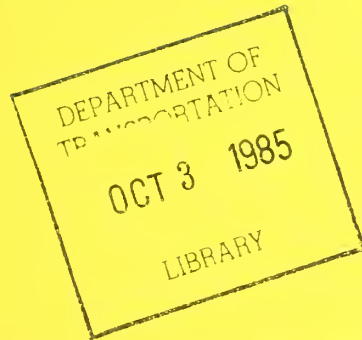


HE
203
.A56
no.
85-24

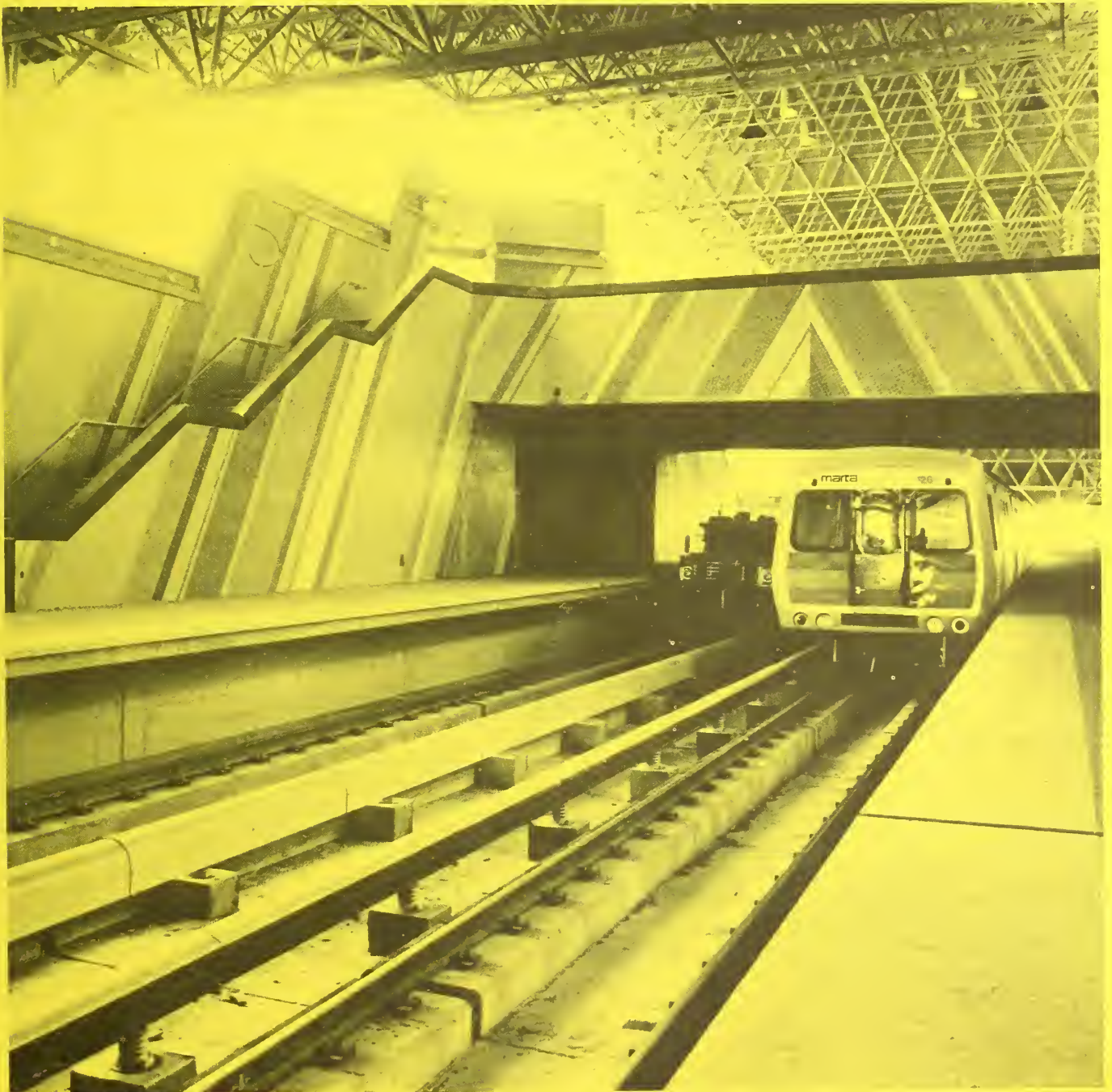
Department of
Transportation



Transit-Linked Development

A Case Study of Atlanta's MARTA System

January 1985



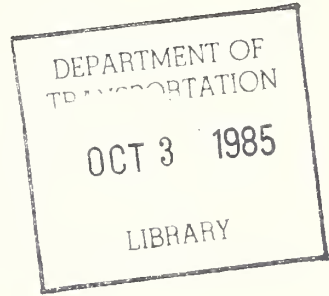
The aerial photographs used in this document were provided by Dillon-Reynolds Aerial Photography, Inc. and are copyrighted material. They are reproduced in this document with the authorization of their firm. Any inquiries about further use or reproduction of these materials should be directed to the copyright holder.

HE
203
ASB
100.
85-24

Transit-Linked Development

A Case Study of Atlanta's MARTA System

Final Report
January 1985



Prepared by
E. Davis, I. Brown, and R. Holmes
Graduate School of Business
Atlanta University
223 Chestnut Street, SW
Atlanta, Georgia 30314

Prepared for
University Research Program
Research and Special Programs Administration
U.S. Department of Transportation
Washington, D.C. 20590

Distributed in Cooperation with
Technology Sharing Program
Office of the Secretary of Transportation

DOT-I-85-24

ACKNOWLEDGEMENTS

The number of people who have participated in this report are too numerous to name individually. We would like to thank all those transit systems which allowed us to interrupt their busy schedules during the data collection and follow-up stages of the project. The four research assistants who collected and analyzed data, read the several drafts and generally provided assistance in putting together the report deserve a great deal of credit.

