CITY OF LOS ANGELES CORNFIELD ARROYO SECO SPECIFIC PLAN: PARKING MANAGEMENT STRATEGIES

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CHAPTER I

INTRODUCTION

1. Geographic Location
2. Existing Conditions
3. Significance of the CASP
4. Study Purpose
5. Problem Statement

GEOGRAPHIC LOCATION

The CASP is a 603-acre area bordered on the north and west by Interstate 110 (Pasadena Freeway) the Arroyo Seco waterway and Elysian Park.

Chinatown is immediately adjacent to its south-westernmost area. Directly south of the Plan area is Union Station, historic Olvera Street and the downtown Civic Center.

The Interstate 5 (Golden State Freeway) the Los Angeles River and Metrolink all pass through the plan area.

CASP

CORNFIELDSARROYO SECO
SPECIFIC PLAN

EXISTING CONDITIONS

SIGNIFICANCE OF THE CORNFIELD ARROYO SECO SPECIFIC PLAN

The physical and cultural characteristics of the CASP area provide excellent opportunities to promote the healthy living benefits of integrates the principles of smart growth, New Urbanism, and green building into neighborhood design so that a level of sustainability can be attained for an the entire area.

STUDY PURPOSE

CHAPTER II

POLICY REVIEW

1. The City of Los Angeles General Plan
2. The City Of Los Angeles Municipal (Zoning) Code
3. Zoning Administrator Division : Parking Reduction
4. CASP Parking Objectives, Goals and, Policies

CITY OF LOS ANGELES GENERAL PLAN

The General Plan, readopted August 8, 2001, provides the overarching authoritative vision for the future of the city. A review of the General Plan Framework revealed that there are currently numerous goals, policies, and objectives that are aimed at improving the current state of parking.

CITY OF LOS ANGELES MUNICIPAL (ZONING) CODE

Planning and Zoning, Chapter I of the Municipal Code, last amended by legislation effective April 30, 2009, spells out the detailed regulations that support the aforementioned General Plan goals, policies and objectives.

Chapter I Section. 12. 12. 1.'P' entitled “Automobile Parking Zone” in the zoning code provides numerical parking requirements for every use and zone.

ZONING ADMINISTRATOR DIVISION: PARKING REDUCTION

Parking reductions are granted through a case-by-case evaluation. Determining which parking management alternative will satisfy both the ZAD and the applicants' needs is a joint effort between both parties.

The applicant can choose to provide a parking management plan with alternatives like remote offsite parking, shared parking, offsite parking, vanpools, carpools, bicycle racks, motorcycle parking, or discounted group transit passes for employees.

CASP PARKING OBJECTIVES, GOALS AND, POLICIES

The first plan of any kind in the city of Los Angeles that does not include parking requirements. The lack of parking requirements will allow developers to minimize the amount of parking for specific projects, given the neighborhood's proximity to transit, the changing culture of Los Angeles, and the declining need for parking.

The effect will be to let the market decide how much parking is needed and where.

UNBUNDLED PARKING

The proposed plan further requires developers to “unbundle” the parking from the rental or sale price of the unit or square footage. By unbundling the price of a vehicle parking space from the rent or sale price of a residential unit renters or home buyers who do not have a vehicle or who have less than two cars will be able to obtain a unit less expensively than in other places in the City where two parking spaces are typically included in the rent or sale price.

CHAPTER III

BEST PRACTICES

1. City of Santa Monica
2. The City of Pasadena
3. The City of Los Angeles
4. Comparison of Parking Policies

CITY OF SANTA MONICA

The Santa Monica Municipal Code (SMMC) contains over a dozen strategies that regulate the provision of parking. All of these strategies are designed to work synergistically to enhance the overall vitality of the city. The SMMC includes

By far, the strategy that is on the leading edge is the innovative parking cash-out program. The city's cash out program is most frequently highlighted in scholarly literature as the superlative example of a municipal parking cash-out program.

THE CITY OF PASADENA

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- Parking Benefits District,
 - Parking Management Zone,
 - Transit Oriented Development Parking Requirement Reduction,
 - Parking Meter Zone (PMZ)
 - Old Pasadena Business Improvement District (BID).

