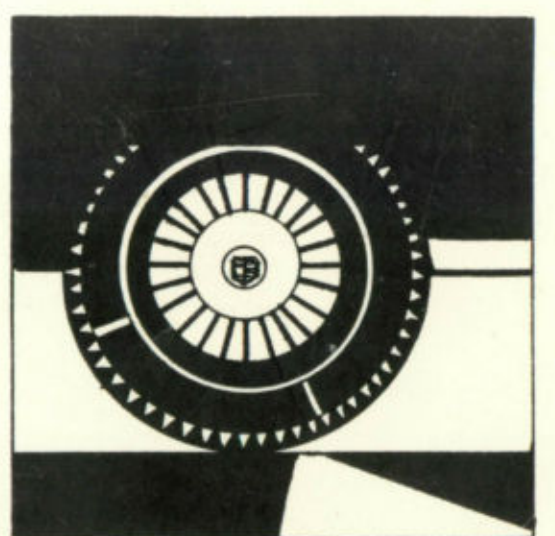
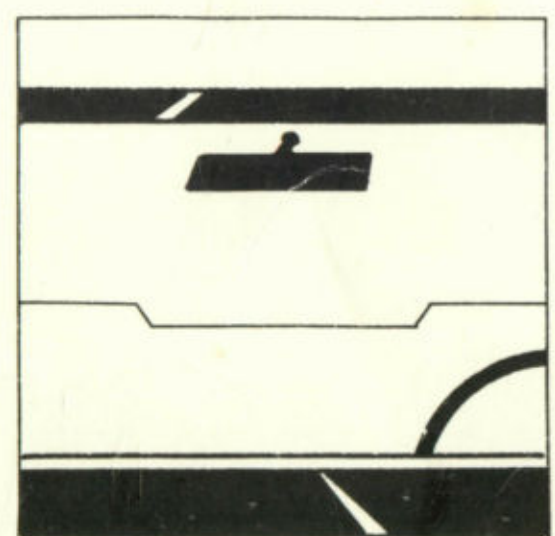
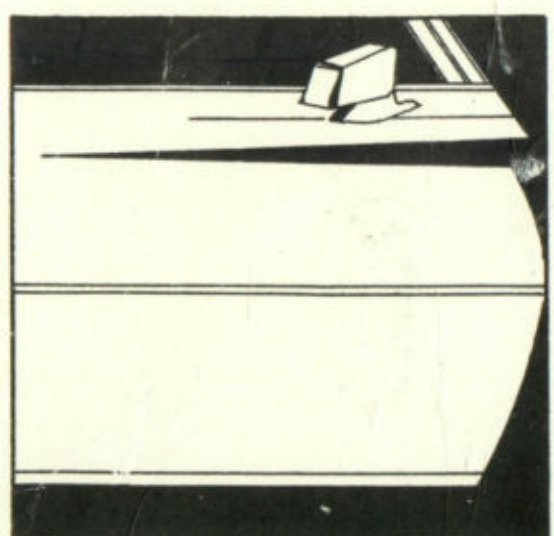
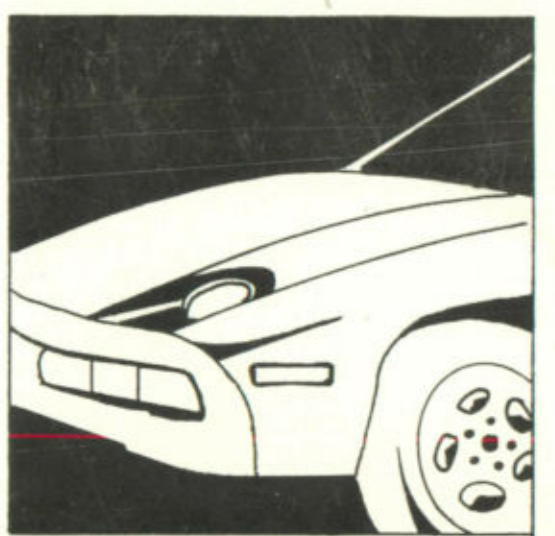
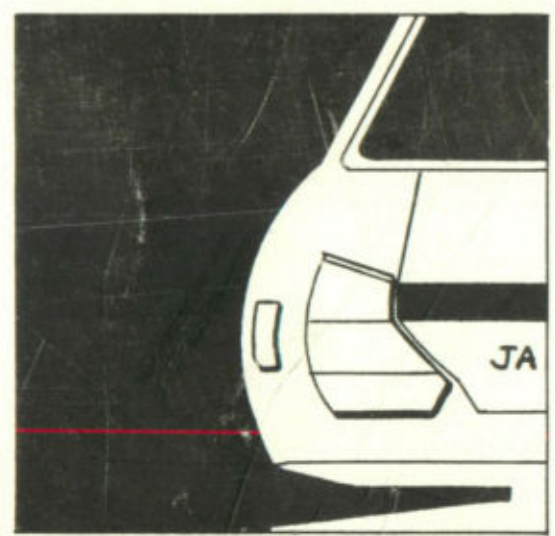
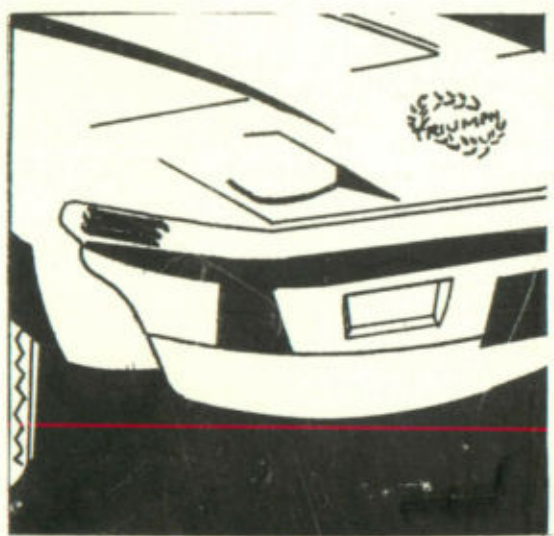
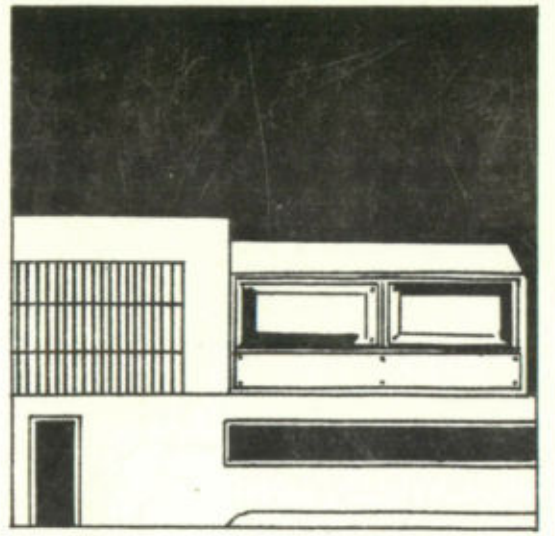
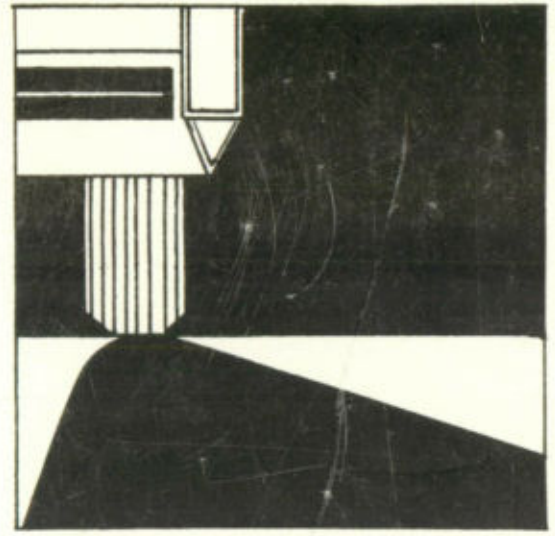
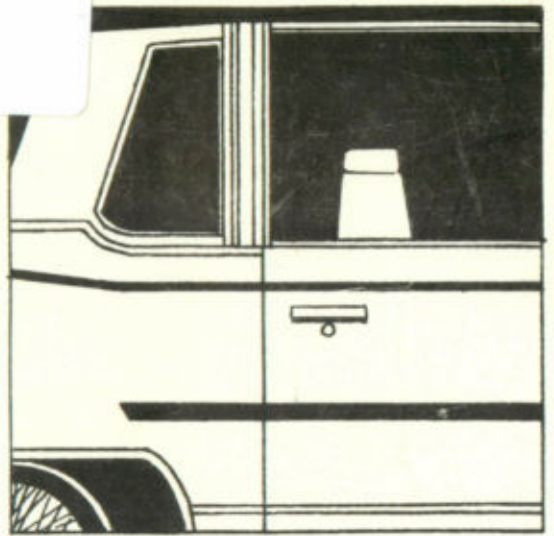


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SOUTH FLORIDA
COLLECTION

MIAMI BEACH PARKING POLICY STRATEGY

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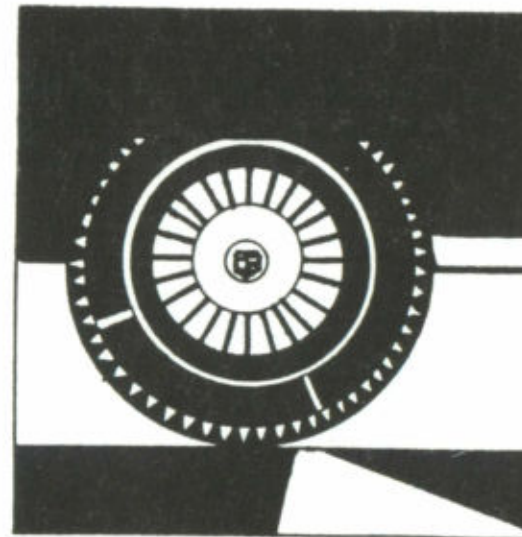


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CITY OF MIAMI BEACH
PARKING POLICY STRATEGY

PREPARED BY:
THE MIAMI BEACH PLANNING DEPARTMENT

OCTOBER, 1986



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William Shockett

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SOUTH FLORIDA
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Professional Contributions by:

Jud Kurlancheek, Director of Planning

Inspector Joe Rousell, Metered Parking Supervisor

Bill Harrison, Purchasing & Property Management Director

Peter Liu, Budget Director

Mark Malatak, Budget Officer

Ira Giller, Architect

Maria Pellerin, Miami Beach Development Corporation

Editor/Author/Layout: Shaye Ross, Principal Planner

Richard S. Rickles, Principal Planner

Armando Valdes, Planning Technician

Charles Buckles, Landscape Architect

Heather Mitchell, Clerk Typist

TABLE OF CONTENTS

	EXECUTIVE SUMMARY	i			
I	INTRODUCTION	2	IV	POTENTIAL SOLUTIONS TO PARKING PROBLEMS IN MIAMI BEACH	
II	WE ARE NOT UNIQUE: WHAT OTHER CITIES ARE DOING		A.	Parking Policies and Implementation Strategies	24
	A. Payment in Lieu of Parking/ Impact Fees	4	B.	Specific Policies for Miami Beach	26
	B. Off Site Parking	4	V	FISCAL CONSIDERATIONS	
	C. Shared or Joint Use Parking	4	A.	Federal Assistance	36
	D. Centralized Decision Making Agency	6	B.	Municipal Funds	36
	E. Non-Resident Parking Restrictions	7	C.	Revenue Bonds	36
III	CHARACTERISTICS OF PARKING IN MIAMI BEACH		D.	General Obligation Bonds	36
	A. Public Parking	8	E.	User Benefit Special Assessment	37
	B. Private Parking	17	F.	Impact Fees	37
	C. Zoning Requirements	20	G.	Parking Assessment Districts	37
			VI	CASE STUDIES	
			A.	Impact Fees and the Construction of a Parking Garage	38
			B.	Angled Parking	42

LIST OF TABLES

	Page
A. Non-Conflicting Land Uses	5
B. Existing Commercial and Hotel Use and Off-Street Metered Parking Supply	9
C. Complimentary Citywide Parking Decals	15
D. New Municipal Parking Lot Costs	15
E. Estimated Increases in Total Parking Demand by Commercial Corridor	16
F. Future Municipal Off-Street Parking Requirements (with impact fee)	16
G. Total Parking Variances by Year 1977 -1985	18
H. Parking Variances in Commercial Corridors 1977 - 1985	19
I. Parking Variance Applications by Type of Use 1977 - 1985	20
J. Miami Beach Parking Facilities Program System-wide Net Revenue	37
K. Metered Parking Maintenance & Operating Expenses - 274 Space Garage	39
L. 1986 Special Revenue Bond Issue - Hypothetical Debt Service Schedule	40
M. Case Study - Impact Fee & Metered Parking Revenues - 274 Space Garage	41

LIST OF EXHIBITS

	Page
1. Commercial Corridor Locations	8
2. Architectural District Location	9
	Municipal Off-Street Parking Supply in Commercial Corridors
3.	71st Street 10
4.	41st Street 10
5.	Lincoln Road 11
6.	Washington Avenue 11
7.	Collins South 12
8.	Collins North 12
9.	Ocean Drive 13
	Angle Parking Case Study
10.	Parallel Parking 43
11.	30° Parking 44
12.	45° Parking 45
13.	90° Parking 46

APPENDICES

I.	Metered Parking Statistics 47
II.	Shared Parking Ordinances 59

EXECUTIVE SUMMARY

The Executive Summary succinctly outlines the data and recommendations presented in the Parking Policy Strategy. In order to gain a complete understanding of the policy implications identified herein, it is suggested that the entire report be read.

I. INTRODUCTION

The purpose of the Parking Policy Strategy is to analyze the existing and future characteristics of parking in Miami Beach, both public and private, in an effort to develop a combination of alternative solutions to the shortages.

The study examines the recommendations outlined in two recent parking facility reports prepared for the City by the consulting firm of David Plummer and Associates. It also presents two in-depth case studies of potentially viable concepts for improving the parking situation in Miami Beach.

II. WE ARE NOT UNIQUE - WHAT OTHER CITIES ARE DOING

This chapter contains a brief synopsis of some of the techniques used by other cities in solving their parking problems. These include impact fees, off-site parking, shared parking, and non-resident parking restrictions. The pros and cons of each technique are also described.

III. CHARACTERISTICS OF PARKING IN MIAMI BEACH

Chapter III presents the existing characteristics of both public and private parking in the City of Miami Beach. It examines current deficiencies in terms of parking availability as well as

administrative problems associated with administering various parking programs. Also included are calculations of future parking demand by geographical area.

A. PUBLIC PARKING

The City's municipal parking supply is administered by the Metered Parking Division of the City's Police Department, and meters are located on street and in off-street lots and garages. Additional plans are currently under development and should be encouraged, to provide attendant parking coupled with a merchant validation program which will offer free or discounted parking at the 42nd Street and Lincoln Lane West garages.

The City's metered parking rate structure and times are recommended to be altered, by standardizing and increasing rates. In addition, the City recently purchased Denver boots, designed to immobilize cars with more than seven unpaid parking tickets. The boots, however, have rarely been used. In order to justify the purchase of the devices, it is recommended that the ordinance itself be simplified to reflect the requirements of the Dade County ordinance and that greater coordination be established between the City agencies responsible for enforcing the Denver boot ordinance.

Another recommendation is to review the large number of free parking decals issued by the City to appointed board members, current and ex-City Commissioners and their spouses, specified City employees, and others. This policy results in a loss of revenue to the metered parking system.

Finally, the chapter recommends increasing the

number of public parking spaces, particularly in the Ocean Drive/Collins Avenue/Washington Avenue and Flamingo Park neighborhoods, with funding provided through the Planning Department's impact fee program. This program can also be expanded to other areas of Miami Beach as the need develops.

B. PRIVATE PARKING

In general, current parking demand is highest relative to available space in the commercial areas, such as along Washington Avenue, 41st Street, and 71st Street (Collins to Indian Creek). Parking demand is also strong in the older multifamily areas which lack private off-street parking. Although there are presently no severe shortages in these neighborhoods, they are near capacity and any significant redevelopment growth or population shift could create a parking problem.

Provision of private off-street parking in the City is governed by the parking regulations contained in the Zoning Ordinance, which specifies required parking ratios for all new developments and rehabilitation projects.

For the past several years, the City has, through an opinion issued by the City Attorney's office, provided for the establishment of "parking credits" when there is a change of use for a particular building. Parking credits should be formally incorporated into the Zoning Ordinance. In conjunction with the formal adoption of an improved parking credit system, the impact fee should be established within the Zoning Ordinance to allow developers to pay such fees in cases where "free" parking credits had previously been issued.

The Zoning Ordinance also requires the provision of one parking space per one bedroom apartment and 1.5 spaces per two bedroom apartment. The current interpretation of the ordinance has led to a proliferation of apartments containing one

bedroom and one "den", thereby reducing the amount of required parking. It is therefore recommended that parking requirements be based upon other factors such as the gross floor area, in order to remove this loophole from the ordinance.

Additional recommendations for private parking improvements include modifying the occupational license code to charge fees based upon the actual number of dwelling units within a building, rather than basing fees upon the number of "rooms", as is currently the practice. It is also recommended that the zoning ordinance be modified to permit the construction of temporary parking lots in the South Pointe redevelopment area (south of 6th Street) and to legitimize the existing City-owned lots on the west side of Collins Avenue, across from North Shore Open Space Park. New standards for minimum landscaping/paving of these temporary lots would be developed in order to reduce the financial hardships to developers and spur new investment.

IV. POTENTIAL SOLUTIONS TO PARKING PROBLEMS IN MIAMI BEACH

Chapter IV identifies several alternative solutions to the parking problems in the City. First, a series of general goals and objectives is presented, followed by one or more implementation strategies that are designed to meet the goals and objectives. Within the complete text of the report, a number of proposed techniques/solutions are analyzed in further detail, and specific policies are established for each potential solution.

A. PARKING POLICIES AND IMPLEMENTATION STRATEGIES

The following is a listing of general policy recommendations (For more detail, see main text, pages 24 - 25).

- Policy I:** Encourage a public/private partnership in meeting future demand for parking.
- Policy II:** Develop a master plan for municipal parking acquisition, construction, and ongoing improvements.
- Policy III:** Increase quantity of metered parking spaces in existing on-street areas and lots.
- Policy IV:** Increase metered parking revenues.
- Policy V:** Encourage transportation alternatives which will result in a decrease in automobile usage in areas with parking deficiencies.
- Policy VI:** Recognize that successful historic districts traditionally have an undersupply of available parking. Attempt to partially solve these problems with techniques designed to mitigate the effects of the lack of parking.
- Policy VII:** Increase available parking supply without destroying the aesthetics and character of the neighborhood.
- Policy VIII:** Increase security/safety in municipal garages and lots.
- Policy IX:** Amend the zoning ordinance parking requirements to result in a better ratio of supply to demand.

Policy X: Investigate provision of preferential parking for residents of areas with parking deficiencies.

B. SPECIFIC POLICIES FOR MIAMI BEACH

This section provides a more comprehensive outline of specific policies which should be considered when applying several of the more complex parking solutions to the situation in Miami Beach.

Parking impact fees should be permitted in lieu of providing required parking, particularly in cases of rehabilitated buildings with no available parking. The City should make every effort to soften the cost of the impact fee by permitting developers/owners to make annual cash payments over a 25 year period, with the yearly cost equalling the City of Miami Beach parking permit costs (currently \$250 per space). The ordinance would contain a provision for reasonable inflation and/or interest costs. If a developer chooses to pay the impact fee at the outset, a lump sum of \$5000 will be assessed.

In addition to using the impact fees for construction of permanent facilities, the funds could be utilized to lease and improve vacant properties for parking lots.

Acquisition and construction of municipal parking lots and/or structures can be facilitated by the establishment of parking assessment districts, through which property owners pay special assessments in addition to their annual taxes to fund the construction of public improvement bonds within a given geographical area. It is likely that a program of this nature, which requires strong neighborhood-based support, would only be found in older commercial and hotel areas which are undergoing renovation and expansion activity.

Shared parking can be used to reduce the total

number of spaces required to meet parking demand. For example, an office development could permanently lease its parking facility to a restaurant or retail use for weekends and evenings.

This is similar to the situation in South Pointe Marina, where parking will be shared by the South Beach Elementary School and the Marina, both of which have peak parking demands at different times. Moreover, a parking facility could be operated by the Metered Parking Division leasing space on a shared basis to a number of different users in the immediate vicinity.

The City should also consider the creation of a centralized decisionmaking agency/department to administer the City's parking programs. This department would operate the day to day functions of metered parking as well as make long range recommendations for the placement and construction of new municipal lots and garages. This would necessitate the repeal of the Falk Amendment (limits bond sales to \$250,000 unless voters approve), and/or revision to include an exception for parking revenue bonds.