The Atlanta Journal Constitution was gracious in providing some of the graphics used in the report. Typing was ably handled by Ms. Dorothy Wright and Mrs. Linda Crook.

TABLE OF CONTENTS

	PAGE
CHAPTER I	
I. Introduction	1
II. Metropolitan Atlanta Rapid Transit System	2
III. Land-Use Planning in Atlanta	4
IV. Objectives of the Study	4
V. Methodology	6
VI. Review of Pertinent Literature	6
VII. Joint Development	7
CHAPTER II	
I. Introduction	10
II. Joint Development Experiences	10
Toronto	10
San Francisco	11
Washington	12
San Diego	13
Miami	14
Baltimore	15
Buffalo	16
Portland	17
CHAPTER III	
I. Introduction	19
II. Development Tools	20
CHAPTER IV	
I. Introduction	25
II. Atlanta Development Trends	29
CHAPTER V	
I. Introduction	35
II. Category I	36
Five Points	36
A. Underground	37
B. Fairlie - Popular	40
C. Broad Street Mall	40

	D. Government Walk	41
	Peachtree Center	41
III.	Category II	43
	A. Peachtree Walk Project	49
	B. Peachtree Summit	49
	C. Peachtree Promenade	49
	D. Renaissance Park	50
	E. Southern Bell	50
	F. Other Developments	51
IV.	Category III	52
	Ashby	52
	University West	57
	West End	58
V.	Category IV	60
	Decatur	60
	1978 Candler Block Hotel Plan	64
	The Subway Mall	64
	1979 Sycamore Block Plan	65
	1980 Decatur Commerce Association Plan	65
	1983 Plan	66
	Lenox Station	66
	Standard Club	71
	Resurgens Plaza	74

CHAPTER VI

I.	Introduction	81
II.	Summary and Recommendations	81
	Public Acquisition of Land	81
	Develop a True Partnership	82
	Zoning	82
	Direct Station Access	83
	Route Selection and Station Location	83

