	3	2	1		
	Illegal		0	0	0	5	5	0		
Lot 12	Reg	46	1	1	5	35	36	7		
	HC	4	0	0	0	0	0	0		
Lot 13	2 Hr Parking	25	3	11	19	16	19	15		
	HC	1	0	0	0	0	0	0		
008E	East Side	Illegal		0	0	0	0	0	Red Curb	
	West Side	Illegal		0	0	0	0	0	Red Curb	
008W	East Side	Illegal		0	0	0	0	0	Authorized Vehicles Only	
	West Side	Illegal		0	0	0	0	0	Authorized Vehicles Only	
014	North Side	Unmarked	35	29	34	39	37	38	34	No Parking 4 A.M. to 6 A.M. Daily Street Sweeping
		Marked	15	13	15	15	15	14	No Parking 4 A.M. to 6 A.M. Daily Street Sweeping / 2 Hour Parking 8 A.M. to 6 P.M. Except Sunday	
	South Side	Marked	15	14	14	15	15	15	2 Hour Parking 8 A.M. to 8 P.M. Daily	
		Unmarked	24	21	28	27	29	27	22	No Parking 2 A.M. to 4 A.M.
		Illegal		0	0	0	0	0	0	Illegal
015	North Side	Marked	18	14	18	18	18	18	No Parking 4 A.M. to 6 A.M. Tuesday Street Cleaning 10 Hour Parking 8 A.M. to 6 P.M. Monday Thru Saturday	
	South Side	Metered	17	17	16	15	15	14	No Parking 4 A.M. to 6 A.M. Thursday Street Cleaning 10 Hour Parking 8 A.M. to 6 P.M. Monday Thru Saturday	
016	North Side	Unmarked	18	0	0	0	0	0	No Restriction	
	South Side	Unmarked	10	0	0	0	0	0	No Restriction	
017	East Side	Marked	43	3	4	7	20	12	10	10 Hour Parking 8 A.M. to 6 P.M. Except Holidays And Saturdays And Sundays
		Marked	25	5	9	8	12	13	19	2 Hour Parking 8 A.M. to 6 P.M. Except Holidays And Saturdays And Sundays
	West Side	HC	1	0	0	0	0	1	0	Handicap Parking Only
		Marked	14	0	2	6	7	10	14	10 Hour Parking 8 A.M. to 6 P.M. Except Holidays And Saturdays And Sundays
		Illegal		0	0	0	0	0	0	Illegal
018	North Side	Unmarked	16	0	0	0	1	1	0	10 Hour Parking 8 A.M. to 6 P.M. Except Holidays And Saturdays And Sundays
	South Side	Illegal		0	0	0	0	0	0	No Parking Any Time
019	West Side	Unmarked	5	0	0	0	3	3	0	2 Hour Parking 8 A.M. to 6 P.M. Except Holidays And Saturdays And Sundays
	East Side	Illegal		0	0	0	0	0	0	No Parking Any Time
GRAND TOTAL			890	136	193	279	354	425	394	

NOTE: Segment 16 (Nursery) was closed