The merchant/business community should be encouraged to participate directly in the provision of public parking. This participation can take many forms, from agreeing not to park employee cars in valuable on-street spaces to paying a special assessment for additional parking. Merchants can also participate in parking validation programs, ride-/shop programs, and they might assist in the provision of security for garages.

It is also recommended that a Master Financial Plan for acquisition, construction, and ongoing improvements to the Metered Parking System be prepared. Additionally, a framework of policy statements should be adopted prior to proceeding with the development of a Master Plan (see pages 24 through 34) for a full delineation of these recommended policies).

These policies include concentrating acquisition for the next three to five years in the following areas: a) Collins Avenue (5th to 15th Streets), b) Drexel/Pennsylvania/Michigan (6th to 16th Streets), c) and the area east of the Convention Center, and d) Commerce Street. Five garages should be considered within the next five to fifteen years in the City. Design of these facilities should meet compatibility standards listed in the Secretary of the Interior Standards for historic preservation. As stated earlier, the Fedco lot and adjacent properties should be considered for construction of a large multi-story garage as well as City owned property at 13th Street (four lots), which would serve the Ocean Drive neighborhood. The third garage should be built in proximity to 7th Street and Collins Avenue. The construction of a garage should be preceded by parking lots. The fourth garage should be privately constructed on the Upland Marina parcel in South Pointe, and the fifth garage should be provided on Commerce Street.

First priority for acquisition should be given to properties adjacent to municipally owned lots or on vacant municipal property, and they should not front on tourist or active commercial corridors; i.e., Ocean Drive, 41st Street, Washington Avenue, Biscayne Street.

Vacant property should be considered first when purchasing property. If a property is not vacant, it should be a nuisance property; i.e., numerous building code violations, police calls, etc, or one in which there is less floor area or units in the building than what is allowed by code.

Properties which have historic significance or which have been determined to be contributing to the historic character of the Architectural District should not be purchased unless they are adjacent to an existing surface lot. Property for development of new parking facilities should not be purchased unless it can be expanded to at least three lots without the demolition of a contributing building.

Lots should be acquired in areas which (a) are undergoing rehabilitation activities and (b) have been subject to Neighborhood Revitalization Plans. Parking lots should not exceed four platted lots.

The City can also increase the number of municipal parking spaces by permitting angled parking on selected side streets and by restriping existing lots and garages to permit compact car spaces (no more than 25-35% of the total). The angled parking option was endorsed by the parking subcommittee of Rediscover Miami Beach as a means of providing parking to residents in the Art Deco District at minimal cost to the City.

If parking problems persist in residential neighborhoods, a residential parking permit program could be established on a limited basis. This type of program is not recommended for tourist areas.

V. FISCAL CONSIDERATIONS

This chapter describes the sources of funding used to finance construction and operation of parking facilities. These include: 1) federal assistance, 2) municipal funds, 3) revenue bonds, 4) general obligation bonds, 5) user benefit special assessments, and 6) impact fees.

VI. CASE STUDIES

Chapter VI presents two case studies of viable alternative solutions to parking problems. The first example shows how the impact fee can be used to finance the construction of a parking garage, and the second presents several scenarios for increasing municipal parking by restriping to create angled parking spaces.

CHAPTER ONE

Introduction

KEY POINTS

High land costs, dense development, and potential for rehabilitation of older structures are all factors which require us to carefully investigate innovative methods to accommodate transportation needs.

Aside from single family areas, older sections of the City have inadequate parking in terms of location and number of spaces.

The City has responded to parking deficiencies by acquiring lots and developing them for off-street metered parking.

It is important to provide sufficient parking to accommodate the need; however, strict enforcement of parking requirements can often destroy the economic viability of new construction and rehabilitation projects.

In 1898, the first automobile was sold in the United States, a one-cylinder Winton. Fifteen years later, Henry Ford began mass producing his now-famous cars, and the nation's cities began facing the ever-increasing problem of where to put them. Like most American cities, Miami Beach has relied heavily on motor vehicles for the movement of people throughout the City. There is no question that economic prosperity and the viability of our commercial, tourist, and residential activities greatly depends upon the efficiency of our transportation facilities, including parking. However; here as elsewhere, the actual need has outpaced planning provisions for such facilities.

The purpose of the Parking Policy Strategy is to analyze the existing and future characteristics of parking in Miami Beach, both public and private, in an effort to develop a combination of alternative solutions to the shortages. High land costs, dense development, and potential for rehabilitation of older structures are all factors which require us to carefully investigate innovative methods to accommodate the transportation needs of our residents, tourists, customers, and employees. These methods can range from establishing parking impact fees to encourage rehabilitation of older buildings to shared parking and ridesharing programs.

The methodology used to prepare the strategy includes a review of a number of innovative concepts used by other local governments which can potentially be applied to Miami Beach. It also includes an analysis of the existing characteristics of private and public parking in the City, with particular attention to several commercial corridors and the historic district.

This study examines the recommendations outlined in two recent parking facility reports prepared for the City by the consulting firm of David Plummer and Associates, and extracts relevant data and strategies set forth in them. The documents are: (1) the 1983 Traffic and Off-Street Parking Facilities Study, which explored the City's zoning ordinance requirements for parking and the adequacy of the metered parking system; and (2) the 1984 Miami Beach Parking Facilities Plan, which determined the location, size, and cost of parking facilities to be acquired and constructed through a \$6 million bond issue approved by the City.

Finally, the Parking Policy Strategy presents two in-depth case studies of potentially viable concepts for improving the parking situation in Miami Beach.

There were no parking requirements at all in the City's zoning code until 1955, and none that addressed commercial uses of any kind until 1971. Consequently, aside from single family areas, older sections of the City, (most notably the commercial and low density apartment districts) have inadequate parking in terms of location and number of spaces.

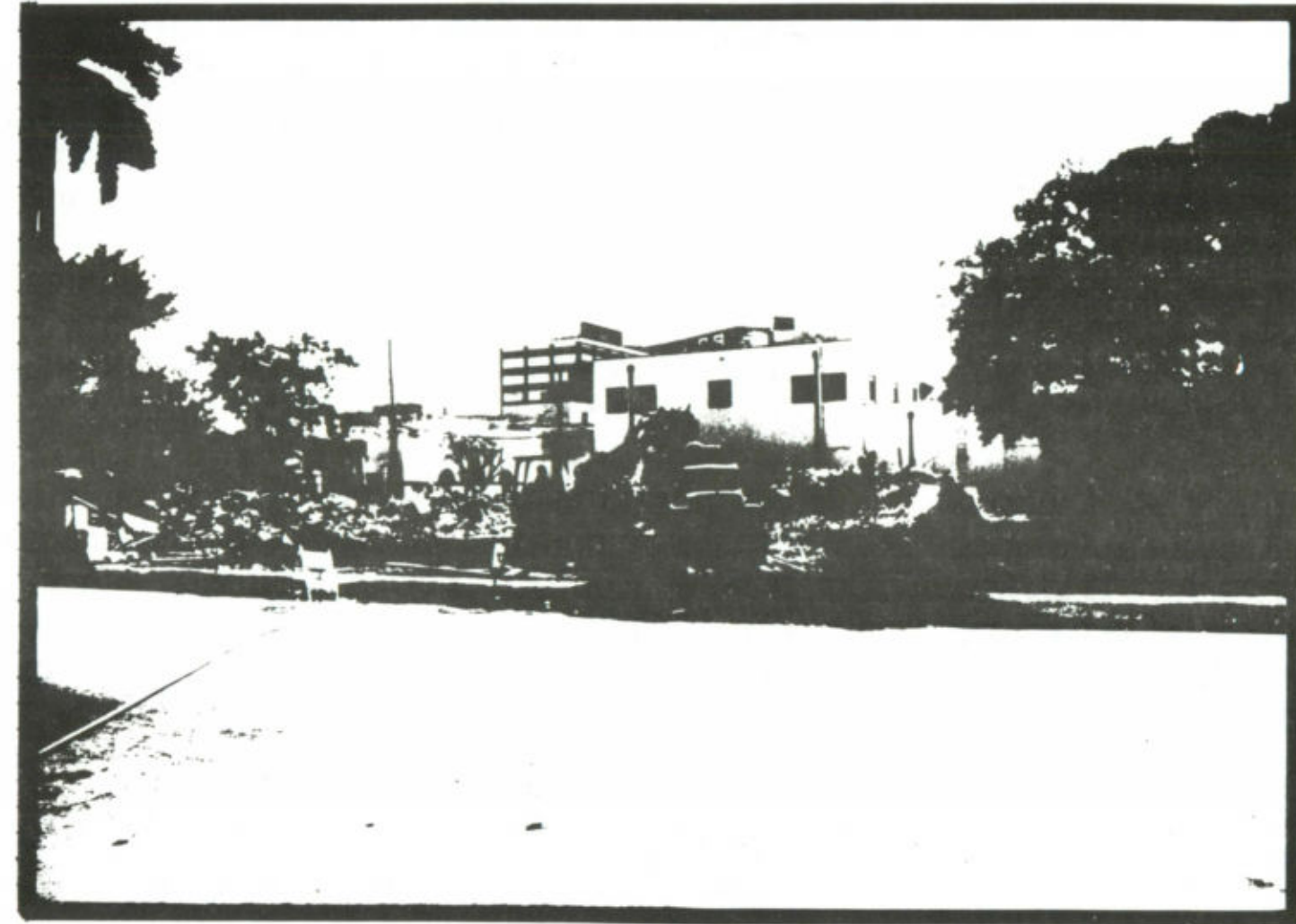
Older multifamily neighborhoods such as Flamingo and North Shore also have very little private parking and are, for the most part, almost completely dependent on the on-street public supply. In the past, the majority of apartment buildings were occupied by elderly persons who generally did not own cars. However, as the

buildings are renovated, younger tenants with cars are moving in, resulting in an increasing parking shortage.

The City has responded to parking deficiencies by acquiring lots and developing them for off-street metered parking. Generally, these lots are located in commercial districts. Revenues from on and off-street meters are used to pay for the costs of purchasing and constructing new parking facilities. Since 1935, when the City's first parking meters were purchased, the number of metered spaces has grown to 11,648. Nearly 140 acres in Miami Beach, a City of only seven square miles, is now devoted to public on and off-street parking. Unfortunately, there is still a lack of sufficient parking in many areas of the City.

Miami Beach, like nearly every other community in the United States, is faced with competing objectives when it comes to providing solutions to parking problems. On one hand, it is important to provide sufficient parking to accommodate the need, but on the other hand, strict enforcement of parking requirements can often destroy the economic viability of new construction and rehabilitation projects. Also, a proliferation of lots and garages does little to enhance the overall physical environment of the City. In addition, it is important to note that successful historic, tourist, and commercial districts often have parking deficiencies which can never be remedied without destroying the aesthetics of the urban environment.

There is no single cure to this dilemma, the best answers seem to be found in combinations of innovative programs designed to effect a balance between the several competing objectives as they relate to transportation, parking, economic development, urban design and the environment.



Newly acquired municipal parking areas on 40th Street.

CHAPTER TWO

We Are Not Unique: What Other Cities Are Doing

KEY POINTS

An emerging trend is to allow for cash payments in lieu of required off-street parking (impact fee). These fees are incorporated into zoning ordinances.

An example of shared parking is Seattle's Pioneer Square Historic District, where parking is shared by office workers during the day and patrons of restaurants and nightclubs during the evenings.

Since Miami Beach is not alone in its need to find alternative solutions to parking problems, it is helpful to examine the approaches taken by other local governments. Payments in lieu of providing parking, off-site parking, shared parking, and various other programs have recently evolved as a means of solving local parking problems. This section provides a synopsis of some of these techniques used by other cities.

A. PAYMENTS IN LIEU OF PARKING/IMPACT FEES

An emerging trend in municipalities is to allow for cash payments in lieu of required off-street parking (impact fee). Typically, these payments are based on the full cost of providing parking in the general vicinity of the development. The intent of collecting impact fees is to allow a municipality to finance the acquisition of property and/or the construction of public lots and garages and to permit a development to be constructed. A detailed discussion of impact fees is presented in Chapter IV.

Rye, New York assesses one-time fees at a cost of \$10,000 per required space in the Central Business District and \$4000 per space outside of the commercial core. Scarsdale, New York mandates a standard charge of \$6500 per space for new structures or a change in use. Davis City, California permits payment in lieu of parking amounting to actual determined fair market value of the required number of spaces, and the City agrees to provide the parking within a ten year time period. Culver City, California uses a somewhat different formula for assessing parking

impact fees. Their fee equals five times the amount of assessed value per square foot of land under the development times 300 square feet per parking space required. This fee is permitted only for rehabilitation of existing buildings and not for new construction.

Impact fees are incorporated into the zoning ordinances in each of these municipalities.

B. OFF-SITE PARKING

Off-site parking, under some zoning ordinances, may be used where space is not available on site. A few ordinances limit off-site parking to non-residential uses and discourage its use at supermarkets and other retail uses that are heavily dependent on convenient access by automobiles. Many communities also specify maximum distances between any off-site parking facility and the land use(s) it is intended to serve. For example, Arlington County, Virginia requires that such spaces be located within 600 feet of the development, compared to the Miami Beach limit of 400 feet. All of these communities require that off street parking facilities not located on the same lot with the development be legally connected through a unity of title. This insures that the parking lots are not sold off and developed at a later date.

C. SHARED OR JOINT USE PARKING

Shared or joint use parking opportunities exist where the same parking spaces can be utilized by two or more different land uses due to differences in operating hours for the uses or due to underutilization of an existing parking area. For

example, in Seattle's Pioneer Square Historic District, parking is shared by office workers during the day and the patrons of restaurants and night clubs during evening hours. Recently, the Miami Beach zoning ordinance was amended to incorporate this concept in the Convention Center District. Shared parking will also be implemented at the South Pointe Marina where South Beach Elementary School teachers will use the lot on weekdays, and the Marina will use spaces during evenings and weekends.

Table A contains several additional examples of land uses which can be considered to be non-conflicting in terms of parking requirements.

There are numerous administrative problems associated with permitting shared parking, which include changes in property ownership and uses or hours of operation in existing uses. The Montgomery County, Maryland zoning ordinance addresses some of these problems by requiring that the land uses and the common parking facilities be under the same ownership. In addition, they require a developer/owner to obtain a new occupancy permit if there are subsequent changes in land use. The owner must also prove that sufficient parking will be available for the new combination of uses.

TABLE A
Nonconflicting Land Uses

<u>Uses With Daytime Hours</u>	<u>Uses With Evening Hours</u>
Banks	Bowling alleys
Business offices	Dance halls
Professional offices	Theaters
Medical clinics	Restaurants (with limited hours)
Service stores	Bars
Retail stores (with limited hours)	Nightclubs
Manufacture/wholesale (with limited hours)	Auditoriums
Grade schools/high schools	Meeting halls
Strip commercial streets	Apartment buildings

Contributing Source: Flexible Parking Requirements, Thomas P. Smith, 1983

KEY POINTS

The City of Miami uses modern, sophisticated technology such as a Master Meter, instead of individual meters.

The techniques often used to restrict outsiders from parking in a residential area include residential parking permit programs.

D. CENTRALIZED DECISIONMAKING AGENCY

A professionally managed and administered municipal parking agency can result in a substantially improved parking program. The City of Miami Parking System is a good example of the successful operation of a municipal parking authority. Although this document does not recommend the creation of an independent parking authority, it does recognize the need to address centralized decision making as it pertains to parking, rather than continuing the current fragmented approach. Thus, it is helpful to examine several of the innovative programs developed by the City of Miami.

Included among Miami's innovative programs are the following:

- "Meter Beater" tram shuttle - moves office workers from low cost, remote parking to congested downtown areas.
- Joint ventures with the private sector.
- Joint venture with Metro-Dade County to operate and manage Metrorail station parking lots.
- Use of modern, sophisticated technology, such as a Master Meter, instead of individual meters; television monitoring equipment in garages.
- Restriping lots and garages to accommodate compact cars, resulting in more available parking and higher revenues.
- Development of alliances with merchants and business associations.

The rate structure for hourly parking and monthly decals in Miami is carefully evaluated and revised on an annual basis by the Parking Authority. Decal

rates range from \$6.30 to \$8.40 per month (\$75.00-\$100.00 per year) in less congested areas to \$49.88 per month (\$598.00 annually) in the downtown lots. Parking rates in garages are considerably higher, with the highest rate - \$84.00 per month (\$1,008.00 annually) in the New World Trade Center Garage.

The many innovative practices established by the Miami Parking System have resulted in a financially successful operation. All facilities are owned by the Authority and financed through revenue bonds which are repaid from parking operations. The system has not required any property tax support since its inception.



Master Meter in downtown Miami parking lot.

The Miami Parking System is a well coordinated organization which operates quite differently than the Miami Beach system. In Miami Beach, decisions regarding acquisition and construction of lots and garages have been made in the past by consultants, a two member Parking Committee and the City Commission on a case by case basis. There has been no attempt to coordinate the ongoing functions of the Metered Parking Division with Parking Committee recommendations. As such, the Metered Parking Division has very little input in long range decisions regarding the operation of the system. In order to address some of these issues, the Parking Committee was recently incorporated into the City's Finance Committee, and it now includes members of the City's Finance Department and Office of Management and Budget. This modification will perhaps enable the system to improve its financial position, however, it is yet to be seen whether this Committee will take an advocacy role similar to the City of Miami Parking System.

E. NON-RESIDENT PARKING RESTRICTIONS

Non-resident parking restrictions consist of regulatory actions designed to reduce or eliminate the use of on-street parking spaces by automobiles from outside a residential neighborhood. These measures have been initiated by residents and implemented by municipalities when parking by non-residents increases to the point of interfering with the parking needs of the residents or with other neighborhood activities. The techniques often used to restrict outsiders from parking in a residential area include limits on the number of consecutive parking hours, alternate side parking requirements during busy time periods and residential parking permit programs.

Boston, New Orleans, Arlington, Virginia, and other cities have incorporated restrictions against non-resident parking in their zoning ordinances. In

each case, this was done to accommodate complaints from residents. Each neighborhood to be included in a restrictive parking program is individually evaluated on a block by block basis. Provisions are made for visitor, health-related, and service delivery vehicles. Tourist and commercial neighborhoods are generally not included in residential permit programs. This program may be necessary in some areas of the Art Deco district as it begins to attract tourists and younger residents who have cars, however, at this time costs associated with administration and the questions regarding its necessity appear to outweigh the need to establish the program now.



Boston uses permits to restrict parking in crowded residential areas.

KEY POINTS

Future demand for municipal parking exceeds the current and immediately planned supply. The introduction of the impact fee program will provide funds to increase the number of spaces.

The areas which will potentially experience the highest pressure for parking are the commercial areas of Washington Avenue, 41st Street, and 71st Street and the older residential developments suitable for revitalization, such as the Art Deco District, the Flamingo Park area, and South Pointe.

Approximately half of the parking variance approvals during the period from 1977 to 1985 were based upon conditions that developers pay fees in lieu of providing parking.

Other municipal parking expansion plans include the recent purchase of a lot on Collins Avenue (1300 block) which will add 20 spaces to the inventory; 146 new spaces to be provided at the new Municipal Justice Center on Washington Avenue; 48 metered spaces constructed at Island View Park; and a 210 space metered lot for beachgoers at South Pointe Park.

Future demand for municipal parking in Miami Beach exceeds the current and immediately planned supply. The introduction of the impact fee program administered by the Planning Department will provide funds to increase the number of Citywide public parking spaces. This will be particularly evidenced in the Ocean Drive/Collins Avenue/Washington Avenue area and Flamingo Park neighborhood where rehabilitation of hotels and apartments is currently taking place. There will be a further demand in South Pointe as redevelopment occurs, thus prompting the need for at least two large scale municipal parking garages in addition to on-site structured parking to be provided by private developers.

Table F presents an estimate of the future municipal parking demand by area based upon the following assumptions:

- Overall development in the City's commercial areas will generate the total demand for spaces identified in the Plummer Report and Table E.
- The rehabilitation of apartments and hotels in the Ocean Drive Corridor will equal the demand for spaces based upon the Ocean Drive Study prepared by the City's Planning Department in 1984. This number ranges from 1350 to 1650 spaces, as identified in Table E.
- The impact fee/parking credit system described in Chapter IV of this study will be expanded.

TABLE E
ESTIMATED INCREASES IN TOTAL PARKING DEMAND BY COMMERCIAL CORRIDOR

CORRIDOR	TOTAL INCREASE (SPACES)*	NET INCREASE IN METERED SUPPLY (NO IMPACT FEE)**	NET INCREASE IN METERED SUPPLY (IMPACT FEE)***
71st Street			
East of Indian Creek	120 - 180	30 - 70	40 - 90
West of Indian Creek	140 - 200	20 - 60	25 - 75
41st Street	340 - 520	50 - 100	60 - 125
Lincoln Road	1,090 - 1,640	60 - 70	75 - 90
Washington Avenue	390 - 580	180 - 230	270 - 345
Collins Avenue North	250 - 370	20 - 60	25 - 75
Collins Avenue South (to 16th Street)	360 - 380	90 - 130	110 - 165
Ocean Drive/Lower Collins Avenue	1,350 - 1,650	Uncounted	675 - 825
Total	4,040 - 5,520	450 - 720	1,280 - 1,790

* Assumption: 20 to 30% increase in current land use intensities. Lower values indicate total additional public and private parking spaces required if land use intensities are increased 20%.