LIST OF FIGURES

		PAGE
Figure 1	System Map	3
Figure 2	Growth Managment Tools	21
Figure 3	Summary of Usage	22
Figure 4	Metro Atlanta Construction Contracts	25
Figure 5	Municipalities in the Atlanta Region	26
Figure 6	MARTA Service Area	27
Figure 7	Atlanta Office - Leasing Pattern	28
Figure 8	Increase in Employment by Geographic Sector	29
Figure 9	Development Around Perimeter Center	30
Figure 10	Gwinnett Place Mall	32
Figure 11	Major Downtwon Projects	33
Figure 12	Peachtree Center and Underground Atlanta Projects	43
Figure 13	1967 Aerial View of Downtown Atlanta	44
Figure 14	1975 Aerial View of Downtown Atlanta	45
Figure 15	1983 Aerial View of Downtown Atlanta	46
Figure 16	1967 Aerial View of Midtown	53
Figure 17	1975 Aerial View of Midtown	54
Figure 18	1975 Aerial View of Midtown	55
Figure 19	1983 Aerial View of Midtown	56
Figure 20	1967 Aerial View of West End	61
Figure 21	1975 Aerial View of West End	62
Figure 22	1983 Aerial View of West End	63
Figure 23	1970 Aerial View of Decatur	67
Figure 24	1975 Aerial View of Decatur	68
Figure 25	1983 Aerial View of Decatur	69

Figure 26	Housing Developments Near Lenox Square	70
Figure 27	Major Commercial Buildings in Lenox Area	73
Figure 28	1967 Aerial Photo of Lenox	77
Figure 29	1975 Aerial Photo of Lenox	78,79
Figure 30	1983 Aerial Photo of Lenox	80

EXECUTIVE SUMMARY

The linkage between transportation and land-use development has been recognized for decades, yet there are apparently few successful efforts to fully integrate transportation and urban development/redevelopment. This report provides additional evidence to support the hypothesis that linkages do exist between land development and transportation. However, that development is not automatic, but rather is fostered through supportive zoning, special incentives and strong markets. This case study of transit-linked development in Atlanta can serve to guide joint development in the United States newest rail cities such as Baltimore, Buffalo and Miami.

LAND USE PLANNING IN ATLANTA

Atlanta has been a pioneer in comprehensive city planning. Its Comprehensive Development Plans, Urban Framework Plan and Transit Station Area Studies (TSADS) are examples of the importance that MARTA rapid rail stations play in land-use planning. Creation of Special Public Interest Districts and Planned Development Districts are policies in Atlanta's latest zoning ordinance designed to promote growth and mixed-use development in station areas. The TSADS are of particular relevance because they provide a blue-print to guide the development in MARTA station areas, as the system matures.

JOINT DEVELOPMENT

The decade of the seventies saw a 30 percent increase in downtown office construction in major United States cities. This increase required major infrastructure improvements including major transportation improvements. Joint Development (a public/private partnership) has become an important element in implementing these transportation improvements. Several federal assistance programs (e.g. Urban Mass Transportation Act of 1964) have contributed to the interest in joint development, now commonly referred to as a public-private coventure. Among the mechanisms utilized to stimulate coventure are tax increment financing, special benefits assessments, dedicated property taxes on station areas and zoning controls designed to shift some of the financial burden for transit from the public to the private sector. Those growth management strategies that have proven to be most successful and therefore gained the widest acceptance are (1) development agreements (2) early developer involvement in planning (3) leasing and/or selling air rights (4) public underwriting of initial feasibility studies and (5) land banking. Although land banking offers the transit agency an opportunity to assemble desirable tracts of land prior to station construction, usually at favorable prices, most local jurisdic-

tions have legislation that prohibits the excess taking of land.

Toronto has been identified as the model city for transportation linked urban design. During the sixties, construction of major urban complexes and high rise developments clustered near transit stations. Successful joint development resulted from a recognition by the Toronto Transit Commission of the importance of the private sector in transportation planning and construction.

San Francisco's Bay Area Rapid Transit (BART) System, the United States reentry into major rail construction, is the first test of the ability to generate development around transit stations in this country. Although limited joint development success has been experienced in San Francisco, more recent evidence from Washington and Baltimore have shown greater impact. Even with these successes, particularly in Washington, researchers have been unable to attribute a cause-effect relationship between a transit station and subsequent development.