PARKING POLICY COMPARISON CHART

MANAGEMENT STRATEGY	City of Santa Monica	City of Pasadena	City of Los Angeles	CASP
Shared Parking	✓	✓	✓	✓
Off-Site Parking	✓	✓		✓
Exemptions for Minor Floor Area Additions	✓			
Compact Spaces	✓	✓	✓	✓
Tandem and Stacked Spaces	✓			
Vanpool and Carpool Parking	✓	✓	✓	✓
Curb loading provisions	✓	✓	✓	✓
Parking cash-out	✓			✓
Reduced Parking Requirements	✓			✓
Shared / Joint Parking,	✓	✓	✓	✓
Minimum Parking Requirements	✓			
Change of Use	✓			
Tandem and Stacked Spaces	✓			
Bicycle Parking	✓	✓	✓	✓
Parking pricing and time restrictions		✓	✓	✓
Park Once and Walk” outreach campaign		✓		
Transit park/ride parking facilities		✓	✓	✓
Preferential parking district programs		✓		
Multispace meters		✓		
Business Improvement District		✓	✓	
Parking Meter Zone	✓	✓	✓	✓
Parking Credit program		✓		
Trip Reduction Standards		✓		
TOD Parking Requirement Reduction		✓		
Unbundled Parking				✓

CHAPTER IV

LITERATURE REVIEW

1. Transportation and Land Use: A Perspective
2. The High Cost of Free Parking
3. Comparison of Parking Management Strategies
4. Guide on Parking Rates
5. Parking and Smart Growth Study
6. Transit Passes In Lieu Of Required Parking Spaces

TRANSPORTATION AND LAND USE: A PERSPECTIVE

The voices of researchers, J.S. Adams (1970) and P.O. Muller (1995), have shaped the way the history of transportation and land use are viewed. Adams (1970) posits that "Transportation modes has shaped the pattern of urban form into four eras: the Walking/Horsecar era, the Electric Streetcar era, Recreational Automobile era, and the Freeway era.

THE HIGH COST OF FREE PARKING

According to Donald Shoup (2005), most local governments, through their zoning ordinances, have a parking supply policy that requires land uses to provide minimum parking requirements based on the peak demand each use generates, without considering the cost to developers and end users.

He posits that this has encouraged automobile dependency and urban sprawl. As the old adage says, "there is no such thing as a free lunch". The same can be said for parking. The cost of "free parking" is actually bundled into a buildings' overall development, purchase and lease cost. A minimum parking requirement can increase development costs by more than 10 times

	SCHOLARLY LITERATURE								
	CASP Cornfiled Arroyo Seco Specific Plan	Shoup The High Cost of Free Parking	Shoup In Lieu of Required Parking	Shoup Evaluating the Effects of Parking Cash Out: Eight Case Studies	Mott Onsite Parking: The Scourge of America's Commercial Districts	EPA Parking Alternatives: Making Way for Urban Infill and Brownfields Redevelopment	EPA Parking Spaces / Community Places: Finding the Balance Through Smart Growth Solutions	MTC Developing Parking Policies to Support Smart Growth in Local Jurisdictions: Best Practices	MTC Reforming Parking Policies To Support Smart Growth
MANAGEMENT STRATEGY									
Transit/TOD Supportive Policies									
Carsharing	✓							✓	✓
Transit Friendly Parking Design	✓							✓	✓
Transit Supportive Zoning	✓							✓	✓
Transit Incentive Programs	✓					✓		✓	✓
Walkability and Wayfinding	✓								✓
Late-night taxi service and feeder shuttle service	No							✓	
Transit subsidies for tenants	No			✓				✓	
Guaranteed ride home program	No								
Pedestrian and Bike amenities	✓					✓			
Parking Requirements									
Reduced Parking Requirements	✓	✓	✓	✓	✓		✓	✓	✓
TOD Friendly Parking Requirements	✓					✓			✓
Parking Maximums	No				✓		✓	✓	✓
Shared Parking	✓		✓			✓	✓	✓	✓
Free parking for carpools and vanpools.	No							✓	
Demand-based parking requirements based upon local use study	*					✓		✓	
Parking Pricing									
On-street Parking Pricing	*	✓		✓				✓	✓
Variable Rate Parking Pricing	No	✓						✓	✓
Coordinated Off-street and On-street Pricing	*	✓							✓
Unbundled Parking	✓	✓	✓					✓	✓
Parking Cash-Out	*	✓		✓		✓			✓
Parking Management Strategies									
Parking Payment Technology	No								✓
Parking Database	No								✓
Real-time Parking Information	No			✓					✓
Designated transportation coordinator	No							✓	
Parking Districts									
Assessment Districts	No	✓		✓				✓	✓
Revenue Districts	No	✓		✓				✓	✓
Residential Permit Parking	No								✓
Parking Financing									
In-Lieu Fees	No		✓			✓		✓	✓
Risk Fund	No								✓
Parking Occupancy Tax	No								✓
Parking Tax by Space	No								✓
Tax Exemptions and Variable Rate Tax	No								✓