** Assumption: Continuation of municipal supply at current rate average among corridors, less any existing surplus with distribution efficiency of 50% and with current deficiencies in municipal supply added.

*** Assumption: Impact fee will result in 25% increase in municipal supply for 71st Street, 41st Street, Lincoln Road, Collins Avenue North; 50% increase will be required for Washington Avenue, Collins Avenue South to 16th Street; municipal supply for Ocean Drive will equal 50% of total increase in spaces.

TABLE F
FUTURE MUNICIPAL OFF-STREET PARKING REQUIREMENTS (WITH IMPACT FEE)

COMMERCIAL CORRIDOR	PARKING SPACES*	ADDITIONAL AREA REQ. (SQ. FT.)	PRIORITY RANKING**
71st Street			
East of Indian Creek	40 - 90	18,000 - 40,000	C
West of Indian Creek	25 - 75	11,000 - 35,000	C
41st Street	60 - 125	27,000 - 55,000	B
Lincoln Road	75 - 90	35,000 - 40,000	B
Washington Avenue	270 - 345	30,000 - 60,000	A
Collins Avenue North	25 - 75	11,000 - 35,000	B
Collins Avenue South to 16th St.	110 - 165	50,000 - 75,000	B
Ocean Drive/Lower Collins Ave.	675 - 825	120,000 - 200,000	A
Total	1,280 - 1,790	302,000 - 540,000	

* Square footage requirements assume construction of a parking garage.

** Priority Ranking
A: Minimum # of spaces should be provided in next 5 to 7 years.
B: Minimum # of spaces should be provided in next 7 to 12 years.
C: Minimum # of spaces should be provided in next 12 to 20 years.

SOURCE: MIAMI BEACH PLANNING DEPARTMENT, 1985.

B. PRIVATE PARKING

1. Overview

In general, current parking demand is highest relative to available space in the commercial areas, such as along Washington Avenue, 41st Street, and 71st Street (Collins to Indian Creek). Parking demand is also strong in the older multifamily areas which lack private off-street parking. Although there are presently no severe shortages in these neighborhoods, they are near capacity and any significant redevelopment growth or population shift could create a parking problem.

The demand for parking is expected to increase if redevelopment and revitalization is to occur. This is particularly true in the area south of Dade Boulevard. While it is difficult to accurately project the overall increase in parking demand due to insufficient information about the extent of redevelopment and the resulting change in land uses, some general observations are possible.

The areas which will potentially experience the highest pressure for parking are the commercial districts indicated above and older residential developments suitable for revitalization, such as the Art Deco District, the Flamingo Park area and South Pointe. Due to the pattern of existing development and individual lot sizes, a reasonable redevelopment of property might preclude provision of parking required to meet any additional demand, with the exception of South Pointe.

Of particular concern are retail corridors such as Washington Avenue, Lincoln Road and mid to lower Collins Avenue, which were developed prior to the establishment of parking requirements. As these areas experience hotel, office and retail renovation, the parking problems will be aggravated. Table F summarizes the parking shortages which may be anticipated in several of

the City's important commercial areas over the next few years.

2. Parking Variances

A comparison of the City's private parking demand relative to the available supply can be made by examining the types of parking variances applied for and received over the past few years.

A variance is a relaxation of certain Zoning Ordinance regulations - in this case, parking requirements - which is not contrary to the public interest and where, owing to conditions peculiar to the property, a literal enforcement of the Ordinance would result in an unnecessary and undue hardship.

During the period 1977-1985, 149 parking variance applications were processed, with a total of 3,163 parking spaces requested to be waived (see table G). Of that amount, the City's Zoning Board of Adjustment approved waivers for 2,237 spaces. Approximately half of the approvals were based upon conditions that the developer pay fees in lieu of providing parking. The fee program was developed by the Planning Department with the assistance of the Board of Adjustment and is used as a mechanism to allow for the substantial renovation of buildings and introduction of uses which generate activity and provide a funding strategy for the acquisition and development of parking lots.

The geographic areas in which the greatest numbers of variances occurred, not surprisingly, are in the City's most active commercial corridors. Sixty percent of the 149 total parking variance requests were located in the commercial corridors identified in the Traffic Circulation and Off-Street Parking Facilities Study prepared by David Plummer and Associates in 1983. In addition, the Ocean Drive Corridor represented over one tenth of all City requests, due to the active interest in

KEY POINTS

Until a draft impact fee for the Ocean Drive area was established in 1984, parking variance fees set by the Zoning Board of Adjustment were often applied in an inconsistent manner.

A developer stands a much greater chance of obtaining Zoning Board of Adjustment approval to complete a project if he/she agrees to financially assist in the provision of parking.

TABLE G
TOTAL PARKING VARIANCES
BY YEAR
1977 - 1985

YEAR	NO. SPACES REQUIRED	NO. SPACES REQUESTED TO BE WAIVED	NO. SPACES WAIVED (NO. DECALS, ETC. REQUIRED)	NO. SPACES WAIVED WITH CONDITIONS	NO. SPACES DENIED	NO. SPACES WITHDRAWN	NUMBER OF APPLICATIONS		TOTAL
							APPROVED	DISAPPROVED	
1977	351	132	55	0	6	71	11	1	12
1978	171	157	90	0	67	0	9	5	14
1979	264	230	67	0	103	60	11	4	15
1980	412	286	159	0	65	62	17	4	21
1981	918	223	169	0	25	29	13	1	14
1982	1783	459	231	33	0	195	22	0	22
1983	986	334	199	126	9	0	15	1	16
1984	990	882	86	750	0	47	17	0	17
1985	524	460	96	176	7	151	17	1	18
TOTAL	6399	3163	1152	1085	282	615	132	17	149

NOTES: ¹For the purpose of this analysis, loading spaces were counted as parking spaces since the total number was insignificant.
²Conditions = cash payment, purchase of decals.

rehabilitating the historic hotels located in the Miami Beach Architectural District.

Table H identifies the commercial corridors with the greatest activity in terms of parking variances. The 41st Street area ranked highest in number of variance requests, followed by Lincoln Road and Ocean Drive. This activity reflects the growing problem evidenced by the lack of available parking in these areas.

A review of the types of land uses which most frequently require the need for parking variances shows that nearly three-fourths are for commercial and hotel developments, with less than one quarter of the requests representing residential projects.

Hotel renovations/expansions also account for the greatest number of large variance requests; those developments with over 25 parking spaces or more waived. For example, the 1981 conversion of the Alexander Hotel from apartments to hotel rooms required 408 parking spaces, 79 of which were

waived by the Zoning Board of Adjustment without requiring fees in lieu of parking.

Most parking variances, however, are small in comparison to the large hotel or office renovations. When the large variance requests (those over 25 parking spaces) are subtracted from the total number of applications, the average number of spaces waived per application is only 5 parking spaces.

It is interesting to note that by far the most common small parking variance request is for restaurants, either an expansion of the facility or an addition of seats to the establishment. Again, these establishments are located in the City's several commercial corridors.

Residential parking variances account for only 17% of the total, with multifamily new construction and multifamily renovation approximately equal in number of applications processed. The reason that we do not see more parking variances for

apartment building rehabilitation is that most of these developments do not increase intensity of use or density, in fact they often reduce the number of units by expanding others in order to meet the needs of younger tenants and their families. This allows the developer to renovate without providing additional parking or requiring a parking variance. Since most of the older residential buildings were built without parking, the neighborhood parking problem, particularly in the Historic District, becomes more pronounced as buildings are occupied with persons who have one to two cars in place of the elderly tenants who did not have cars.

In the last two years, an interesting trend has emerged with regard to parking variances relating to the renovation of existing structures built prior to the establishment of parking requirements. In 1982, the Zoning Board of Adjustment (ZBA) began assessing some developers for parking (based upon Planning Department recommendations and impact

fee guidelines). The Board, in return for granting the Parking variance, has required fees in lieu of parking and/or purchase of City metered parking decals. Unfortunately, until a draft impact fee for the Ocean Drive area was established in 1984, these requirements were often applied in an inconsistent manner, varying widely from one applicant to another. This situation has now been corrected.

Since the advent of the parking variance/assessment in 1982, only two parking variance applications have been denied by the ZBA compared to 15 applications which were denied during the previous 5-year period. Thus, the developer stands a much greater chance of obtaining the required ZBA approval to complete a project if he/she agrees to financially assist in the provision of parking.

In summary, an analysis of parking variance requests provides a detailed look at our problem

TABLE H
PARKING VARIANCES
IN
COMMERCIAL CORRIDORS
1977-1985

<u>COMMERCIAL CORRIDOR</u>	<u>NUMBER APPLICATIONS</u>	<u>NUMBER SPACES REQUESTED</u>	<u>NUMBER SPACES WAIVED</u>	<u>NUMBER SPACES WAIVED WITH CONDITIONS</u>
41st STREET	22	646	189	207
LINCOLN ROAD	18	213	174	0
OCEAN DRIVE	18	469	41	276
WASHINGTON AVENUE	10	64	58	0
COLLINS SOUTH - 16th-29th	11	149	53	0
COLLINS NORTH - 66th TO 75th	9	331	79	233
71st STREET	2	13	13	0
TOTAL IN COMMERCIAL CORRIDORS	90	1885	607	716
TOTAL CITY WIDE	149	3163	1152	1085

KEY POINTS

The amount of the City's impact fee is substantially less than that collected by other cities in the United States.

The Plummer Study recommended modifying the zoning ordinance to officially adopt the issuance of "parking credits".

TABLE I
PARKING VARIANCE APPLICATIONS
BY TYPE OF USE
1977-1985

TYPE OF USE	# OF APPLICATIONS	# OF SPACES REQUESTED
Restaurant	47	527
Retail	18	160
Hotel/Apartment Hotel and Accessory	17	1006
Multi-Family Rehabilitation	13	120
Multi-Family New	11	116
Office	11	289
Religious and Institutional	8	271
Mixed Office/Retail	8	514
Elderly *	7	133
Single Family	4	4
Other **	5	23
	149	3163

* Elderly includes ACLF, Elderly Assisted Housing, Senior Center, Hot Meals Program.
** Other includes private clubs, concessions, bus station, video games.

areas, both by geographic area and by land use. Lincoln Road (South side), 41st Street and Ocean Drive present significant parking dilemmas, and renovation of commercial establishments and hotels generally causes a need for additional parking which rarely can be accommodated on-site by the developer. If the proper impact fee is charged, the establishment of assessments can prove to be of tremendous benefit in solving this problem. As indicated in Table G, both the Zoning Board and developers are embracing this new policy, since nearly half of all parking spaces waived since 1977 have been waived with impact fees assessed. It should be also noted that the amount of the City's impact fee is substantially less than that collected by other Cities in the United States. It is recommended that this situation be re-examined as the economy of the City improves.

C. ZONING REQUIREMENTS

Provision of private off-street parking facilities in the City is governed by the parking regulations contained in the Zoning Ordinance. Section 9 (Section 18 for the Overlay District) of the Miami Beach Zoning Ordinance specifies required parking ratios for all new developments and rehabilitation projects. These ratios are determined by the parking demand expected to be generated by specific land use categories and are expressed in the number of required spaces per unit of measurement (i.e. gross floor area, dwelling unit, number of seats). The regulations recognize that parking demands vary between land uses (i.e. retail, office, bank), and that the same uses have different parking needs depending on the district in which they are located.

The regulations make specific reference to off-street parking requirements when the existing development is enlarged or changes its present use. The code specifies that any change must be done in "conformity with parking regulations of the district in which the building is located". If any change of present use, size, or intensity creates "a requirement for an increase in the number of existing parking spaces, such spaces shall be provided on the basis of the enlargement or changes". The ordinance, therefore, addresses only the provision of sufficient parking for new uses or net increases in floor area, and no consideration is given to the adequacy of existing parking supply, which is often insufficient or not present at all.

1. Recent Amendments to the Zoning Ordinance

The 1983 Plummer Traffic and Off-Street Parking Facilities Study analyzed the adequacy of the City's existing parking requirements and recommended several zoning ordinance modifications which have subsequently been adopted by the City Commission. These include the following:

- a) A reduction in off-street parking requirements for retail uses and an increase in requirements for medical offices, clinics, banks, and savings and loan associations.
- b) Distinguish large scale luxury hotel complexes from conventional hotel uses. Reduce requirements for luxury hotels in terms of spaces per guest-room but substantial increase requirements on a "per seat" basis for major areas within the complexes which cater to visitors as well as hotel guests for entertainment, quality restaurant, and ballroom and meeting functions.

2. Parking Credits

The Plummer Study also recommended modifying the zoning ordinance to officially adopt the issuance of "parking credits". This item will be considered later in the year by the Planning Board.

In numerous places within the zoning ordinance, reference is made to interpretation of the off-street parking requirements whenever a building is enlarged or a use is changed. The Zoning Ordinance clearly provides that when such renovations or conversions are proposed which would create a requirement for an increase in the number of existing parking spaces, the spaces shall be provided.

However, for the past several years, the City has

modified these requirements to allow for "parking credits" when there is a change of use for a particular building. The parking credit system, which is not incorporated in the Zoning Ordinance, was addressed by a legal opinion rendered by a prior City Attorney in 1980. The opinion addressed situations in which an establishment is closed and a new establishment is intended to be opened in an existing building with or without renovation work.

The opinion states that parking credits for existing non-conforming uses can be considered when computing parking requirements when the following criteria are met:

- a. The structure must not have lost its non-conforming status through lapse of time, fifty percent deterioration criteria, structural alteration, or otherwise.
- b. The required parking for the new use must not be greater than the parking which would be required for the old use if present parking ordinance requirements were applied to both.
- c. If the previous use had a parking variance, any conditions attached to that variance must be complied with, if the variance spaces are to be considered.

Since parking requirements were only adopted in 1971, most older commercial uses, multi-family dwellings and hotels either have no parking or severely non-conforming parking. Under these circumstances where insufficient parking was initially provided, the practice of issuing parking credits only perpetuates an inadequate parking supply. The parking demand will not disappear by continuation of current parking credit practices.

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KEY POINTS

In conjunction with the formal adoption of a parking credit system, an impact fee could be established within the zoning ordinance to allow developers to pay such fees in cases where "free" parking credits had previously been issued without having to go before the Board of Adjustment.

In order to rectify existing loopholes in the parking ordinance, it is recommended that parking requirements be based upon factors that do not include unit size limitations.

The Zoning Ordinance does not distinguish between permanent, long range parking lots and short range, temporary lots which are intended to be replaced by a parking structure or other facility.

The Plummer Study recommended the establishment of the parking credit system within the Zoning Ordinance to account for a change of use and/or enlargement of older structures originally constructed prior to the effective date of the existing ordinance. For most uses, building size increases up to 5% would not require more parking, an increase of up to 50% would require more spaces based only on the increased area, but more than a 50% enlargement would require off-street parking to be computed for the total area on the basis of the existing requirements. A change of use for these older structures which would result in less parking than the "current" use (computed using the rates in the existing Zoning Ordinance), would not require an increase in the required parking.

In conjunction with the formal adoption of a parking credit system, an impact fee could be established within the zoning ordinance to allow developers to pay such fees in cases where "free" parking credits had previously been issued without having to go before the Board of Adjustment.

3. Apartment Bedroom/Den Counts

The current parking requirements for apartment buildings and apartment hotels are as follows:

- 1 space for each 1 efficiency unit;
 - 1 space per one-bedroom unit;
 - 3 spaces per 2 dwelling units with two or more bedrooms.
 - Dwelling unit with more than three bedrooms shall provide 1 extra space per bedroom unit for any bedroom existing upon the corridor; and 1 space per sleeping room.
- For the purpose of computing parking requirements, an efficiency unit shall have a maximum of 750 square feet, and a one-bedroom unit a maximum of 1,200 square feet.

Since the adoption of the current Zoning Ordinance in 1971, it has become apparent that the current interpretation of the bedroom requirements in the ordinance has led to a proliferation of 1199 square foot apartments containing one bedroom and one "den". This loophole in the ordinance permits the developer to provide one parking space per unit when the intent of the ordinance is that 1.5 spaces should be provided for units that exceed 1200 square feet or those which have two bedrooms. Often, the "den" includes direct access to a bathroom and/or closet. Moreover when the building is being constructed, signs advertising convertibles and two bedroom apartments are placed on the property while the building plan indicates such units as dens. The 1200 square foot criteria has also reduced the size of units, which adversely impacts on the City's desire to attract young professionals and families who desire larger units.

In order to rectify the existing situation, it is recommended that parking requirements be based upon factors that do not include unit size limitations.

4. Occupational Licenses

The Occupational License Section of the City's Finance Department, in assessing fees for operation of apartment houses, bases such fees upon the number of "rooms" in an establishment. The section of the City Code pertaining to apartment houses should be modified to reflect the actual number of dwelling units, so that the Zoning Ordinance and City Code are consistent. A side benefit of this accounting procedure would be (1) a method to actually determine the number of apartment units in the City, and, (2) a cross reference to insure that apartments are not illegally subdivided.

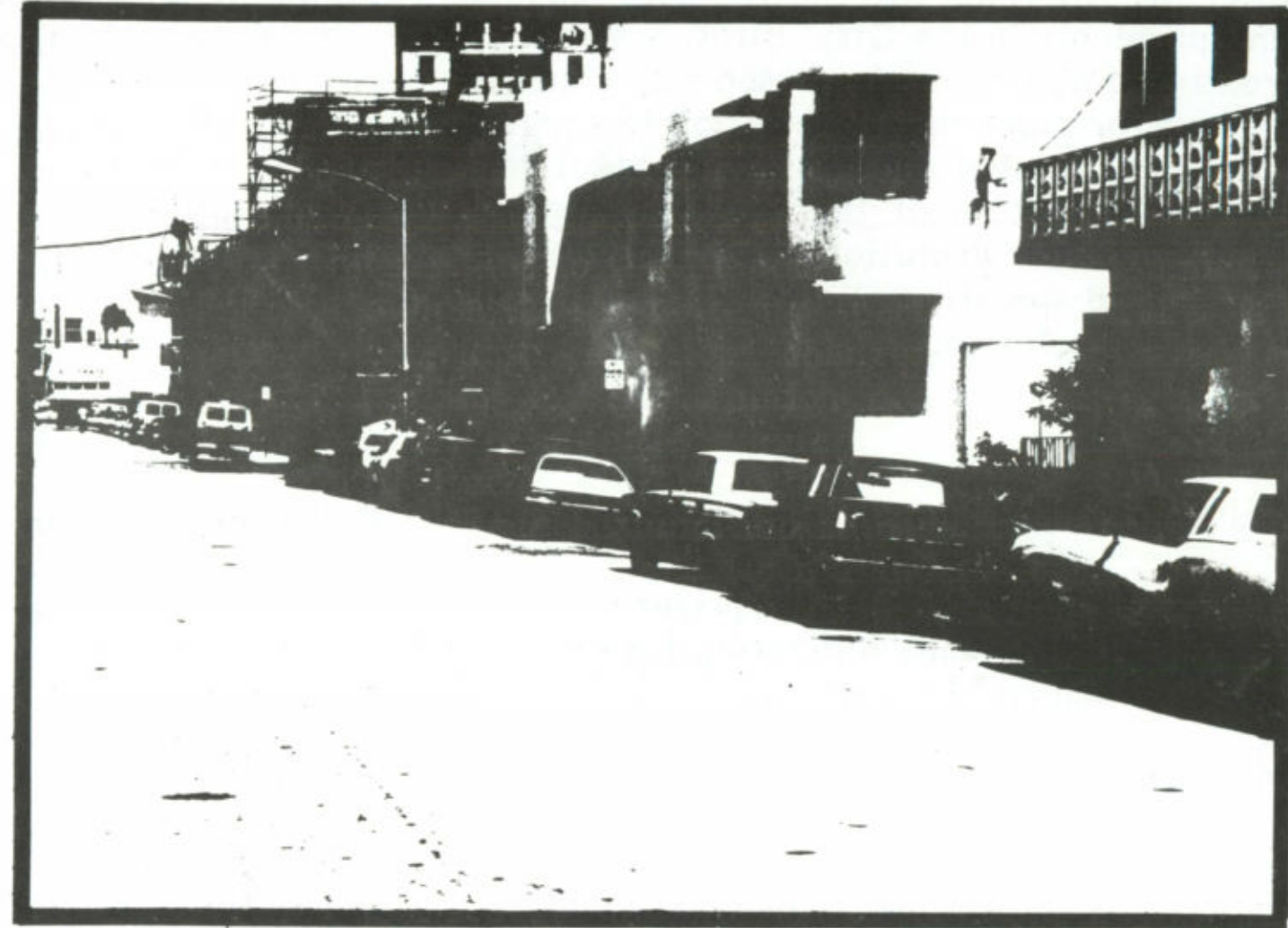
5. Temporary Parking Lots

The Zoning Ordinance does not distinguish between permanent, long range parking lots and short range, temporary lots which are intended to be replaced by a parking structure or other facility. Thus, a temporary lot must include landscaping and other expensive amenities, even though the lot is only intended to be operated for a short period of time.