TRANSIT-LINKED DEVELOPMENT IN ATLANTA

Transit-linked development in Atlanta parallels national trends with high intensity mixed-use development clustered around stations located in strong markets. Although there are few instances of actual joint development (public/private partnerships), the value capture concept whereby the public sector gets a return on the increased land value resulting from its public investment is successfully being implemented. In particular, nodes on the North line including North Avenue, Midtown, Civic Center, Arts Center and Lenox are experiencing substantial developer interest. Land banking and construction of housing and office space follow the transit line and are clustered about the North Line rail stations.

Notable developments (or proposed developments) in transit station areas include the Rouse Company's redevelopment plans for Underground Atlanta. Called the "Heart of Atlanta," this \$120 million project is designed to be the major entertainment complex in downtown needed to support the convention industry. Located adjacent to the Five Points station, the project expects to gross \$70 million during its first year of operation in 1987. With expectations of attracting 11.5 million visitors, planners see a multiplier effect spilling over into the Garnett Street and Georgia State station areas with new intown housing construction. Expansion of John Portman's Peachtree Center, the addition of several major luxury hotels and opening of Georgia Pacific's new corporate headquarters are the major developments located near the Peachtree Center station.

Southern Bell's \$100 million 1.9 million square foot office and retail complex at North Avenue, the Peachtree Summit (with direct access to the Civic Center station) office complex which houses MARTA and Coca-Cola among its major tenants and speculative office space

being constructed at the Midtown and Arts Center stations are examples of the tremendous impact these rail stations are making in the North Line corridor.

Since 1978, major completed or announced construction on the North Line from the Peachtree Center station to the Lenox station adds over 7 million square feet of office, nearly 5000 new hotel rooms, more than a million square feet of retail and several new residential complexes. All this development is occurring within a 1500 foot radius of North Line transit stations.

Atlanta's experience suggests the following actions promote successful joint development projects:

(1) Developer involvement in initial transportation planning promotes developer interest in future development projects at transit sites.

(2) Transit agencies must take an active role in joint development. MARTA opted for a passive role allowing the free market system to guide development. As a result development concentrated at North Line stations whereas the East and West Line stations experienced little or no development. Joint development potentials should be a part of route alignment and station location decisions.

(3) Direct station access seems to foster developer interest.

(4) The local government and transit agency must establish clear policies supporting joint development. Two examples of public policies designed to encourage station area development in Atlanta are (a) the city's zoning ordinance which created Special Public Interest Districts in MARTA station areas and (b) MARTA's September 1982 disposition policy for surplus property including subsurface, surface and air rights.

(5) Transit agencies should create an office of joint development. This office could provide a single access point that has authority to make deals and assist developers in putting together development packages.



CHAPTER I

I. INTRODUCTION

Currently, several cities are undertaking construction or expansion of rapid rail transit systems. Often, these tremendous capital investments cannot be justified solely on the basis of the number of passengers they will carry. This study assesses the land-use development and economic impact of such investments through a case study of Atlanta's Metropolitan Rapid Transit (MARTA) System. Although other transit related facilities were considered (e.g. transit malls), the focus of the study is development potential in areas surrounding rapid rail stations. The report reviews land-use impacts (Chapter II) of selected rail systems, then presents an analysis of transit-linked development in Atlanta.

Spurred by the success in stimulating economic development of Toronto's rapid rail and "Go Transit" systems, transportation planners and researchers in the United States are incorporating joint development into planning for new or expanding rapid rail systems. In Los Angeles, up-front land-use planning is focusing on how development can support the rail system. The city has implemented legal statutes that clearly allow the Southern California Rapid Transit District (SCRTD) to enter into joint development. Among these is the ability to initiate benefit assessment districts. Station area master planning includes advanced planning for development around the stations. Examples of the emphasis Los Angeles is placing on joint development include construction of knockout panels for future development and developer input into the master planning for location and facility design.

Exciting applications of joint development are taking place in New York. A \$27 million contribution to "fix-up" a subway station was required for the developer to get the contract for redevelopment of Times Square. Another developer has agreed to a \$31 1/2 million cash contribution to build a rail station as a part of the negotiation for renovation work in Manhattan.

This early up-front planning is contrasted with the situation in San Francisco and Washington. Early interest in joint development was not a primary focus of the BART planners. The first couple of years in Washington, developers took a wait and see approach. Their attitude was one of "I don't believe it will happen." However, recent successes in Washington have heightened the interest of developers in joint development opportunities at Washington's Metro stations.