PARKING MANAGEMENT STRATEGIES

Policy/Program	Potential Effectiveness (percent reduction in demand)	Comments
Parking Pricing	<p>HIGH TYPICALLY 5-30%</p> <p>Depending on the amount of the parking fee and the surrounding/controls on parking</p>	Pricing is known as the most effective way to manage parking demand. There are a number of specific approaches to address different settings.
Shared Parking	<p>MEDIUM/HIGH TYPICALLY 10-20%</p> <p>Depending on the mix of land uses and parking demand in relatively close proximity</p>	Shared parking reductions can be readily calculated once the actual land use types are known.
Reduced Parking Requirements	<p>MEDIUM TYPICALLY 10-15%</p> <p>Depending on how close the requirements are to actual demand rates</p>	Reduces the supply, which in turn may reduce demand, or reflect a lower demand, especially adjacent to transit or combined with shared parking and pricing.
Unbundling and Cash-Out Options	<p>MEDIUM TYPICALLY 10-15%</p> <p>Depending on the price, demand and convenience of parking in the area</p>	This is really a variation of parking pricing and is quite effective. Can be used in both residential and work environments.
Transit Passes and Incentives	<p>MEDIUM/LOW TYPICALLY 5-10%</p> <p>Depending on how close the requirements are to actual demand rates. Depends on transit access + relative convenience between transit and destinations + price/income levels</p>	The cost-effectiveness of these measures appears to be very good for development immediately adjacent to transit stations/corridors.
Car Sharing	<p>LOW TYPICALLY 3-5%</p> <p>Depending on the auto-ownership levels, density and level of mixed use development in the area, and transit quality</p>	Car sharing supports lower household auto ownership rates, transit and other parking policies. It may indirectly contribute to greater reductions in demand.

EFFECTS OF CASHING OUT EMPLOYER PAID PARKING:

- An employer-funded program under which an employer offers to provide a cash allowance to an employee equivalent to the parking subsidy that the employer would otherwise pay to provide the employee with a parking space.
- The cash-out law applies to employers who:
 - Employ at least 50 persons;
 - Subsidize commuter parking in parking spaces they do not own;
 - Are located in a non-attainment air basin

ECO PASSES

There is considerable evidence that providing Eco Passes instead of parking spaces will increase transit ridership, reduce the cost of transit oriented development, improve urban design, reduce the need for variances, and reduce traffic congestion, air pollution, and energy consumption.

CHAPTER V

METHODOLOGY

1. Secondary Data and Literature
2. Primary Data Collection
3. Dataset 1 Methods
4. Dataset 1 Shortcomings
5. Field Survey
6. Dataset 2 Methods
7. Dataset 2 Tools
8. Zone Three Study Site
9. Sampling Method

SCIENTIFIC BASIS OF THE STUDY ACTION

STEPS	ACTION
1. Observation	Conduct a physical field survey the parking supply & demand in the CASP area.
2. Hypothesis	The uses in the CASP do not generate parking demand consistent with the parking requirements prescribed in the LA Municipal zoning code, therefore there is an oversupply of parking in relation to demand.
3. Predictions	The data gathered will show a majority of the land uses in the CASP area generate parking demand that is less than the current supply and requirements of the LAMC.
4. Test	Through a quantitative survey of a representative sample, numerically prove the discrepancy between the distribution of supply and demand.

PRIMARY DATA COLLECTION

The primary data collection methods were an aerial survey and a field survey.

The dataset one aerial survey was conducted using web-based mapping programs. The goal was to provide initial rough estimates of the existing parking supply

The goal of dataset two was to determine the occupancy rates of weekday versus weekend and peak versus off-peak parking lot usage.

ZONE THREE STUDY SITE & SAMPLING METHOD

STRATIFIED
SAMPLING
MISAPPLICATION
PROPORTIONAL
SIMPLE CALCULATE
STAFF
METHOD
MALE
WARRANTS
DISPARITY
PERCENTAGE
STATISTICS
SIGNIFICANTLY
PARTITION
POPULATION
EXHAUSTIVE
SCALING
REFLECT
ARITHMETIC
SUBGROUP
VARIATION
NATE

CHAPTER VI

DATA ANALYSIS

1. *Parking Supply*
2. *Parking Demand*
3. *Maximum Demand Observed*
4. *Young Nak Church Demand*
5. *Max Demand Weekday vs. Weekend*

PARKING SUPPLY BY LAND USE

LAND USE	Observed Supply	% of Total Supply
Multi Family Residential	27	2%
Single Family Residential	19	1%
Residential TOTAL	46	3%
Service Shop	57	3%
Auto Service	18	1%
Warehouse -10,000	3	0%
Light Manufacturing	362	21%
Public Facilities	103	6%
Restaurant	12	1%
Commercial	367	21%
Church (6000 members)	768	44%
Other Uses TOTAL	1,690	97%
All Uses TOTAL	1,736	100%