This situation has occurred in the South Pointe redevelopment area and has resulted in a financial hardship to developers as they renovate their buildings for interim periods of time until economic conditions change. If landscaping and parking lot construction codes were relaxed, it could result in a greater investment in buildings. As such, it is recommended that the Zoning Ordinance be modified to permit the construction of temporary lots for a fixed rate of time which would meet minimum landscaping/paving requirements.

This proposed revision to the Zoning Ordinance would also legitimize the existing situation in the City-owned parking lots on the west side of Collins Avenue at North Shore Open Space Park. These lots are, for the most part, unpaved and unmetered and are used for weekend parking for beachgoers. Future development of these properties is anticipated and planned for in Phase I of the City's adopted North Shore Comprehensive Plan. It is therefore undesirable to repave and relandscape these properties prior to development.

Additionally, temporary lots could be developed with impact fee funding to provide an interim solution to parking problems in the Art Deco district.



Older areas of Miami Beach, such as this South Beach neighborhood, have very little on-site parking.

CHAPTER FOUR

Potential Solutions to Parking Problems in Miami Beach

This chapter presents the alternative solutions to the parking problems in the City. First, a series of general goals and objectives is presented, which is followed by one or more implementation strategies that are designed to meet the goals and objectives. Within the complete text of the report, a number of proposed techniques/solutions are analyzed in further detail, and specific policies are established for each potential solution.

A. Parking Policies and Implementation Strategies

- Policy I:** Encourage a public/private partnership in meeting future demand for parking.
- Implementation Strategy I:**
1. Impact Fees
 2. Shared Parking
 3. Centralized Decisionmaking Agency Department
 4. Merchant/Business Participation
 - Validation
 - Security
 - Ride/Shop Program
 5. ● Parking Assessment Districts

- Policy II:** Develop a master plan for municipal parking lot acquisition, construction, and ongoing improvements.
- Implementation Strategy II:**
1. Adopt policies for acquisition
 2. Centralized Decisionmaking Agency/Department
 3. Master Financial Plan

- Policy III:** Increase quantity of metered parking spaces in existing on-street areas and lots.
- Implementation Strategy III:**
1. Angle parking on selected side streets
 2. Compact car spaces

- Policy IV:** Increase metered parking revenues.
- Implementation Strategy IV:**
1. Increase rates
 2. Investigate use of Master Meter
 3. Investigate number of complimentary parking decals
 4. Centralized Decisionmaking Agency/Department
 5. Impact Fee
 6. Merchant/Business Participation

- Policy V:** Encourage transportation alternatives which will result in a decrease in automobile usage in areas with parking deficiencies.
7. Improve enforcement revenues, i.e., Denver Boot, increase ticket fees
 8. Issue decals/permits for designated off-street areas rather than Citywide.
 9. Parking Assessment Districts

- Implementation Strategy V:**
1. Shuttle/Tram Service, particularly for special events.
 2. Improved links to mass transit
 3. Ride/Shop Program
 4. Increase rates/decrease time limits in high usage areas. Decrease rates/increase time limits in low usage areas.
 5. Develop methods to discourage all-day parkers from using valuable on-street and high usage lots in favor of garages.

Policy VI: Recognize that successful historic districts traditionally have an undersupply of available parking. Attempt to partially solve these problems with techniques designed to mitigate the effects of the lack of parking.

Implementation Strategy VI:

1. Shared Parking
2. Impact Fees
3. Ride-Shop Program
4. Improved links to bus transit
5. Residential Parking Permits
6. Shuttle/Tram Service
7. Concentrate acquisition of lots adjacent to existing parking lots
8. Construct parking garages - 3 to 4 stories in height with proper design features
9. Parking Assessment Districts
10. Temporary parking

Policy VII: Increase available parking supply without destroying the aesthetics and character of the neighborhood.

Implementation Strategy VII:

1. Maintain/increase landscaping
2. Master Meter in large areas instead of unsightly meters
3. Concentrate garages, large lots in areas near but not fronting on tourist/business corridors

Policy VIII: Increase security/safety in municipal garages and lots.

Implementation Strategy VIII:

1. Merchant/Business participation in security
2. Purchase vandal-resistant meters and equipment
3. Attendant parking
4. Regular police patrol of garages

Policy IX: Amend the zoning ordinance parking requirements to result in a better ratio of supply to demand.

Implementation Strategy IX:

1. Incorporate impact fees and parking credit system in zoning ordinance.
2. Modify requirements for parking based on some standard other than the number of bedrooms.
3. Modify requirements to allow for temporary parking lots in the redevelopment area.

Policy X: Investigate provision of preferential parking for residents of areas with parking deficiencies.

Implementation Strategy:

1. Residential parking permits

KEY POINTS

If we are to encourage private reinvestment, it is necessary to effect a balance between the two competing objectives of providing parking and encouraging development. This can be accomplished by subsidizing the total cost of required parking through the City's Metered Parking system and by spreading out impact fee charges over a period of years.

If a developer chooses to pay the impact fee at the outset, a lump sum of \$5000 per space will be assessed.

B. SPECIFIC POLICIES FOR MIAMI BEACH

This section provides a more comprehensive outline of specific policies which should be considered when applying several of the more complex parking solutions to the situation in the City of Miami Beach.

1. Impact Fees

In order to determine the scope and magnitude of impact fee charges, it is first necessary to identify what we intend to accomplish through the establishment of such fees. The primary concern is to establish a mechanism that will provide sufficient parking to support activities resulting from development and rehabilitation of buildings in Miami Beach. If this were the City's only concern, then the easiest mechanism would be to require that developers actually provide the entire amount of required parking either on or off-site. We could also require that the developer be assessed a fee in an amount equal to the real cost of acquiring and constructing the necessary parking; however, these initial costs might be so high as to render the project infeasible. If we are to encourage private reinvestment, it is necessary to effect a balance between the two competing objectives of providing parking and encouraging development. This can be accomplished by subsidizing the total cost of required parking through the City's Metered Parking System and by spreading out impact fee charges over a period of years. However, should a developer desire to pay such fees at the outset, a lump sum fee of \$5,000. per space will be assessed. A critical concern is the ability of the metered parking system to fund the project without the strict collection and enforcement of the impact fees.

The following conditions should also be present when considering the use of impact fees:

- a. Construction of on-site parking would preclude reasonable use of land.
- b. The construction of multiple parking levels or surface parking would have an adverse visual impact or disrupt the flow of retail stores in commercial districts.
- c. Adequate space for required parking is not available on the building site, (lots not deep or wide enough) thus presenting a hardship to the developer.
- d. Off-street parking is available and planned within a reasonable distance from the development.
- e. The impact fee process is substantiated in the City's Comprehensive Plan, Neighborhood Study and reflected in the Capital Improvement Plan.
- f. The administration develops a procedure that insures annual payments are received and that revocation of occupational licenses, zoning variances, or other approvals that were granted in reliance of receipt of this impact fee are instituted in situations where defaults occur.

It is important to set limits to the extent impact fees can be used to reduce parking requirements, particularly since the partial cost of providing this private parking will be borne by the City. For example, a large apartment building development should not be allowed to waive all parking and pay the fee, if there is ample space in the development in which to provide the required parking. There must be standards set by type of construction and use in order to determine if impact fees are proper.

With the foregoing comments in mind, below is a list of policy statements concerning the establishment of parking impact fees.

- a. Parking impact fees should be permitted in specified commercial and multiple family zoning districts. Specific impact fees have already been incorporated into the Zoning Ordinance in the PS Districts (South Pointe), and should remain as is.
- b. Parking credits should no longer be informally issued at no cost, but rather, they should be reflected in the Zoning Ordinance as part of the impact fee program.
- c. Provisions for assessing impact fees should be incorporated into the City's Zoning Ordinance administered by the Planning Department with consideration on a case by case basis with appeal to the Zoning Board of Adjustment.
- d. The City will make every effort to soften the cost of the impact fee by permitting the developer/owner to make annual cash payments over a 25 year period. The ordinance would contain a provision for reasonable inflation and/or interest costs. If a developer chooses to pay the impact fee at the outset, a lump sum of \$5,000 per space will be assessed.
- e. In the event that ownership, use or square footage changes in a building which pays annual parking fees, the amount of the fee should be reassessed and potentially increased.
- f. If a building which pays annual impact fees is demolished, impact fees will cease.
- g. The use of impact fees will be restricted for new construction projects, as follows:
 - New construction office, commercial, and multifamily projects must provide 75% of the required parking on site.
- h. Developers who rehabilitate buildings which have some existing parking must not be permitted to sell or lease said parking and request an impact fee assessment for those spaces.



Developers who rehabilitate Ocean Drive properties pay parking impact fees.

KEY POINTS

A parking assessment district would function as a form of special taxing district, to be established only upon approval of 51% of the property owners within the district.

An office development could permanently lease its parking facility to a restaurant or retail use for weekends and evenings, times when office parking demands are extremely low.

The non-conflicting land uses to be permitted to use shared parking will be determined by the City and will not include multifamily residential uses.

- i. The annual impact fees will equal the annual costs of parking permits in the City of Miami Beach (currently \$250 per space) and will be increased at the same rate that annual permit fees are increased or as the economy of the City improves, whichever, is greater. Lump sum fees will equal \$5,000 per space.
- j. The total number of parking spaces required in Section 9 or Section 18 of the Zoning Ordinance will be used as the basis for the assessment of impact fees; however, credits associated with existing units, seating or floor space shall not be included in determining the parking requirement. The formula for assessing fees should be as follows:
 - Purchase of decals and/or permits: In no case shall the number of decals/permits purchased exceed 50% of total parking spaces waived.
 - At least 50% of the assessment will be in the form of a direct cash payment to be used for future acquisition/construction of parking or related improvements with the proceeds deposited in specific accounts.
 - For rehabilitation projects the impact fee shall only be applied to that portion of the building which will be substantially renovated or expanded.
 - The first payment shall be received prior to the issuance of a building permit; however, the effective date of the first payment shall commence upon the issuance of a Certificate of occupancy and be valid for one (1) year. The second and subsequent payments shall be received annually on the anniversary of the date the Certificate

of Occupancy or Occupational License (whichever is earlier) was received. This requirement shall be effective for a 25 year period.

2. Parking Assessment District

Acquisition and construction of municipal parking lots and/or structures can be facilitated by the establishment of parking assessment districts. These are established by property owners who pay a special assessment in addition to their annual taxes to fund the construction of public improvement bonds within a given geographical area. The establishment of the parking assessment district and sale of bonds must be approved by the electoral via a referendum.

A parking assessment district would function as a form of special taxing district, to be established only upon approval of 51% of the property owners within the district. As such, strong neighborhood support for this concept should be a prerequisite to placing the issue on the ballot. It is likely that this neighborhood-based support would only be found in older commercial and hotel areas which are undergoing renovation and expansion activity. Several complex administrative issues would have to be dealt with in establishing parking assessment districts. First, an equitable determination of required annual taxes must be made based upon such factors as amount of existing private parking, intensity and type of use, and existing parking impact fees. Second, future zoning variance impact fee requirements would have to be waived. Third, a careful evaluation must be made of the future parking demand within the assessment district to ensure that sufficient tax revenues are generated to meet that demand. Finally, lending institutions should be consulted prior to the establishment of the district to ensure that financing will remain available to owners and developers who pay annual parking taxes in lieu of providing required parking.

3. Shared Parking

Shared parking is defined as "parking space that can be used to serve two or more individual land uses without conflict or encroachment." It is an important concept because when managed correctly and coordinated well with the mix of related land uses it can significantly reduce the total number of spaces required to meet parking demand, greatly reducing development costs and conserving valuable land for more productive purposes.

There are a number of possible options for implementing shared parking among several separate users, some of which could involve the City's Metered Parking System. The important point is that, in as much as it is possible, these alternative parking arrangements should be a permanent condition of the use in lieu of normally required/provided parking. This could take the form of parking agreements between private users in which, for example, an office development permanently leases its parking facility (or portion thereof) to a restaurant or retail use for weekends and evenings, times when office parking demand are extremely low. This is similar to the situation at the South Pointe Marina where parking will be shared by the South Beach Elementary School and the marina, both of which have peak parking demands at opposite times. Moreover, a parking facility could be operated by the Metered Parking Division leasing space on a shared basis to a number of different users in the immediate vicinity.

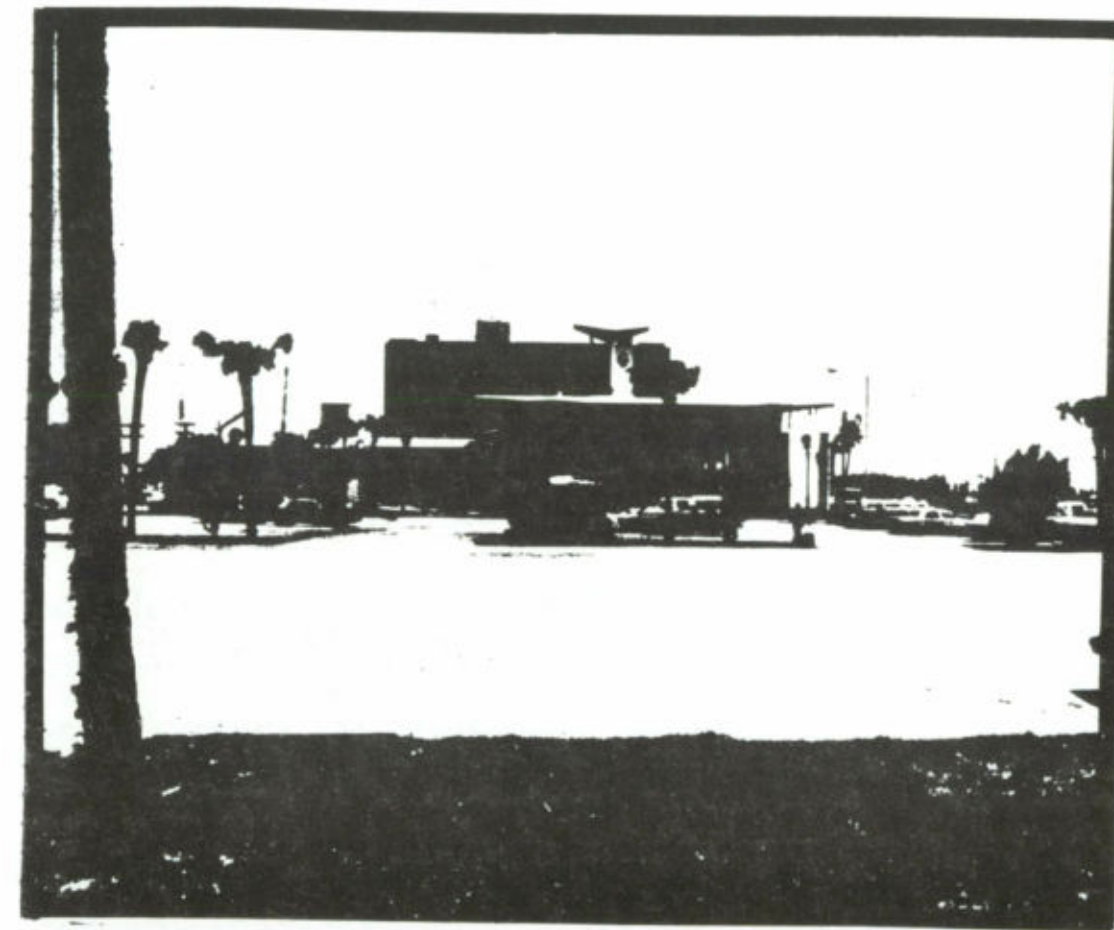
The concept of shared parking should be based upon the following policies:

- a. Parking requirements for the individual uses must reflect the actual peak demand.
- b. If parking is allowed to be shared by more than one owner, a covenant running with the

land will be required.

- c. Shared parking spaces should not be reserved for individuals or groups on a 24 hour basis.
- d. Any subsequent change in use will require a new permit and proof that sufficient parking is available.
- e. The land uses and the common parking facility must be located within 600 feet of each other.
- f. The non-conflicting land uses to be permitted to use shared parking will be determined by the City and will not include multifamily residential uses.

The Administration of the program should be by the Metered Parking Division with assistance by the Planning and Public Works Departments.



South Pointe Marina provides an example of the shared parking concept.

KEY POINTS

The City should consider repealing the Falk Amendment, which limits bond sales to \$250,000 unless the voters approve.

Merchants and business persons must recognize that their cooperation is necessary in the successful administration of parking in commercial corridors.

With the high cost of land in Miami Beach, considerable care must be exercised when selecting lots for future acquisition.

4. Centralized Decisionmaking Agency/Department

The City should consider the establishment of a professionally administered agency or department, solely responsible for the City's municipal parking program. In order for such an agency to be successfully managed, the following policies should be considered:

- a. Repeal of the Falk Amendment (limits bond sales to \$250,000 unless voters approve), and/or revision to include an exception for parking revenue bonds.
- b. The agency/department should have the professional staff and authority to:
 - recommend the issuance and sale of parking revenue bonds
 - set rates, time limits
 - recommend future acquisition parcels
 - collect revenues/administer metered parking fund
 - negotiate agreements with developers for joint use of space with approval of the City Commission
 - oversee construction of garages and surface lots
 - administer the collection of the parking impact fee in conjunction with the Planning Department and Zoning Board of Adjustment.
- c. Ticket revenues should be returned to the metered parking fund.

5. Merchant/Business Participation

Since the availability and quality of public parking directly affects the successful operation of a retail/commercial establishment, it seems only logical that the business community should be encouraged to participate directly in the provision

of public parking. This participation can take many forms, from agreeing not to park employee cars in valuable on-street spaces to paying a special assessment for additional parking in the vicinity. Merchants and businesses must recognize that their cooperation is necessary in the successful administration of parking in commercial corridors.

A number of merchants have recently petitioned the City for a merchant validation/attendant parking program for the Lincoln Lane and 42nd Street garages. In this case, a portion of spaces would be allotted to customers who would then receive vouchers from the merchants for discounted parking. This is used as an economic development promotional tool to increase business and may not result in additional parking or increased revenues. Nevertheless, it is an important pilot project and should be encouraged.

Similar to the merchant validation program is the ride-shop program used in other cities which might provide the same promotional benefit to merchants and also result in reducing parking demand. In the ride-shop program, a Merchants Association would provide Metrobus passes as an alternative to providing free parking.

Another form of merchant/business participation could involve assisting in the provision of security for garages. For example, if the Lincoln Road Merchants Association becomes concerned about the lack of safety for patrons and their cars in the Lincoln Lane garage, perhaps they can consider hiring a security guard to patrol the area. A similar system is in place in the City of Miami.

6. Metered Parking Master Financial Plan

A Master Financial Plan for acquisition, construction, and ongoing improvements to the Metered Parking System is essential to the future financial well-being of the system and the

provision of adequate public parking in the future. Ideally, an entity such as a professionally managed parking department should be the agency responsible for advocating, preparing and implementing such a plan. In the absence of such a department, a Parking Task Force should be created, comprised of the Planning Department, Office of Management & Budget staff, Metered Parking staff, Legal staff and others involved in the process, including the Finance Committee of the City Commission.