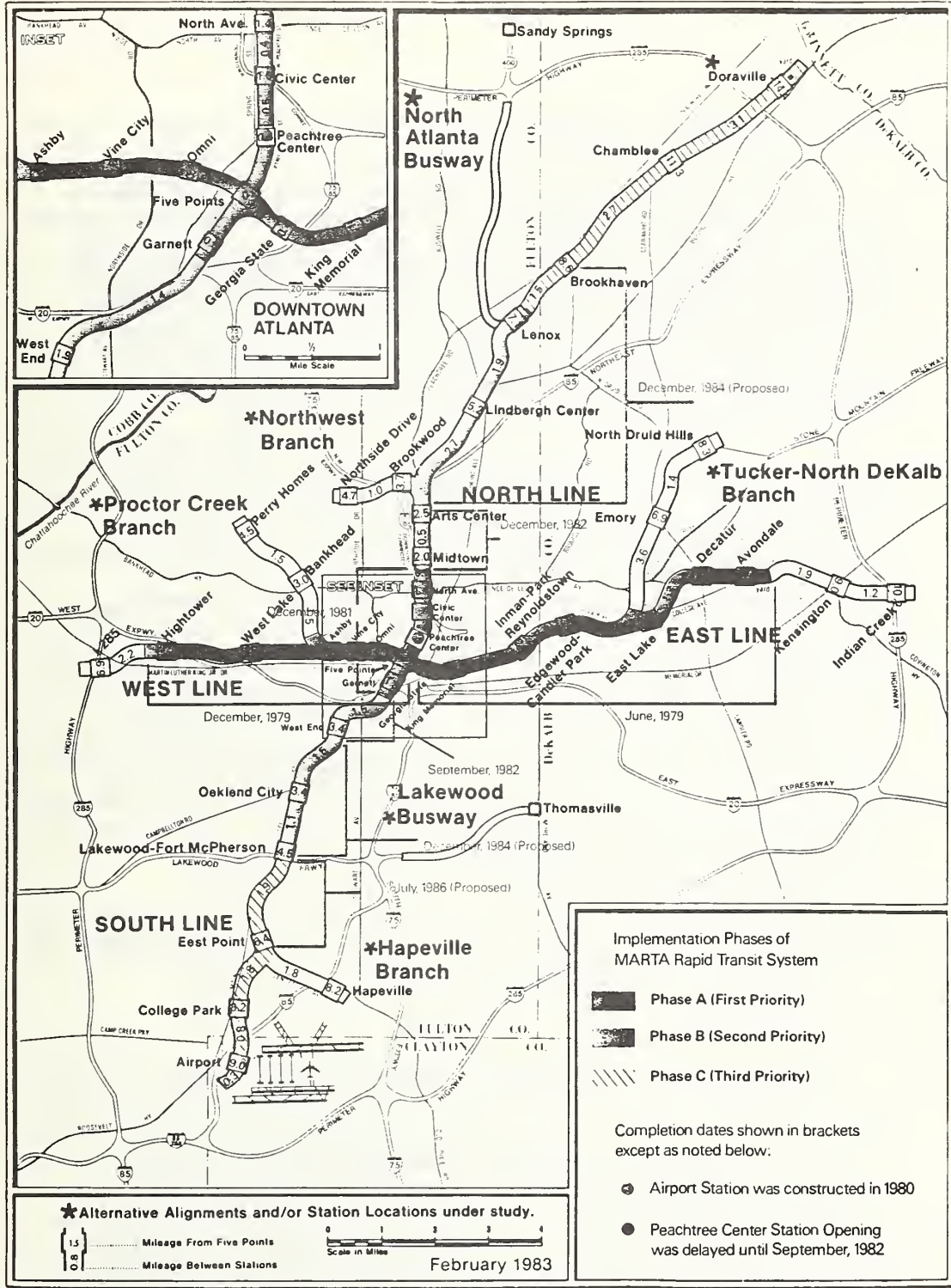
Although there have been recent successes, studies of major rapid transit systems have confirmed that intensive mixed-use development around rapid transit stations is not inevitable, but requires incentive actions and supporting policies from the public and private sectors. The present study reviews several instances nationally to document both successful and unsuccessful joint development programs. The study then focuses specifically on the experiences of the Metropolitan Atlanta Rapid Transit Authority (MARTA) System, utilizing the city's transit station area development studies as a tool to study the process.