PARKING SUPPLY (LAMC VS. OBSERVED)

LAND USE	Zoning Requirement	Spaces Required by Zoning	Observed Supply Ratio / 1,000 sf	Observed Supply
Multi Family Residential	2 / du	20	2.7	27
Single Family Residential	1.5 - 2 / du	18	1.9	19
Residential TOTAL		38		46
Service Shop	1 / 500 sf	92	1.2	57
Auto Service	1 / 500 sf	14	0.8	18
Warehouse - 10,000	1 / 500 sf + 1 / 5000 sf	4	0.4	3
Light Manufacturing	1 / 500 sf	384	1.4	362
Public Facilities	1 / 500 sf	491	0.3	103
Restaurant	1 / 100 sf	6	20.8	12
Commercial	1 / 250 sf	196	0.9	367
Church (6000 members)	1 / 35 or 1 / 5 seats	1200	3.1	768
Other Uses TOTAL		2,388		1,690
All Uses TOTAL		2,425		1,736

MAXIMUM DEMAND OBSERVED

LAND USE	Observed Max Demand	% of Supply
Multi Family Residential	17	63%
Single Family Residential	20	105%
Residential TOTAL	37	80%
Service Shop	56	98%
Auto Service	14	78%
Warehouse -10,000	3	100%
Light Manufacturing	246	68%
Public Facilities	66	64%
Restaurant	13	108%
Commercial (freestanding discount)	264	72%
Church (6000 members)	769	100%
Other Uses TOTAL	1,431	85%
All Uses TOTAL	1,468	85%

MAX DEMAND WEEKDAY VS. WEEKEND

LAND USE	Weekday Max Demand	% of Supply	Weekend Max Demand	% of Supply
Multi Family Residential	11	41%	17	63%
Single Family Residential	20	105%	20	105%
Residential TOTAL	31	67%	37	80%
Service Shop	56	98%	26	46%
Auto Service	14	78%	10	56%
Warehouse -10,000	3	100%	1	33%
Light Manufacturing	232	64%	246	68%
Public Facilities	66	64%	24	23%
Restaurant	12	100%	13	108%
Commercial (freestanding discount)	264	72%	233	63%
Church	139	18%	769	100%
Other Uses TOTAL	786	47%	1,322	78%
ALL USES TOTAL	817	47%	1,359	78%

WEEKDAY VS. WEEKEND DEMAND

ABOVE 85%	Weekday Demand	Weekend Demand
	Single Family Residential	Church
	Service Shop	Single Family Residential
	Restaurant	Restaurant
	Warehouse	
	Auto Service	Auto Service
	Church	Commercial
	Commercial	Light Manufacturing
	Light Manufacturing	Multi-Family Residential
BELOW 85%	Multi-Family Residential	Warehouse
	Public Facilities	Public Facilities

CHAPTER VII

RECOMMENDATIONS

7.1 Conclusion

7.2 Recommendations

CASP POLICIES

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- 1) Car Sharing,
 - 2) Transit Friendly Parking Design,
 - 3) Transit Supportive Zoning,
 - 4) Transit Incentive Programs,
 - 5) Walk Ability And Wayfinding,
 - 6) Unbundled Parking
 - 7) Pedestrian And Bicycle Amenities,
 - 8) Reduced Parking Requirements
 - 9) TOD Friendly Parking Requirements
 - 10) Shared Parking

TRANSIT PASSES

The CASP should require employers to provide discount transit passes for employees.
Providing Eco Passes

The Eco Passes can yield benefits for developers, property owners, employers, commuters, transit agencies, and cities.

PARKING CASH OUT

A study on parking cash-out summarized results from seven work sites and estimated a 26 percent reduction in parking demand. After cashing out, solo driving to work fell by 17 percent. Carpooling increased by 64 percent. Transit ridership increased by 50 percent. Walking and bicycling increased by 33 percent. Commute parking demand fell by 11 percent (Shoup, 1992)

SUMMARY

- Both transit passes and parking cash out are cost effective because it is much cheaper to pay for a transit ride to and from work than to pay for a free parking space at work.
- The low cost of reducing the demand for parking compared with the high cost of increasing the supply shows that Eco Passes and parking cash out are cost-effective strategies.
- These cost-effectiveness comparisons were made in places famous for their addiction to cars: Silicon Valley (for Eco Passes) and Southern California (for parking cash out). If Eco Passes and parking cash out can reduce parking demand in these two places, they can probably achieve the same results the CASP area.