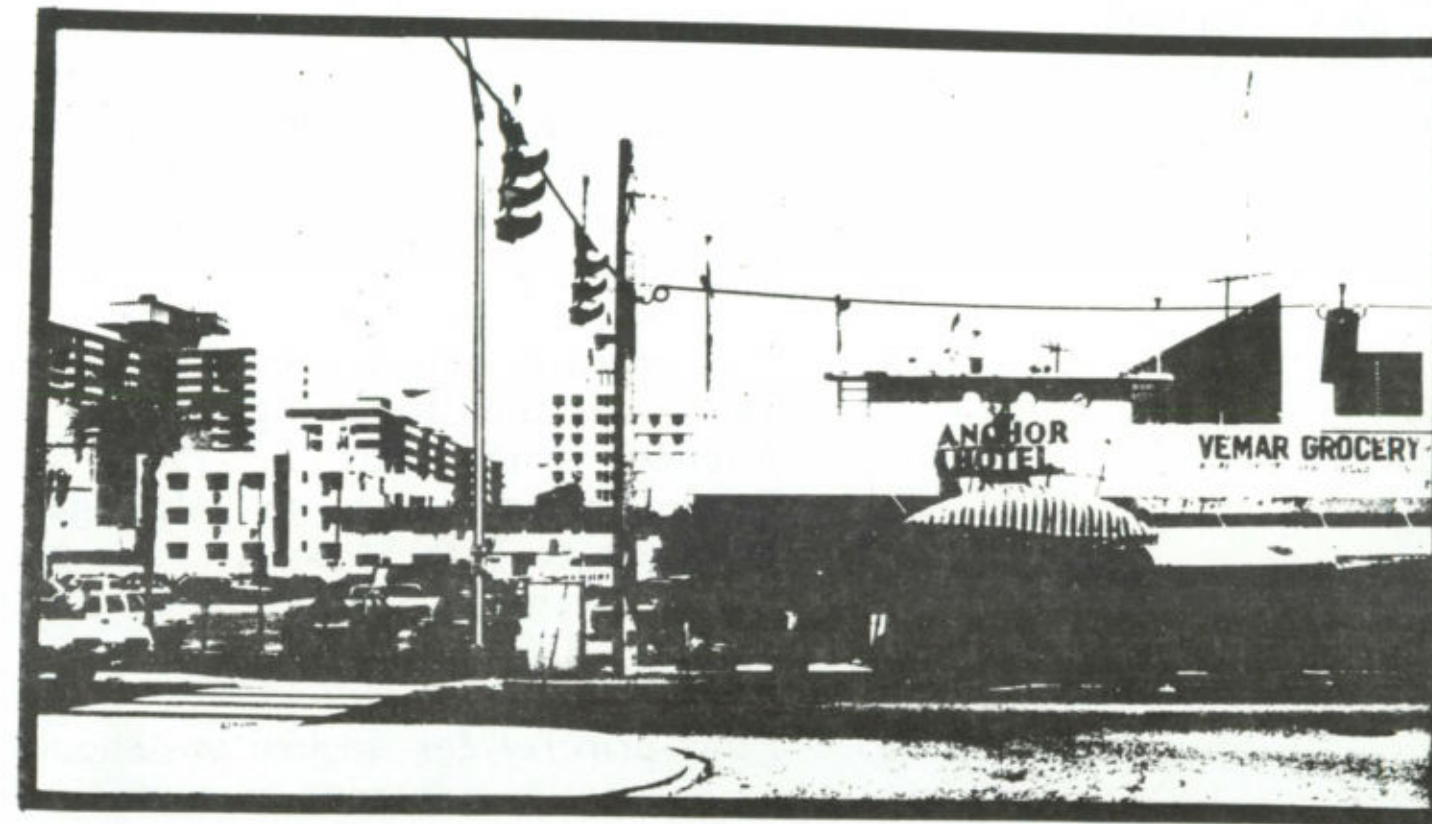
7. Acquisition and Development Policies

The costs of acquiring surface lots can vary considerably, depending on current use, zoning, and location of the property to be acquired. The City has recently authorized the purchase of one 50' x 140' lot which will provide 20 additional parking spaces at a cost of \$229,000 or \$11,450 per space. With the high cost of land in Miami Beach, considerable care must be exercised when selecting lots for future acquisition.

The Plummer Study recommended that an additional 350 to 720 additional parking spaces be added to the existing Municipal Parking System to satisfy current and future parking demands within the numerous commercial corridors located throughout the City. As was shown in Chapter IV, however, the establishment of the impact fee will substantially increase that figure, resulting in a future demand of 1280 to 1790 public spaces. Obviously, the extent of this increase will result in a need for several garages to be constructed, since surface lots cannot be purchased in sufficient amounts to meet the parking need.

Another factor to be considered in acquiring future property is the location in relation to other municipal parking areas. If possible, it is desirable to acquire properties adjacent to municipal parking areas, thus increasing the potential for the future location of a garage.

In addition to considering the cost factors, location factors must be evaluated. First, the general proximity to areas which have a parking deficiency must be considered. As indicated in Table F, the areas of most serious concern are located in the vicinity of Collins Avenue South of 21st Street, Washington Avenue, and South Pointe. The area bounded by Collins, 6th Street, Washington, and 16th Street should be considered as a top priority for the next acquisition for municipal parking purposes. A 1500 to 2000 car garage with commercial uses fronting on Washington and Collins combined with a bus terminal on the ground floor should be considered for construction in the municipal property next to Fedco. This will entail acquisition of the Anchor Hotel and adjacent multifamily property. A third priority is the area east of the Convention Center to the Ocean. This area has an existing parking deficiency and the parking problems will become critical when the Convention Center expansion is complete.



The construction of a parking garage at 16th and Washington would necessitate acquisition of the Anchor Hotel.

KEY POINTS

A 1500 to 2000 car garage with commercial uses fronting on Washington and Collins combined with a bus terminal on the ground floor should be considered for construction on municipal property next to Fedco.

Two garages should be constructed in South Pointe, on the upland marina property and on Commerce Street.

Up to 20% additional parking can be generated by permitting angled parking on various side streets where parallel parking currently exists.

In addition, South Pointe will require the provision of structured parking in two primary areas, the upland marina parcel and at the southern portion of South Pointe. A 1500 to 2000 space garage will be constructed by South Shore Developers, Inc. to accommodate the housing development, retail, commercial, and marina activities, and the school. Ground level parking in the structure will be allocated to the City for metered parking.

Another garage will become necessary to fulfill the parking needs in South Pointe, to allow for overflow parking from South Pointe Park, Penrods, Joe's Stone Crabs, the housing and hotel developments, and other retail/commercial activity. Ideally, this structure would be situated on Commerce Street. This would be in keeping with the recommended policy of not placing structures on active tourist/commercial corridors (Biscayne Street, in this case).

The policies/steps listed below for acquisition, construction, and on-going improvements should be adopted as a framework for proceeding with development of a Master Plan.

Acquisition Policies

- a. Concentrate acquisition for the next 5-15 years in the following areas: a) Collins Avenue from 5th - 15th Streets, b) Drexel/Pennsylvania to Michigan Avenue from 6th to 16th Streets, c) the area east of the Convention Center and d) Commerce Street.
- b. First priority for acquisition should be given to properties adjacent to municipally owned lots or on municipally owned property that is vacant.
- c. Parcels to be acquired should not front on tourist or potentially active commercial

corridors; i.e., Ocean Drive, 41st Street, Washington Avenue, Biscayne Street.

- d. Vacant property should be considered first when purchasing property. If a property is not vacant, it should be a nuisance property; i.e., numerous building code violations, police calls, etc or one in which there is less floor area or units in the building than what is allowed by code.
- e. Properties which have historic significance or which have been determined to be contributing to the historic character to the Architectural District should not be purchased unless they are adjacent to an existing surface lot. Property for development of new parking facilities should not be purchased unless it can be expanded to at least three lots without the demolition of a contributing building.
- f. Lots should be acquired in areas which (a) are undergoing rehabilitation activities and (b) have been subject to Neighborhood Revitalization Plans.
- g. Parking lots should not exceed four platted lots.

Construction Policies

- a. Five garages should be considered for future construction when the demand occurs as a result of substantial renovation and new construction activity. It is anticipated that this demand for parking will occur within the next five to fifteen years. Design of these facilities should meet compatibility standards listed in the Secretary of the Interior Standards for historic preservation. As stated earlier, the Fedco lot and adjacent properties should be considered for construction of a large multi-story garage and/or City owned

property at 13th Street (four lots). The third garage should be built in proximity to 7th Street and Collins Avenue. The construction of a garage should be preceded by parking lots. The fourth garage should be privately constructed on the Upland Marina parcel in South Pointe, and the fifth garage should be provided on Commerce Street.

- b. Garage structures should be designed to be compatible with the surrounding neighborhood in terms of size, design, setbacks, etc.
- c. Attendant parking or master meters should be considered at new garages.

Policies for Other Improvements

- a. A meter replacement plan should be developed, similar to the City's vehicle replacement program.
- b. Assume an average life of 10-15 years per meter.
- c. Master Meters should be considered in large surface areas and garages.

8. Angled Parking

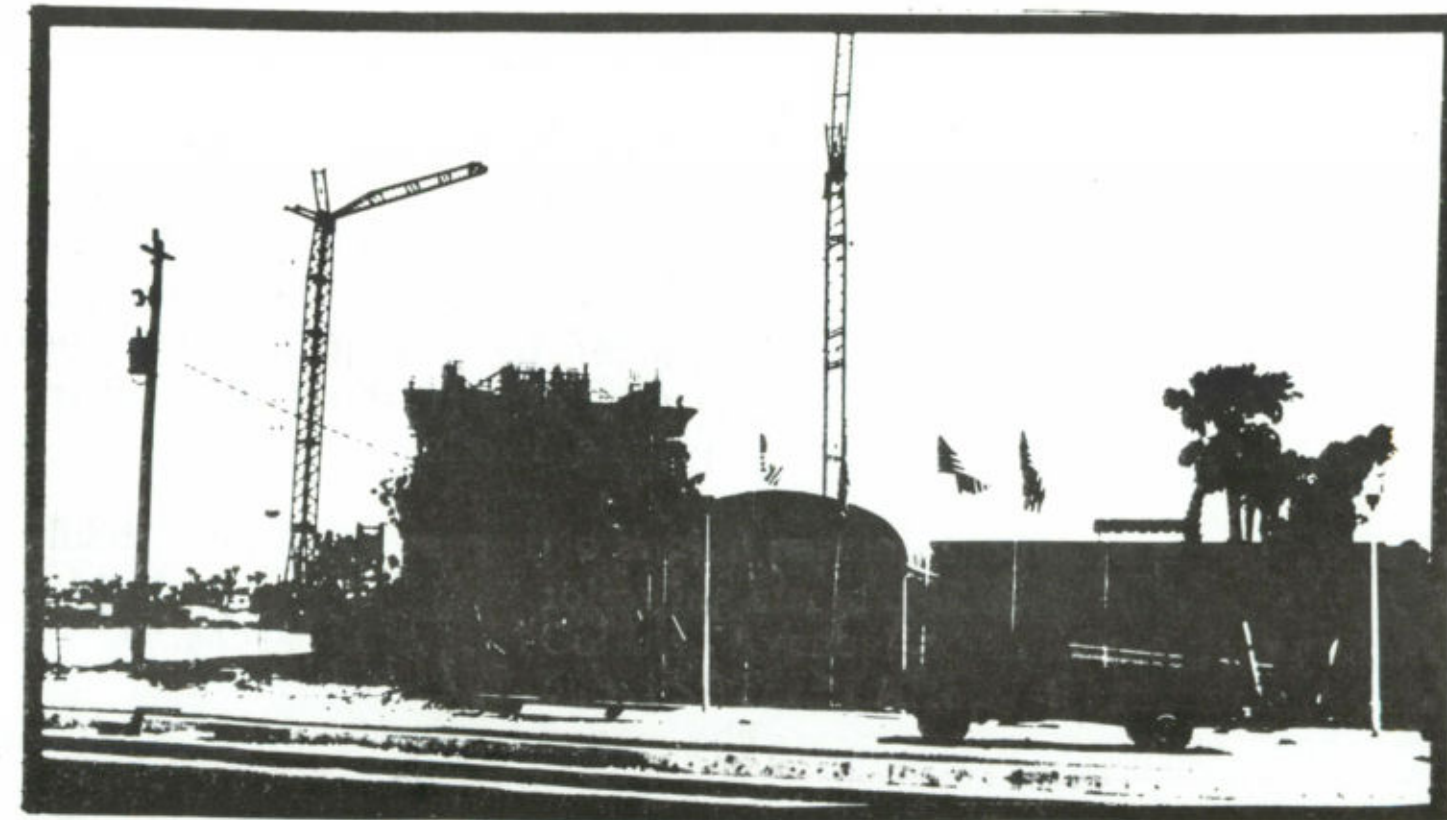
Up to 20% additional parking can be generated by permitting angle parking (metered) on various side streets where parallel parking currently exists. The following policies should be considered when allowing angled parking:

- a. No angled parking should be permitted on the following streets:
Collins Avenue/Indian Creek, Washington, 41st Street, Alton Road, 71st Street, Normandy Drive, Ocean Drive.
- b. The street width must be at least 50 feet.

- c. Angle parking will only be allowed on one side of the street.
- d. Angle should not exceed 45 degrees.



Two areas which will require additional municipal parking in the future are Ocean Drive and South Pointe.



SOUTH FLORIDA
COLLECTION

KEY POINTS

Cost factors must be carefully evaluated when deciding to convert a metered lot to allow compact car spaces.

Residential parking permit programs should not be considered on a widespread basis, particularly in tourist areas.

9. Compact Car Spaces

The following policies are recommended when converting or constructing existing or new lots and/or garages into compact car areas:

- a. No more than 25-35% of the total spaces should be for compact cars.
- b. Compact car spaces must be clearly designated.
- c. Cost factors must be carefully evaluated when deciding to convert a lot; i.e., new meters and poles, restriping, signage.
- d. Lots with highest utilization should be considered first when restriping lots; i.e., ground floors of garages, Washington/Collins lots.
- e. Lots should be of sufficient size to warrant restriping to accommodate compact cars - at least 20,000 square feet.

10. Residential Parking Permits

In order for a residential parking permit program to be established in Miami Beach, the following policies are recommended.

- a. The request for such a program should come from a neighborhood association and supported by a majority of property owners and residents of the street or area, not the City.
- b. This type of program should not be encouraged on a widespread basis, particularly in tourist areas.
- c. The neighborhood must have a clearly demonstrated parking problem and residents

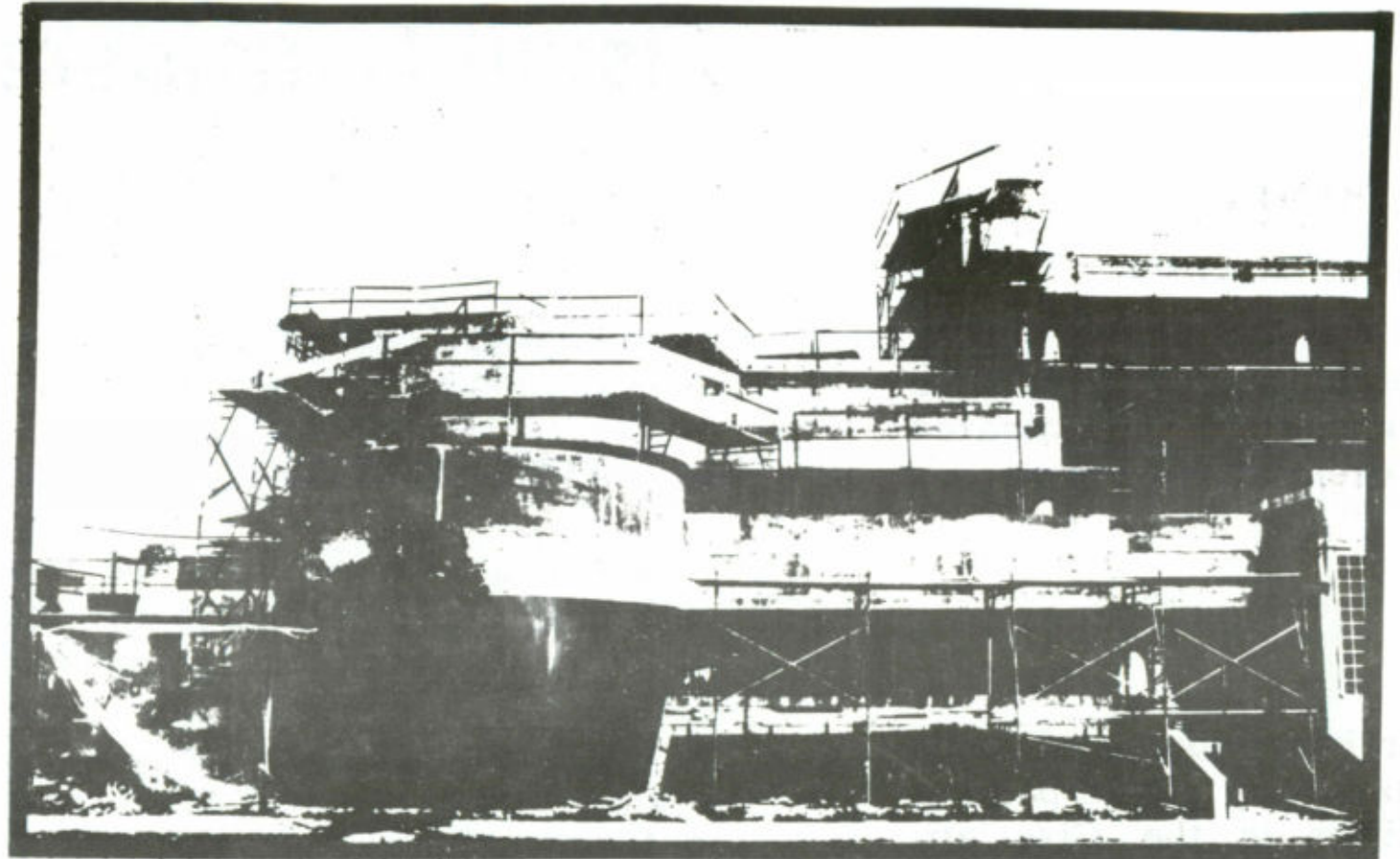
must desire a residential parking permit program.

- d. The neighborhood must have an established resident/neighborhood association.
- e. Subsequent to a request, the Planning Department staff with the assistance of Metered Parking Division will conduct parking occupancy studies
- f. Residents and property owners will then be polled on a block by block basis. 51% of the property owners and residents must approve a program for it to operate on their block.
- g. Resident permits will not entitle them to park in metered spots.
- h. Administrative fees will be charged @ \$10.00 per month per registered automobile. The Metered Parking Division will be responsible for the administration of residential permits.

40th Street



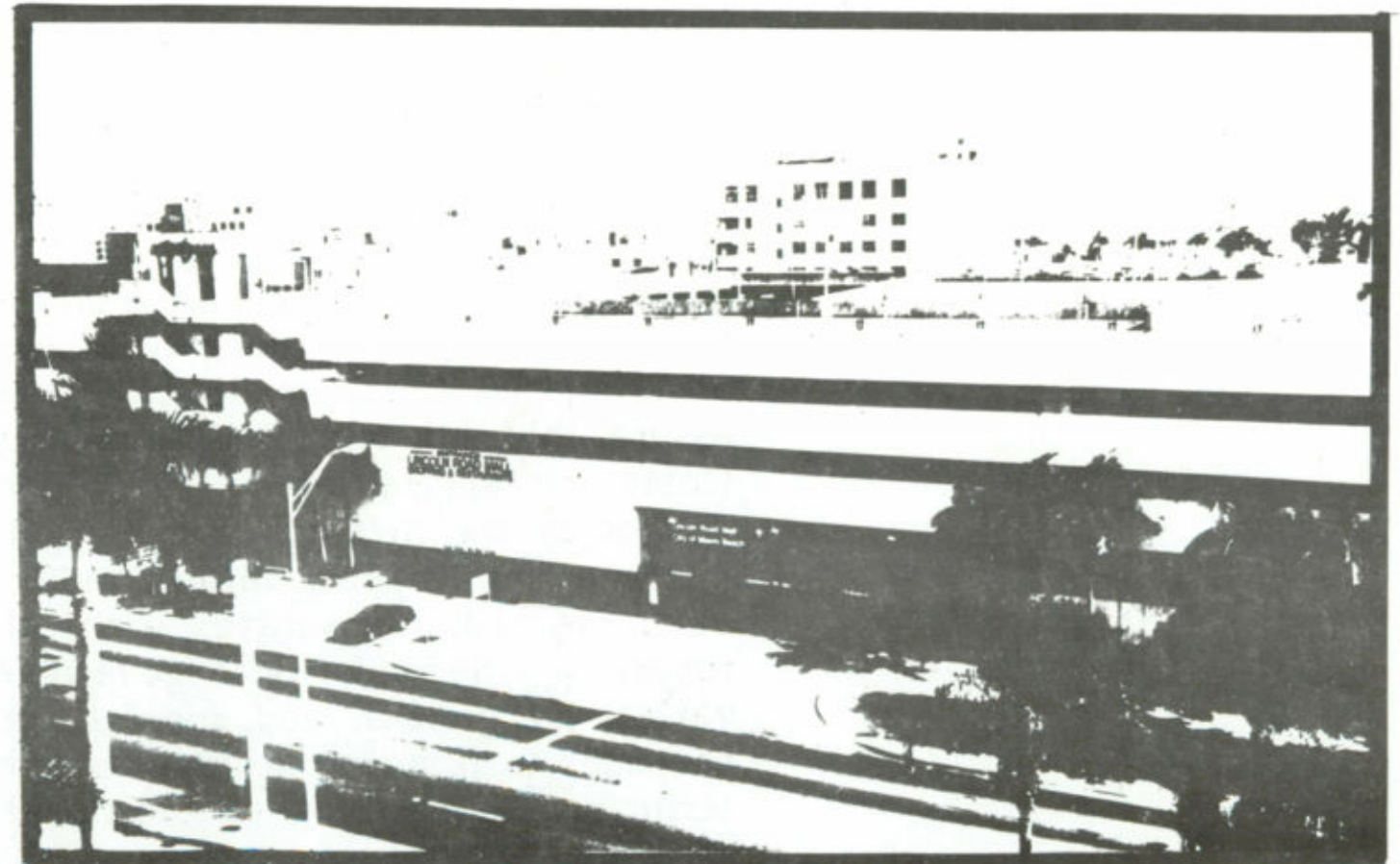
Police and Courts Facility



Lincoln Lane East



Lincoln Lane West



Miami Beach Public Parking Facilities

CHAPTER FIVE

Fiscal Considerations

KEY POINTS

Federal sources should be continuously investigated for potential assistance.

The primary source of funds for providing public parking facilities in the City are revenue bonds.

The potential for developing parking facilities is impacted by the fiscal considerations of the City. The following are sources of funding local governments commonly used to finance construction and operation of parking facilities.

A. FEDERAL ASSISTANCE

Financial assistance from the federal government will most likely decline in the foreseeable future. Expected reductions in revenue sharing and various categorical programs (i.e. Urban Development Action Grants, Community Development Block Grant) would require an increase of the local matching share for the future construction. Nevertheless, federal sources should be continuously investigated for potential financial assistance.

B. MUNICIPAL FUNDS

Public parking facilities in the City are provided under municipal auspices and financed with municipal funds. The reliance on municipal funding is common and is largely due to two major advantages. First, municipal financing methods assure that all users will contribute their share. Costs are appropriated to property owners who will enjoy the direct benefit through the increase in trade and property values, and to the community at large commensurate with the benefits it receives. Second, local governments can use a variety of general and special purpose municipal revenues to finance parking facilities. Use of long-term bonds provides an additional advantage by assuring that future taxpayers pay a part of the cost and thus share the burden with today's taxpayers.

C. REVENUE BONDS

The primary source of funds for providing public parking facilities in the City are revenue bonds. Parking revenues are pledged for the term of the bonds, resulting in generally higher interest rates than for general obligation bonds. Revenues include collections from parking meters and leases, paid by those who use particular facilities. Use of revenue bonds in the City of Miami Beach is seriously hindered by the passage of the "Falk Amendment" and its addition to the City Charter, which requires a citywide referendum to approve any project in which bond sales exceed \$250,000.

D. GENERAL OBLIGATION BONDS

General obligation bonds are secured by the full faith and credit of the issuing municipality and thus, provide the highest degree of security and carry the lowest interest rate of any municipal bond. Moreover, the borrowing power of the City for financing other projects is reduced by the amount of the outstanding bonds issued for parking facilities. As stated in #3 above, the Falk Amendment prevents the City from issuing general obligation bonds without voter approval.

E. USER BENEFIT SPECIAL ASSESSMENT

Under this financing arrangement, all properties within a designated district are assessed and apportioned the improvement cost according to the benefits received. The apportionment may consider the use of the property relative to the parking demand it generates, gross sales of the business, and/or distance to the proposed parking facility. A major disadvantage of the assessment method is objection of property owners and disagreement over the assessment. Consequently, financing may be delayed which discourages new developments. In addition, the City's \$250,000 cap on the issuance of bonds (the Falk Amendment), prevents the City from issuing bonds without voter approval.

As such, this system of financing parking facilities, may be better suited for improvement of existing facilities in well established districts than for the construction of new facilities in the areas of major redevelopment.

F. IMPACT FEES

As the case study in Chapter VI shows, the assessment of annual impact fees for provision of required parking can be used to fund the acquisition and/or construction of municipal parking facilities on an ongoing basis.

6. PARKING ASSESSMENT DISTRICTS

Revenues generated through the establishment of parking assessment (special taxing) districts could be used to finance the sale of public improvement bonds for the acquisition and/or construction of municipal parking facilities.

TABLE J

MIAMI BEACH PARKING FACILITIES PROGRAM
SYSTEM-WIDE NET REVENUE (IN THOUSAND DOLLARS)

FISCAL YEAR	TOTAL REVENUE	TOTAL EXPENSES	NET * REVENUES	DEBT SERVICE RATIO **
1984-85	\$4,248	\$2,200	\$2,048	2.63
1985-86	\$4,199	\$2,340	\$1,859	2.38
1986-87	\$4,171	\$2,480	\$1,691	2.17
1987-88	\$4,166	\$2,620	\$1,546	1.98
1988-89	\$4,291	\$2,740	\$1,551	1.99

* Expenses and net revenues do not include bond payments.
** Debt Service Ratio Coverage is based on annual payments of \$780,000 for 15 years.

SOURCE: DAVID FLUMMER & ASSOCIATES, 1984

CHAPTER SIX

Case Studies

A. IMPACT FEES AND THE CONSTRUCTION OF A PARKING GARAGE

The need to find alternative solutions to the parking problem has become increasingly evident. The case study presented herein illustrates how the impact fee can be used to finance a portion of the required parking while encouraging the construction and rehabilitation of viable projects.

We are assuming that the following rehabilitation projects will be constructed in 1986 and are in general proximity of an existing surface parking lot at 1300 - 1329 Collins Avenue.

1. A 100 room hotel with night club - 125 parking spaces required.
2. A 75 room hotel with small cafe/restaurant - 83 spaces required.
3. One 20 unit multi-family rehabilitation - 20 spaces required.
4. One 18 unit multi-family rehabilitation - 18 spaces required.

These four projects will require a total of 246 parking spaces, none of which can be provided on-site. Each developer requests parking variances in the amounts listed above, and the Zoning Board of Adjustment grants the variance contingent upon the payment of impact fees for a fixed period of time.

The impact fee will be assessed according to the following formula:

TOTAL FEE = Number of spaces required times annual permit fee for 25 years.
one-half of the spaces may be used for purchase of decals/permits and one-half must be a cash payment to the impact fee account equal to the permit fee. Currently, the annual permit cost is \$250. Our current Parking Impact Program requires a 50% annual fee and/or decal purchase, not the 100% assessment presented in this analysis. It is anticipated to increase periodically over the 25 year period, with annual costs of \$550 in the year 2010.

In return for the decal and cash payments, the City agrees to construct a four-story 274 space garage on four municipally owned lots at 1300-1329 Collins Avenue (four platted lots). Since the acquisition has already been financed through prior revenue bonds and metered parking surpluses, only the construction costs will be calculated in this scenario. It should also be noted that decal purchases and cash payments do not guarantee spaces in the garage.

It is anticipated that the garage will be constructed in 1988 at a cost of \$1,902,903. It is assumed that the City would issue revenue bonds (20 year term, 10% interest) to cover the costs of financing the garage. Table M compares the projected revenues from decals, cash payments, and meters (less maintenance and operating expenses) to the yearly cost of the bond issue. As the comparison indicates, only a minimum amount of supplemental funding would be required, and the garage becomes self-supporting in the year 2000.

TABLE K

METERED PARKING MAINTENANCE & OPERATING EXPENSES--274 SPACE GARAGE

Year	# Spaces	Sal,Ret, Ins.	Depre- ciation	Mgmt. Fees	Elec.	Prop. Ins.	Repair Supplies	Total
1985	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	274	\$33,192	\$1,178	\$11,100	\$2,291	\$4,039	\$1,943	\$53,742
1990	274	\$34,852	\$1,178	\$11,655	\$2,462	\$4,342	\$2,088	\$56,577
	274	\$36,595	\$1,178	\$12,237	\$2,647	\$4,667	\$2,245	\$59,570
	274	\$38,424	\$1,178	\$12,849	\$2,846	\$5,017	\$2,413	\$62,728
	274	\$40,346	\$1,178	\$13,492	\$3,059	\$5,394	\$2,594	\$66,063
	274	\$42,363	\$1,178	\$14,166	\$3,289	\$5,798	\$2,789	\$69,583
1995	274	\$44,481	\$1,178	\$14,875	\$3,535	\$6,233	\$2,998	\$73,300
	274	\$46,705	\$1,178	\$15,618	\$3,800	\$6,701	\$3,223	\$77,225
	274	\$49,040	\$1,178	\$16,399	\$4,085	\$7,203	\$3,465	\$81,371
	274	\$51,492	\$1,178	\$17,219	\$4,392	\$7,743	\$3,725	\$85,749
	274	\$54,067	\$2,439	\$18,080	\$4,721	\$8,324	\$4,004	\$91,635
2000	274	\$56,770	\$2,439	\$18,984	\$5,075	\$8,948	\$4,304	\$96,521
	274	\$59,609	\$2,439	\$19,934	\$5,456	\$9,619	\$4,627	\$101,683
	274	\$62,589	\$2,439	\$20,930	\$5,865	\$10,341	\$4,974	\$107,138
	274	\$65,719	\$2,439	\$21,977	\$6,305	\$11,116	\$5,347	\$112,902
	274	\$69,005	\$2,439	\$23,076	\$6,778	\$11,950	\$5,748	\$118,995
2005	274	\$72,455	\$2,439	\$24,229	\$7,286	\$12,846	\$6,179	\$125,434
	274	\$76,077	\$2,439	\$25,441	\$7,833	\$13,810	\$6,643	\$132,242
	274	\$79,881	\$2,439	\$26,713	\$8,420	\$14,846	\$7,141	\$139,439
	274	\$83,875	\$2,439	\$28,048	\$9,051	\$15,959	\$7,676	\$147,049
	274	\$88,069	\$2,439	\$29,451	\$9,730	\$17,156	\$8,252	\$155,097
2010	274	\$92,473	\$2,439	\$30,923	\$10,460	\$18,443	\$8,871	\$163,609
Total		\$1,278,079	\$41,045	\$427,398	\$119,386	\$210,496	\$101,249	\$2,177,653

SOURCE: MIAMI BEACH PLANNING DEPARTMENT
OFFICE OF MANAGEMENT & BUDGET
1985

TABLE L

1986 SPECIAL REVENUE BOND ISSUE HYPOTHETICAL DEBT SERVICE SCHEDULE	
CAPITAL PROJECTS:	\$1,902,930
PRINCIPLE:	\$2,003,084
INTEREST RATE:	0.1
TERM(in years):	20
#i in first yr:	12
First principle "payment:	1988

Year	Outstanding Principle @ year-end	Principle Paid	Interest Paid	Total Paid
1986	2,003,084.21		0.00	0.00
1987	2,003,084.21		200,308.42	200,308.42
1988	2,003,084.21	100,154.21	200,308.42	300,462.63
1989	2,003,084.21	100,154.21	200,308.42	300,462.63
1990	1,902,930.00	100,154.21	200,308.42	300,462.63
1991	1,802,775.79	100,154.21	190,293.00	290,447.21
1992	1,702,621.58	100,154.21	180,277.58	280,431.79
1993	1,602,467.37	100,154.21	170,262.16	270,416.37
1994	1,502,313.16	100,154.21	160,246.74	260,400.95
1995	1,402,158.95	100,154.21	150,231.32	250,385.53
1996	1,302,004.74	100,154.21	140,215.89	240,370.11
1997	1,201,850.53	100,154.21	130,200.47	230,354.68
1998	1,101,696.32	100,154.21	120,185.05	220,339.26
1999	1,001,542.11	100,154.21	110,169.63	210,323.84
2000	901,387.89	100,154.21	100,154.21	200,308.42
2001	801,233.68	100,154.21	90,138.79	190,293.00
2002	701,079.47	100,154.21	80,123.37	180,277.58
2003	600,925.26	100,154.21	70,107.95	170,262.16
2004	500,771.05	100,154.21	60,092.53	160,246.74
2005	400,616.84	100,154.21	50,077.11	150,231.32
2006	300,462.63	100,154.21	40,061.68	140,215.89
2007	200,308.42	100,154.21	30,046.26	130,200.47
TOTAL		2,003,084.21	2,674,117.42	4,677,201.63

TABLE M

CASE STUDY - IMPACT FEE & METERED PARKING REVENUES - 274 SPACE GARAGE											
Year	Cost per Decal	No. of Spaces	Decal Rev.	Cash Rev	Meter Rate	Meter Rev	Total Rev.	Maint & Op.Exp.	Net Rev.	P&I Bond Issue	Diff. Ea. Year
1985	\$250	123	\$30,750	\$30,750	\$0.20	\$7,738	\$69,238	\$0	\$69,238	\$0	\$69,238
	\$250	123	\$30,750	\$30,750	\$0.20	\$7,738	\$69,238	\$0	\$69,238	\$0	\$69,238
	\$300	123	\$36,900	\$36,900	\$0.20	\$7,738	\$81,538	\$0	\$81,538	\$200,308	(\$118,770)
	\$300	123	\$36,900	\$36,900	\$0.20	\$0	\$73,800	\$0	\$73,800	\$300,463	(\$226,663)
1990	\$300	123	\$36,900	\$36,900	\$0.20	\$105,821	\$179,621	\$53,742	\$125,879	\$300,463	(\$174,584)
	\$350	123	\$43,050	\$43,050	\$0.30	\$158,731	\$244,831	\$56,577	\$188,254	\$300,463	(\$112,209)
	\$350	123	\$43,050	\$43,050	\$0.30	\$158,731	\$244,831	\$59,570	\$185,261	\$290,447	(\$105,186)
	\$350	123	\$43,050	\$43,050	\$0.30	\$158,731	\$244,831	\$62,728	\$182,103	\$280,432	(\$98,329)
	\$350	123	\$43,050	\$43,050	\$0.30	\$158,731	\$244,831	\$66,063	\$178,768	\$270,416	(\$91,648)
1995	\$425	123	\$52,275	\$52,275	\$0.30	\$158,731	\$263,281	\$69,583	\$175,248	\$260,401	(\$85,153)
	\$425	123	\$52,275	\$52,275	\$0.30	\$158,731	\$263,281	\$73,300	\$189,981	\$250,386	(\$60,405)
	\$425	123	\$52,275	\$52,275	\$0.30	\$158,731	\$263,281	\$77,225	\$186,056	\$240,370	(\$54,314)
	\$425	123	\$52,275	\$52,275	\$0.30	\$158,731	\$263,281	\$81,371	\$181,910	\$230,355	(\$48,445)
	\$425	123	\$52,275	\$52,275	\$0.30	\$158,731	\$263,281	\$85,749	\$177,532	\$220,339	(\$42,807)
2000	\$500	123	\$61,500	\$61,500	\$0.40	\$211,642	\$334,642	\$91,635	\$171,646	\$210,323	(\$38,677)
	\$500	123	\$61,500	\$61,500	\$0.40	\$211,642	\$334,642	\$96,521	\$238,121	\$200,308	\$37,813
	\$500	123	\$61,500	\$61,500	\$0.40	\$211,642	\$334,642	\$101,683	\$232,959	\$190,293	\$42,666
	\$500	123	\$61,500	\$61,500	\$0.40	\$211,642	\$334,642	\$107,138	\$227,504	\$180,278	\$47,226
	\$500	123	\$61,500	\$61,500	\$0.40	\$211,642	\$334,642	\$112,902	\$221,740	\$170,262	\$51,478
2005	\$550	123	\$67,650	\$67,650	\$0.40	\$211,642	\$346,942	\$118,995	\$215,647	\$160,247	\$55,400
	\$550	123	\$67,650	\$67,650	\$0.40	\$211,642	\$346,942	\$125,434	\$221,508	\$150,231	\$71,277
	\$550	123	\$67,650	\$67,650	\$0.40	\$211,642	\$346,942	\$132,439	\$214,503	\$140,215	\$74,288
	\$550	123	\$67,650	\$67,650	\$0.40	\$211,642	\$346,942	\$139,439	\$207,503	\$130,200	\$77,303
2010	\$550	123	\$67,650	\$67,650	\$0.40	\$211,642	\$346,942	\$147,049	\$199,893	\$0	\$199,893
	\$550	123	\$67,650	\$67,650	\$0.40	\$211,642	\$346,942	\$155,097	\$191,845	\$0	\$191,845
Total			\$1,362,225	\$1,362,225		\$4,044,404	\$6,768,854	\$2,177,653	\$4,591,201	\$4,677,200	(\$86,195)

SOURCE: MIAMI BEACH PLANNING DEPARTMENT, 1985

B. ANGLED PARKING

The 1983 Plummer Traffic Circulation Study identified another potential mechanism for increasing available public parking - modifying existing on street parallel parking to create angle parking spaces. The Rediscover Miami Beach Committee also strongly endorsed this concept as a solution to residential parking problems in the Art Deco District.

Specifically, the Plummer study recommended angled parking for the following areas:

1. Miami Beach Drive west curb between 21st and 22nd Streets - gain 10 of spaces.
2. North side 40th Street between Chase Avenue and Pine Tree Drive - gain of 20 spaces.
3. 72nd Street from Byron to Dickens - gain of 25 spaces.
4. Alley between 71st Street and Normandy Drive - primarily angle - some parallel would be needed - from Rue Notre Dame to unnamed street.

In addition to the recommendations outlined in the Plummer Report, the Rediscover Miami Beach Committee recommends that angled parking in combination with one-way streets be instituted on Euclid and Pennsylvania Avenues, as well as the east-west Streets between Ocean Drive and Washington Avenue from 6th to 14th Streets. Although the implementation of RMB's suggestion would undoubtedly add more parking in the area, the widespread conversion to one-way traffic could have negative ramifications as is noted below.

This case study shows how a one block area of Jefferson Avenue from 9th to 10th Streets could be modified to provide additional on-street parking or on Drexel Avenue between South of 14th Street.

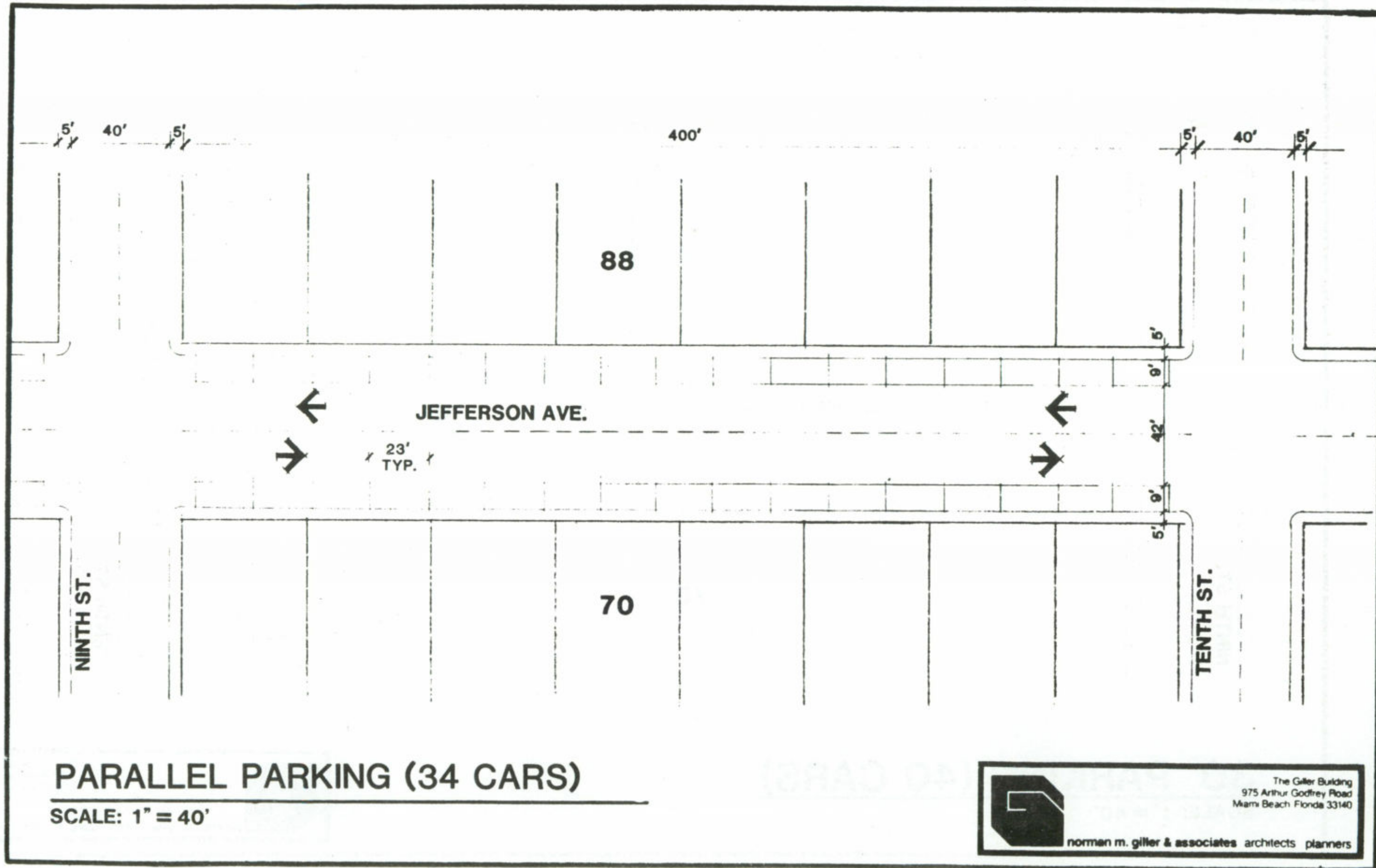
One block of parallel parking could provide a maximum of 34 spaces, whereas 30° angle parking could accommodate 40 spaces, resulting in an increase of 18%. Exhibit 12 shows the scenario with 45° parking allowing 58 spaces. This, however would require that Jefferson Avenue be converted to a southbound one way street with a 20-foot traffic lane. The final scenario, shown in Exhibit 13, provides for 90 degree parking, thus increasing the number of spaces to 86. The actual implementation of an angled parking plan should be approved by the Public Works and Planning Departments.

There are several major considerations in converting parallel spaces to angle spaces which will negate the widespread conversion of areas to angled parking. These are:

1. It would not be safe to have angled parking on heavily travelled streets, thus narrowing the traffic lanes. Also, a conversion to 45 degree parking which would, in this case, necessitate a one-way street, could perilously disrupt traffic patterns in the surrounding blocks.
2. There is a potential for negatively impacting the aesthetic quality of the street by creating a mass of parked cars. The four scenarios shown in this case study indicate maximum parking available without landscaping. A continuous row of parked cars without landscaping is certainly undesirable from an aesthetic point of view.
3. The cost of restriping and purchase of additional meters must also be considered. It may not be feasible to incur this expense simply to gain five to six additional parking spaces.

In conclusion, it must be clearly demonstrated that there is a serious deficiency in available parking to warrant the modification of existing parallel parking. Parking occupancy studies should be conducted prior to undertaking an effort of this nature, and it should not be considered on a widespread basis throughout the City but rather on a case by case basis.

Exhibit 10



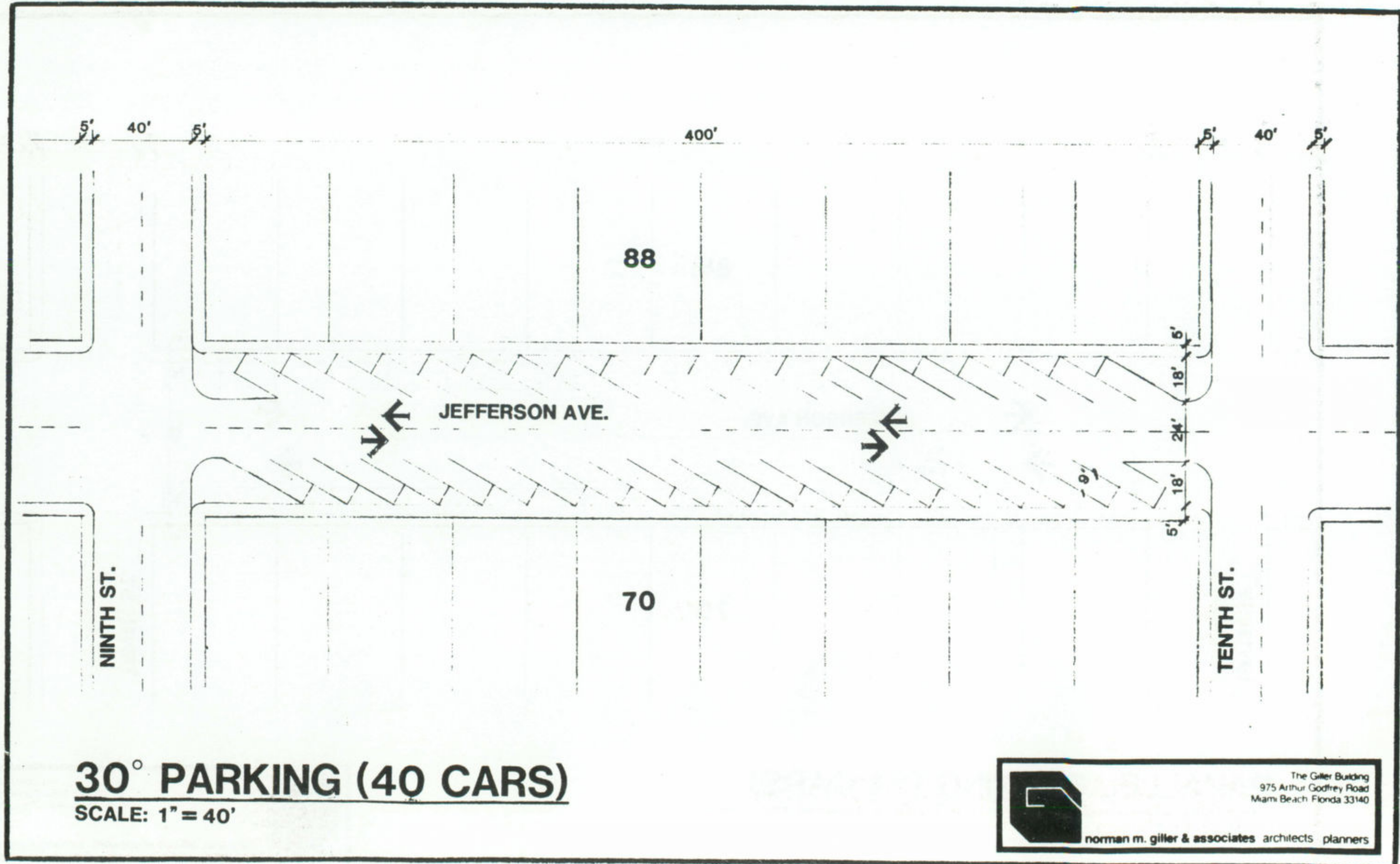
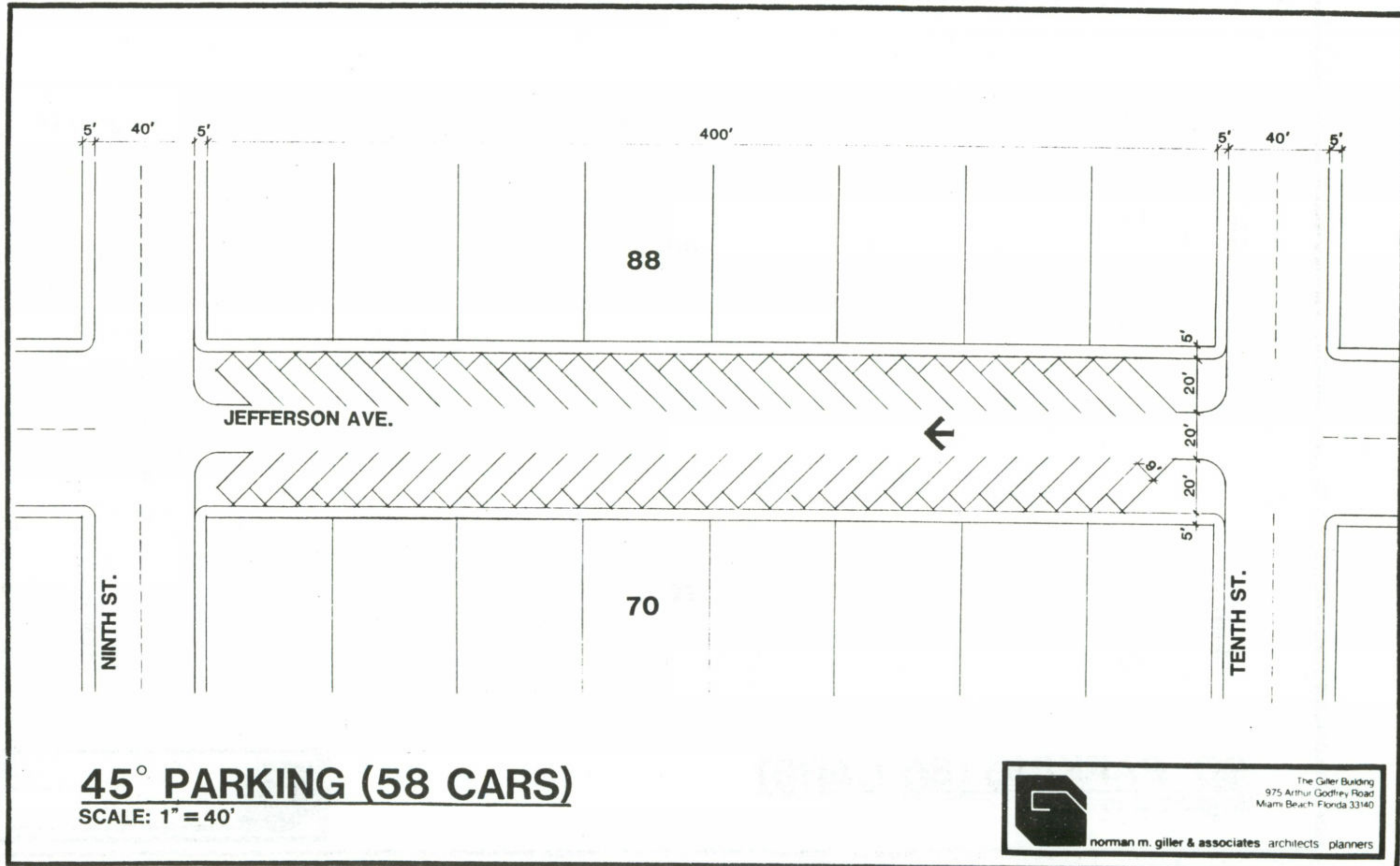
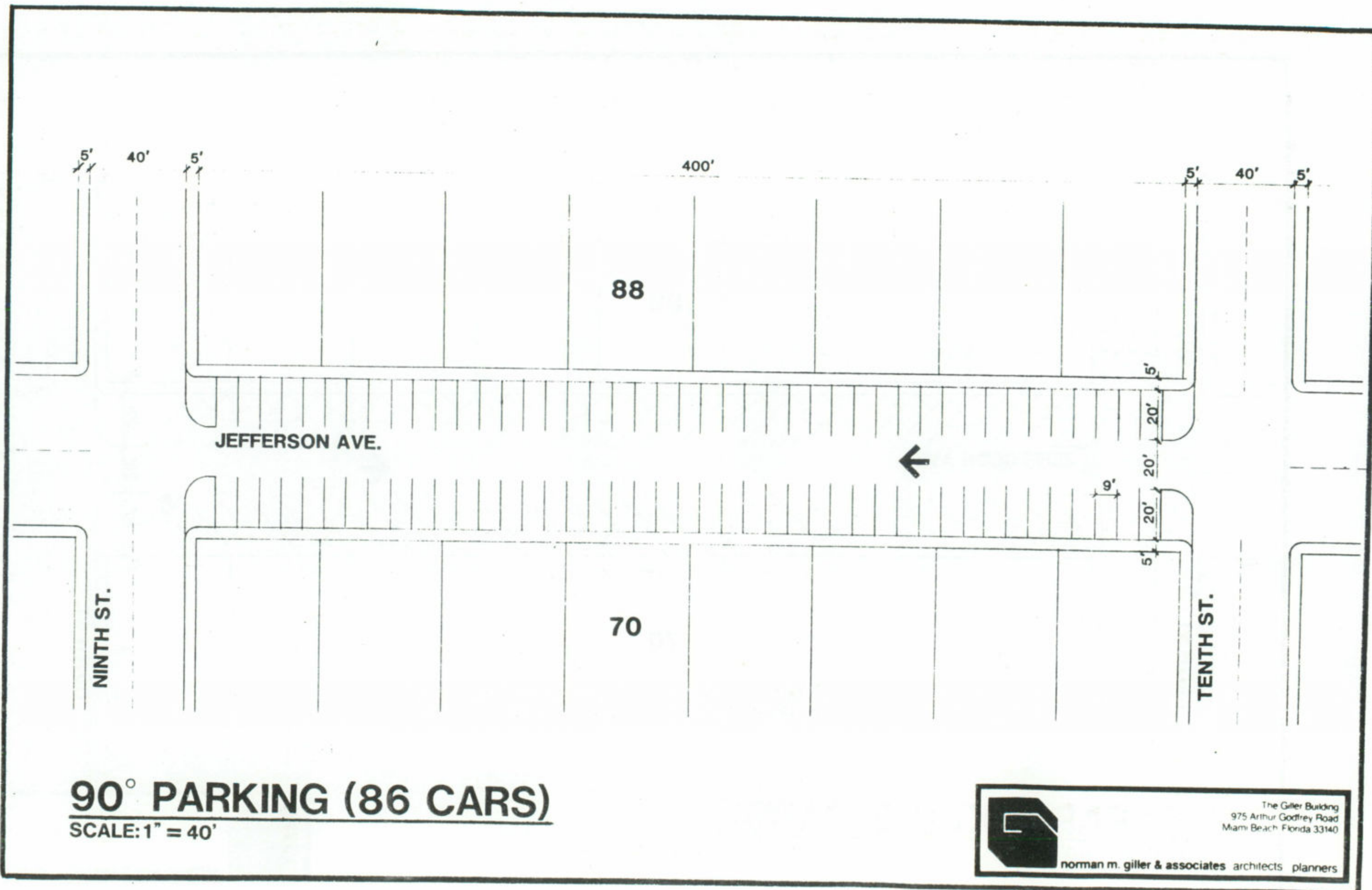



Exhibit 12





90° PARKING (86 CARS)
SCALE: 1" = 40'



The Giller Building
975 Arthur Godfrey Road
Miami Beach, Florida 33140
norman m. giller & associates architects planners

APPENDIX I

City of Miami Beach METERED PARKING STATISTICS (Revenue from Calendar 1985)

ZONE	RTE							RATE	POTENT	IAL(PID)	POTENTIAL	REPORTED	REPORTED	REPORTED	% UTIL
or								PER	INC /	DAY	INCOME/YEAR	INCOME(RDD)	PER DAY	PER DAY	% UTIL
LOT	ZONE	L/S	LOCATION	60	80	HOURS	RATE	(R)	TYPE	TYPE	356	FROM SHEET	356;304)	(RDD / #)	
									COINS	80	304				
1X	WA	S	WASH AVE-EAST (removed 2 meters)	240		2 HR	.20/60 MIN	0.20	05/10/25	480					
			(No Sundays or Holidays, Year = 304 days)	7		12 HR	.25/72 MIN	0.21	25	15					
				247						495	150,389	74,019	243	0.99	49%
2X	WA	S	WASH AVE-WEST	13		1 HR	.25/37.5 MIN	0.40	05/10/25	52					
			(No Sundays or Holidays, Year = 304 days)	195		2 HR	.25/75 MIN	0.20	05/10/25	390					
				12		12 HR	.25/72 MIN	0.21	25	25					
				220						467	142,029	61,889	204	0.93	44%
3X	LL	S	LINCOLN RD-OCEAN (need 84 new mechanisms)	56		5 HR	.20/60 MIN	0.20	05/10/25	112					
				28		2 HR	.20/60 MIN	0.20	05/10/25	56					
				84						168	51,072	33,704	95	1.13	56%
3A	STH	S	COLLINS AVE (need 9 new Mechanisms)	9		30 MIN	.10/30 MIN	0.20	05/10	18					
				9						18	6,408	1,460	4	0.46	23%
4B	LL	S	ALTON TO PURDY (was 17)	32		2 HR	.05/15 MIN	0.21	05/10/25	67					
				29		5 HR	(.10/30 MIN)	0.20	05/10/25						
				108		12 HR	(.25/75 MIN)	0.20	25						
				169				0.20		67	23,923	4,822	14	0.08	20%
4X	LL	S	LINCOLN RD-MERIDIAN (need 382 new mechanisms)	225		2 HR	.10/60 MIN	0.10	05/10/25	225					
				87		2 HR	.20/60 MIN	0.20	05/10/25	174					
				69		12 HR	.10/60 MIN	0.10	05/10/25	69					
				381						468	166,608	67,464	190	0.50	40%
6X	STH	S	COLLINS 20TH-24TH	122		12 HR	.25/72 MIN	0.21	25	256					
							(.10/15 MIN)	0.40							
				3		30 MIN	0.05/7.5 MIN	0.40	05/10	12					

ZONE or LOT	RTE or ZONE	L/S	LOCATION	TYPE 60	TYPE 80	HOURS	RATE	RATE (R)	POTENTIAL INC / TYPE COINS	POTENTIAL IAL (PID) DAY TYPE 80	POTENTIAL INCOME/YEAR PI X 356;304 356 304	REPORTED INCOME (RDD) PER YEAR FROM SHEET	REPORTED PER DAY (RDD / 356;304)	REPORTED PER DAY (RDD / #)	% UTIL RDD/PID
			(removed 36 meters)		105	2 HR	.05/15 MIN	0.20	05/10/25	210					
							(.10/30 MIN)	0.20							
					87	5 HR	.25/37.5 MIN	0.40	25	348					
			(was 256)		317					826	294,127	73,790	207	0.65	25%
7A	OD	S	COLLINS-EAST (removed 1 meter)		211	2 HR	.25/75 MIN	0.20	05/10/25	422					
							(.05/15 MIN)	0.20							
							(.10/30 MIN)	0.20							
					141	12 HR	.25/72 MIN	0.21	25	296					
			(was 365)		352					718	255,644	77,443	218	0.62	30%
7X	OD	S	OCEAN DR-BISCAYNE (installed 1 meter)		398	5 HR	.25/37.5 MIN	0.40	25	1,592					
					398					1,592	566,752	120,481	338	0.85	21%
8X	M 41S	S	PINETREE TO ALTON (removed 18 meters)		35	1 HR	.25/30 MIN	0.50	05/10/25	175					
					8	2 HR	.10/30 MIN	0.20	05/10/25	16					
					9	5 HR	.25/37.5 MIN	0.40	25	36					
					110	2 HR	.20/60 MIN	0.20	05/10/25	220					
					3	30 MIN	.20/60 MIN	0.20	05/10/25	6					
			(No Sundays or Holidays, Year = 304 days)		206	12 HR	.25/72 MIN	0.21	25	433					
					371					886	315,274	81,203	267	0.72	30%
9X	N	S	COLLINS 65TH-75TH		106	12 HR	.25/72 MIN	0.21	25	223					
					257	2 HR	.05/7.5 MIN	0.40	05/10/25	1,028					
							(.10/15 MIN)	0.40	05/10/25	0					
							(.25/37.5 MI	0.40	05/10/25	0					
					100	12 HR	.25/36 MIN	0.42	25	417					
					142	5 HR	.05/7.5 MIN	0.40	05/10/25	568					
							.10/15 MIN	0.40	05/10/25	0					
							.25/37.5 MIN	0.40	05/10/25	0					

City of Miami Beach METERED PARKING STATISTICS (Revenue from Calendar 1985)

ZONE	RTE						RATE	POTENT	IAL(PID)	POTENTIAL	REPORTED	REPORTED	REPORTED	% UTIL
or							PER	INC /	DAY	INCOME/YEAR	INCOME(RDD)	PER DAY	PER DAY	
LOT	ZONE	L/S	LOCATION	TYPE	TYPE	HOURS	(R)	TYPE	TYPE	PI X 356;304	FROM SHEET	(RDD /	PER METER)	
				60	80			COINS	80	304		(RDD / #)		
					1	30 MIN	.10/30 MIN	0.20	05/10/25	2				
					606					2,237	796,467	85,451	240	0.40 11%
15A	STH	S	COLLINS - 18TH		111	12 HR	.25/72 MIN	0.21	25	233				
	WA				111					233	82,984	15,311	43	0.39 18%
15X	STH	S	16, 17 & 18 STREETS (Rate not consistent)		146	12 HR	.50/60 MIN	0.50	25	730				
					146					730	259,880	28,969	81	ERR 11%
16A	M	S	35TH TO 43RD STREETS		109	12 HR	.25/37.5 MIN	0.40	25	436				
					109					436	155,216	23,727	67	0.61 15%
16B	M	S	COLLINS-WEST		213	12 HR	.25/72 MIN	0.21	25	447				
					213					447	159,239	29,156	82	0.38 18%
16C	M	S	COLLINS-WEST		213	12 HR	.25/72 MIN	0.21	25	447				
					213					447	159,239	18,813	53	0.25 12%
16X	STH	S	COLLINS-EAST		96	12 HR	.25/36 MIN	0.20	25	192				
	M				6	2 HR	.25/37.5 MIN	0.40	05/10/25	24				
							(.10/15 MIN)	0.40	05/10/25					
							(.05/7.5 MIN)	0.40	05/10/25					
					102					216	76,896	24,692	69	0.68 32%
19A	M	S	COLLINS & 46TH		15	12 HR	.25/36 MIN	0.20	25	30				
					15					30	10,680	5,740	16	1.07 54%

City of Miami Beach METERED PARKING STATISTICS (Revenue from Calendar 1985)

ZONE	RTE							RATE	POTENTIAL	IAL(PID)	POTENTIAL	REPORTED	REPORTED	REPORTED	% UTIL
or								PER	INC /	DAY	INCOME/YEAR	INCOME(RDD)	PER DAY	PER DAY	RDD/PID
LOT	ZONE	L/S	LOCATION	60	80	HOURS	RATE	(R)	TYPE	TYPE	356	FROM SHEET	356;304)	(RDD / #)	
									COINS	80	304				
24X	N	S	NORMANDY-BAY DR (removed 1 meter)	86		2 HR	(.05/7.5 MIN)	0.40	05/10/25	344					
				-----			(.10/15 MIN)	0.40	05/10/25	-----					
				86			.25/37.5 MIN	0.40		344	122,464	15,487	44	ERR	13%
26X	N	S	COLLINS 75TH TO 85TH	205		8 HR	1.00/60 MIN	1.00	25	2,050					
				109		8 HR	.50/60 MIN	0.50	25	545					
				-----						-----					
				314						2,595	923,820	63,565	179	0.57	7%
1A	OD	L	PIER PARK	92		12 HR	.25/36 MIN	0.42	25	383					
				-----						-----					
				92						383	136,467	22,682	64	0.69	17%
2B	WA	L	MERIDIAN AVE (removed 6 meters)	13		12 HR	.25/72 MIN	0.21	25	27					
				-----						-----					
				13						27	9,719	326	1	0.07	3%
2G	LL	L	LINCOLN LN (currently removing meters)	898		5 HR	.25/30 MIN	0.25	10/25	2,245					
				-----			(.10/10 MIN)	0.10		-----					
				898						2,245	799,220	40,832	115	0.13	5%
4A	LL	L	BAY ROAD (was 37)												
4C	LL	L	WEST AVE- 17TH ST (need 71 mechanisms)	24		12 HR	.20/60 MIN	0.20	05/10/25	48					
				5		30 MIN	.10/60 MIN	0.10	05/10/25	5					
				31		1 HR	.20/60 MIN	0.20	05/10/25	62					
				11		2 HR	.10/60 MIN	0.10	05/10/25	11					
				-----						-----					
				71						126	44,856	10,695	30	0.42	24%
4D	LL	L	WEST AVE- 16TH ST (need 32 new mechanisms)	32		12 HR	.25/72 MIN	0.21	25	67					
				-----						-----					

City of Miami Beach METERED PARKING STATISTICS (Revenue from Calendar 1985)

ZONE	RTE						RATE	POTENTIAL (PID)	POTENTIAL	REPORTED	REPORTED	REPORTED	% UTIL
or													
LOT	ZONE	L/S	LOCATION	TYPE 60	TYPE 80	HOURS	RATE	(R) TYPE	PI X 356;304	INCOME(RDD)	PER DAY (RDD /	PER METER (RDD / #)	
								COINS 80	356 304	FROM SHEET	356;304)		
					32				67	23,923	3,964	11	0.35 17%
5A	LL	L	LINCOLN LN- LOWER	526		5 HR	.10/15 MIN	0.40 10/25	2,104				
				-----			(.25/37.5 MI	0.40	-----				
				526					2,104	749,024	78,411	220	0.42 10%
5X	LL	L	LINCOLN LN- UPPER										
			(Meters removed)	-----					-----				
			(was 633)										
5C	LL	L	MERIDIAN & PENN	142		12 HR	.25/72 MIN	0.21 25	298				
				-----					-----				
				142					298	106,159	28,501	80	0.56 27%
5E		L	CONVENTION HALL W										
	PRE-		(Meters removed)										
	FER		(was 346)										
5G		L	MERIDIAN AVE 19 SO										
	PRE-		(Meters removed)										
	FER		(was 315)										
5H	LL	L	MERIDIAN AVE 19 NO	42		12HR	.25/72 MIN	0.21 25	88				
				-----					-----				
				42					88	31,399	7,630	21	0.51 24%
5F	LL	L	MERIDIAN AVE 18 SO	124		12 HR	.25/72 MIN	0.21 25	260				
				-----					-----				
				124					260	92,702	11,999	34	0.27 13%
6A	STH	L	PARK AVE & 22ND	83		12 HR	.25/72 MIN	0.21 25	174				
				-----					-----				
				83					174	62,051	7,016	20	0.24 11%
7B	?	L	MERIDIAN- 1ST & 2ND	8		12 HR	.10/60 MIN	0.10	8 05/10/25				

City of Miami Beach METERED PARKING STATISTICS (Revenue from Calendar 1985)

ZONE	or LOT	RTE	L/S	LOCATION	TYPE 60	TYPE 80	HOURS	RATE	RATE (R)	POTENTIAL INC / TYPE	IAL(PID) DAY	POTENTIAL INCOME/YEAR PI X 356;304	REPORTED INCOME(RDD) PER YEAR	REPORTED PER DAY (RDD / 356;304)	REPORTED PER DAY (RDD / #)	% UTIL RDD/PID
				(Police Station)	8					8	***	2,848	155	0	0.05	5%
6B	STH	L		COLLINS- 21ST & 22ND	169		12 HR	.50/60 MIN	0.50	25	845	300,820	49,538	139	0.82	16%
					169						845					
7C	OD	L		COLLINS AND 6TH	32		12 HR	.25/72 MIN	0.21	25	67	23,923	3,361	9	0.30	14%
					32						67					
7D	OD	L		OCEAN DR 10TH & 11TH	24		12 HR	.25/72 MIN	0.21	25	50	17,942	3,284	9	0.38	18%
					24						50					
8A	M 41S	L		42ND ST PARKING (Attendant Parking) (was 397 meters)												
8B	M 41S	L		42ND ST-ROYAL PALM	93		12 HR	.25/72 MIN	0.21	25	195	145,711	31,921	90	0.45	22%
					107		2 HR	.20/60 MIN	0.20	05/10/25	214					
					200						409					
8C	M 41S	L		CHASE - 40TH & 47TH	94		12 HR	.25/72 MIN	0.21	25	197	70,274	8,338	23	0.25	12%
					94						197					
8D	M 41S	L		PINETREE & 47TH	18		12 HR	.25/72 MIN	0.21	25	38	13,457	1,285	4	0.20	10%
					18						38					
8E	M 41S	L		ALTON & 41ST	43		12 HR	.25/72 MIN	0.21	25	90					
					43						90					

City of Miami Beach METERED PARKING STATISTICS (Revenue from Calendar 1985)

ZONE or LOT	RTE ZONE	L/S	LOCATION	TYPE 60	TYPE 80	HOURS	RATE	RATE PER HOUR (R)	POTENTIAL INC / DAY TYPE COINS	IAL(PID) DAY TYPE 80	POTENTIAL INCOME/YEAR PI X 356;304 356 304	REPORTED INCOME(RDD) PER YEAR FROM SHEET	REPORTED PER DAY (RDD / 356;304)	REPORTED PER DAY (RDD / #)	% UTIL RDD/PID PER METER
					43					90	32,147	6,354	18	0.42	20%
8F	41S M	L	JEFFERSON & 42ND		33	12 HR	.25/72 MIN	0.21	25	69					
					33					69	24,671	2,206	6	0.19	9%
9A	N	L	HARDING & 71ST		51	12 HR	.25/72 MIN	0.21	25	107					
					51					107	38,128	13,225	37	0.73	35%
9B	N	L	COLLINS-72ND & 73RD		322	12 HR	.25/72 MIN	0.21	25	676					
					322					676	240,727	23,373	66	0.20	10%
9C	N	L	CARLYLE & 71ST		16	12 HR	.25/72 MIN	0.21	25	34					
					16					34	11,962	1,066	3	0.19	9%
9D	N	L	BONITA DR & 71ST		33	12 HR	.25/72 MIN	0.21	25	69					
					33					69	24,671	3,880	11	0.33	16%
9E	N	L	HARDING & 71		35	12 HR	.25/72 MIN	0.21	25	74					
					35					74	26,166	11,538	32	0.93	44%
9F	N	L	COLLINS & 76TH (need 51 new mechanisms)		51	12 HR	.25/72 MIN	0.21	25	107					
					51					107	38,128	2,457	7	0.14	6%
10A	LL	L	NO LINCOLN LANE		23	2 HR	.20/60 MIN	0.20	05/10/25	46					
					67	12 HR	.25/72 MIN	0.21	25	141					
					90					187	66,465	3,929	11	ERR	6%

City of Miami Beach METERED PARKING STATISTICS (Revenue from Calendar 1985)

ZONE or LOT	RTE ZONE	L/S	LOCATION	TYPE		HOURS	RATE	RATE	POTENT	IAL (PID)	POTENTIAL	REPORTED	REPORTED	REPORTED	% UTIL
				60	80			PER HOUR	INC / DAY	DAY	INCOME/YEAR	INCOME (RDD)	PER DAY	PER DAY	RDD/PID
							(R)	TYPE	TYPE	PI X 356;304	FROM SHEET	(RDD / 356;304)	(RDD / #)		
								COINS	80	356					
10B	LL	L	LINCOLN- MICH & JEFF	30	2 HR	.20/60 MIN	0.20	05/10/25	60						
				126	12 HR	.25/72 MIN	0.21	25	263						
				156					323	114,810	15,159	43	0.27	13%	
10C	LL	L	LINCOLN-MER & JEFF (need 147 new mechanism)	147	5 HR	(.25/37.5 MI	0.40	25	588						
				147					588	209,328	32,980	93	0.63	16%	
10D	LL	L	SO LINCOLN-JEFF & MICH	64	12 HR	.25/72 MIN	0.21	25	134						
				64					134	47,846	7,794	22	0.34	16%	
10E	LL	L	SO LINCOLN-MER & JEFF	21	12 HR	.25/72 MIN	0.21	25	44						
				21					44	15,700	1,981	6	0.26	13%	
10F	LL	L	SO LINCOLN-EUCLID & MER	42	12 HR	.25/72 MIN	0.21	25	88						
				42					88	31,399	4,998	14	0.33	16%	
10G	LL	L	SO LINCOLN-MICH & LENOX	20	12 HR	.25/72 MIN	0.21	25	42						
				20					42	14,952	2,540	7	0.36	17%	
10X	LL	L	NO LINCOLN-MICH & LENOX	19	2 HR	.20/60 MIN	0.20	05/10/25	38						
				93	12 HR	.25/72 MIN	0.21	25	194						
				112					232	82,503	10,370	29	0.26	13%	
11X	WA	L	COLLINS- 11TH STREET	29	12 HR	.25/72 MIN	0.21	25	61						
				29					61	21,680	2,151	6	0.21	10%	
12X	WA	L	WASH AVE & 9TH	35	12 HR	.25/72 MIN	0.21	25	74						

City of Miami Beach METERED PARKING STATISTICS (Revenue from Calendar 1985)

ZONE	RTE							RATE	POTENT	IAL(PID)	POTENTIAL	REPORTED	REPORTED	REPORTED	% UTIL
or									INC /	DAY	INCOME/YEAR	INCOME(RDD)	PER DAY	PER DAY	
LOT	ZONE	L/S	LOCATION	TYPE	TYPE	HOURS	RATE	(R)	TYPE	TYPE	PI X 356;304	FROM SHEET	(RDD /	PER METER	
				60	80				COINS	80	356	304	(RDD / #)		
					35					74	26,166	4,261	12	0.34	16%
13X	WA	L	WASH AVE & 10TH		33	12 HR	.25/72 MIN	0.21	25	69					
					33					69	24,671	4,044	11	0.34	16%
14A	STH	L	WASH AVE & 16TH		72	2 HR	.10/15 MIN	0.40	10/25	288					
	WA						(.25/37.5 MI	0.40							
					72					288	102,528	49,277	138	1.92	48%
14X	STH	L	COLLINS & 16TH		134	12 HR	.25/72 MIN	0.21	25	281					
	WA				134					281	100,178	27,846	78	0.58	28%
15B	LL	L	JACKIE GLEASON DR		104	5 HR	.05/15 MIN	0.20	05/10/25	208					
							(.10/30 MIN)	0.20	05/10/25						
							(.25/75 MIN)	0.20	05/10/25						
					104					208	74,048	8,180	23	0.22	11%
16D	M	L	COLLINS & 34TH		69	12 HR	.25/36 MIN	0.42	25	288					
					69					288	102,350	6,049	17	0.25	6%
16E	M	L	COLLINS - 35TH & 36TH		78	12 HR	.25/36 MIN	0.42	25	325					
					78					325	115,700	6,110	17	0.22	5%
17A	OD	L	COLLINS- 13TH NE		81	12 HR	.25/72 MIN	0.21	25	170					
					81					170	60,556	4,973	14	0.17	8%
17X	WA	L	COLLINS & 13TH SW		58	12 HR	.25/72 MIN	0.21	25	122					

ZONE or LOT	RTE ZONE	L/S	LOCATION	TYPE 60	TYPE 80	HOURS	RATE	RATE (R)	POTENTIAL INC / TYPE COINS	IAL(PID) DAY TYPE 80	POTENTIAL INCOME/YEAR PI X 356;304 356 304	REPORTED INCOME (RDD) PER YEAR FROM SHEET	REPORTED PER DAY (RDD / 356;304)	REPORTED PER DAY (RDD / #)	% UTIL RDD/PID
					58					122	43,361	6,800	19	0.33	16%
18A	N	L	COLLINS & 64TH		68	12 HR	.25/72 MIN	0.21	25	143					
					68					143	50,837	9,018	25	0.37	18%
18X	N	L	INDIAN CREEK & 65TH	60		5 HR	.10/20 MIN	0.30	180	05/10/25					
				106		12 HR	.10/20 MIN	0.30	318	10/25					
					166					498	177,288	1,601	4	0.03	1%
19B	M	L	COLLINS & 53RD (Rate not consistent)		168	12 HR	.50/60 MIN	0.50	25	840					
					168					840	299,040	10,183	29	ERR	3%
19X	M	L	COLLINS & 46TH		54	5 HR	.10/15 MIN	0.40	10/25	216					
					411	12 HR	.25/36 MIN	0.42	25	1,713					
					465					1,929	686,546	160,927	452	0.97	23%
20X	STH	L	COLLINS & 27TH		129	12 HR	.25/72 MIN	0.21	25	271					
					129					271	96,440	10,962	31	ERR	11%
22X	N	L	CARLYLE & 72ND		51	12 HR	.25/72 MIN	0.21	25	107					
					51					107	38,128	517	1	0.03	1%
23X	N	L	ABBOT & 83RD		12	12 HR	.25/72 MIN	0.21	25	25					
					12					25	8,971	190	1	0.04	2%
24A	N	L	NORMDR & VERSAILLES		30	12 HR	.25/72 MIN	0.21	25	63					

City of Miami Beach METERED PARKING STATISTICS (Revenue from Calendar 1985)

ZONE	RTE						RATE	POTENTIAL	IAL(PID)	POTENTIAL	REPORTED	REPORTED	REPORTED	% UTIL	
or								PER	INC /	DAY	INCOME/YEAR	INCOME(RDD)	PER DAY	PER DAY	RDD/PID
LOT	ZONE	L/S	LOCATION	TYPE	TYPE	HOURS	RATE	PI X 356;304			356	356;304	(RDD / #)		
				60	80			PI X 356;304			304	304			
								PI X 356;304			304	304			
					30					63	22,428	1,040	3	0.10	5%
24B	N	L	NORM. ISLE-VENDOME		22	12 HR	.25/72 MIN	0.21	25	46					
					22					46	16,447	1,685	5	0.22	10%
24C	N	L	NORM. ISLE-BAY RD		34	12 HR	.25/72 MIN	0.21	25	71					
					34					71	25,418	1,905	5	0.16	7%
25X	N	L	BONITA DR & 71ST		18	12 HR	.25/72 MIN	0.21	25	38					
					18					38	13,457	2,273	6	0.35	17%
26A	N	L	COLLINS -80 TO 81		64	8 HR	.50/60 MIN	0.50	25	320					
					64					320	113,920	14,548	41	0.64	13%
26B	N	L	COLLINS -84 TO 85		69	8 HR	.50/60 MIN	0.50	25	345					
					69					345	122,820	12,014	34	0.49	10%
4E	LL	L	PURDY- 18ST		49	12 HR	.25/72 MIN	0.21	25	103					
			(Removed meters)		49					103	36,632	12,014	34	0.69	33%
			(was 50)												
					174	10,131				59,705	10,748,818	1,719,537	4,934		

NOTE (from Metered Parking Dept.):
 Need 191 New Mechanisms;
 Need 191 Model 80 Complete Housings less Mechanisms;

ZONE	RTE							RATE	POTENTIAL	IAL(PID)	POTENTIAL	REPORTED	REPORTED	REPORTED	% UTIL
or								PER	INC /	DAY	INCOME/YEAR	INCOME(RDD)	PER DAY	PER DAY	RDD/PID
LOT	ZONE	L/S	LOCATION	TYPE	TYPE	HOURS	RATE	PI X	COINS	80	356;304	PER YEAR	(RDD /	PER METER	
				60	80		(R)				356	FROM SHEET	356;304)	(RDD / #)	
=====															

Need 250 Complete Meters to cover installation of new lots, accidents, thefts, etc.

NOTE: SLIGHT VARIATIONS IN DOLLAR FIGURES ARE DUE TO ROUNDING.

ADDITIONAL NOTES:

1. The number of days per year of enforcement have been, for calculation purposes, entered as 356 (365 less 9 holidays) or as 304 (365 less 9 holidays and 52 weekend days) depending on the zone/lot enforcement.
2. Reported Income amounts were taken from the monthly Coin Room Income Summaries for calendar 1985 -- these amounts are gross revenues and have not been adjusted for sales tax.
3. Potential Income figures are based upon 10 hour meter enforcement days and assume full occupancy during those 10 hours.
4. *** Model 60 meters still remain. Coin combination shows above to right.

APPENDIX II Shared Parking Ordinances

Montgomery County planners found that the shared use of the local parking district's lots or garages would benefit both developers and the county. Under the proposed ordinance, developers could save considerable expense building and maintaining parking facilities, and the county could obtain additional revenues for its facilities to help defray the public operating costs. The highest demand for the district's parking spaces occurred during the weekday daytime hours because of the predominance of offices and other daytime uses.

County planners, therefore, have proposed that new parking requirements should permit shared facilities provided that a few conditions, considered "prerequisites," exist; the prerequisites are as follows:

- The county parking facility should be reasonably close to the land use to ensure that shared parking will occur. The county would require that a major entrance of the land use be within 500 feet of the county parking facility.
- The developer/owner should reimburse the county parking district for use of its facilities. It is recommended that an annual fee be paid in proportion to the spaces that are to be shared.

The values used in the proposed county provisions are percentages of the required parking for the land use proposing to share a parking facility. According to county planners, the percentages establish the required amount of parking—an amount equivalent to what the land use would need during the daytime on weekdays. For example, restaurants that can share the county's parking facilities may reduce their on-site parking by 50 per cent since peak parking occurs in the evening when the county facilities can be used. Hotels, on the other hand, may only reduce their required parking by 25 per cent, since most of their parking demand occurs during daytime hours on weekdays.

Proposed Provisions

Certain land uses may share parking with the parking lot district facilities during periods when excess public parking is normally available. The eligible land uses may use the following reduction schedule to calculate their parking requirements.

Land Use	Per cent of Parking Required
Retail.....	60 per cent
Hotel.....	75 per cent
Restaurant.....	50 per cent
Entertainment/Recreational.....	40 per cent
Multifamily.....	60 per cent

**CALCULATING PARKING FOR MIXED-USE DEVELOPMENTS
(MONTGOMERY COUNTY, MARYLAND)**

1. Determine the minimum amount of parking required for each land use as though it were a separate use;
2. Multiply each amount by the corresponding percentage for each of the five time periods;
3. Calculate the column total for each time period;
4. The column total with the highest value is the parking space requirement.

	WEEKDAY		WEEKEND		NIGHTTIME
	Daytime (9 a.m. - 4 p.m.)	Evening (6 p.m. - midnight)	Daytime (9 a.m. - 4 p.m.)	Evening (6 p.m. - midnight)	(midnight- 6 a.m.)
Office/Industrial	100%	10%	10%	5%	5%
Retail	60	90	100	70	5
Hotel	75	100	75	100	75
Restaurant	50	100	100	100	10
Entertainment/Recreational	40	100	80	100	10

Source: "Parking Policies Study: Draft Proposals for Revising the Zoning Ordinance," Transportation Planning Division, Montgomery County Planning Department, July 1983.

Example: Mixed-Use Development—Office, Retail, and Entertainment. The assumption is that the individual land uses would have the following parking space requirements:

Office	300 spaces
Retail.....	280 spaces
Entertainment	100 spaces
Total	680 spaces

	WEEKDAY		WEEKEND		NIGHTTIME
	Daytime (9 a.m. - 4 p.m.)	Evening (6 p.m. - midnight)	Daytime (9 a.m. - 4 p.m.)	Evening (6 p.m. - midnight)	(midnight 6 a.m.)
Office	300	30	30	15	15
Retail	168	252	280	196	14
Hotel	-	-	-	-	-
Restaurant	-	-	-	-	-
Entertainment/Recreational	40	100	80	100	10
TOTAL	508	382	390	311	39

Solution to example problem: shared parking requirement, 508 spaces; (shared parking allows a 25 percent savings.)

Source: APA.

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