II. METROPOLITAN ATLANTA RAPID TRANSIT SYSTEM

MARTA was created in 1965 by an Act of the Georgia General Assembly. In November 1971, the Citizens of Fulton and DeKalb Counties and the City of Atlanta voted approval of a \$1.4 billion mass transit system. As anticipated at the time of the referendum, the federal government provides 80 percent of these funds, with the remaining 20 percent local share being financed by a one percent sales tax.

The approved rapid transit program (as amended) provides for 53 miles of rapid transit, 41 stations, park-and-ride facilities for nearly 30,000 vehicles and a fully integrated network of 1,500 route-miles of feeder and express bus lines. The system is structured in a cruciform arrangement, with the East-West and North-South rail lines intersecting in downtown Atlanta at the center of the region (Figure 1). Geographic coverage extends North to Doraville, Southward to Hartsfield Airport, East through Decatur to Avondale and is bounded on the West by the Hightower Station. As much as possible, the lines of the system are at or above ground level (51 percent and 30 percent respectively), with only 10 miles or 19 percent of the line construction in subway. Average system station spacing is just over 1.2 miles with outlying station spacing approaching 3 miles and downtown station spacing averaging 0.5 miles.

The first phase of the system, the East Line, opened in July 1979, with opening of the West Line following in December 1979. Only twelve of the originally proposed twenty stations of the East-West Lines have been constructed covering a total of 11.8 miles. The first phase of the North-South Line opened in December 1981, with additions to that Line opening in September and December 1982. Presently, eight stations are operating on the Line spanning 4.4 miles from West End to Arts Center. The entire North-South Line is scheduled for completion in 1988, covering a total 23.1 miles.



Prepared by the Atlanta Regional Commission

Figure 1

System Map

III. LAND-USE PLANNING IN ATLANTA

Atlanta has been a pioneer in the area of comprehensive planning. Its city charter of 1973 requires the mayor to both develop one, five and fifteen year Comprehensive Development Plans (CDP) and recommend a generalized land-use development pattern to guide the growth of the city. The first CDP was completed in 1975. A major feature of the city's land-use policy after the creation of MARTA was encouragement of nodal land-use patterns around certain transit stations and selected major transportation intersections.

Two related planning efforts were implemented as a result of MARTA. First, the Urban Framework Plan (1973) represented the city's official position on future land-use and development policies around transit stations. Second, a series of 27 Transit Station Area Development Studies (TSADS) were completed for the transit system.

A new zoning ordinance (effective January 1, 1982) was adopted in December 1980. Recommended as a part of the Urban Framework Plan, its primary focus is to facilitate implementation of major land-use goals and policies in the CDP. Special Public Interest Districts (SPID) and Planned Development Districts (PD) were created to integrate development in transit station areas and promote mixed-use development. Together, these steps represent a general approach by the city to provide comprehensive planning and provide a foundation through which public and private sector decision makers can achieve recommended land-use patterns.

The TSADS reports furnish a set of potential development opportunities against which actual station area development can be compared as the system matures.

IV. OBJECTIVES OF THE STUDY

In their study "Land-Use Impacts of Rapid Transit: Implications of Recent Experience," Knight and Trygg (49) pointed out that there is nothing inevitable about urban development in the vicinity of transit facilities. Assuming this to be true, it is important to identify and understand what policies, tools, programs and techniques have contributed to desirable land-use planning and development in these station areas. This case-study of transit-linked development of Atlanta's MARTA System adds additional information that can help in understanding the role transit plays in urban development. The report provides:

1. A review of the literature pertaining to transportation and land-use impacts. This review includes preliminary results from ongoing impact studies and specific analyses of land-use and joint development.

2. A review of selected transit systems. Utilizing impact studies and site visits made by the research team, the work on actual urban development impacts of major urban and light rail systems are reviewed and analyzed.
3. A review and assessment of various tools and methodologies which have had some utility in guiding land-use impacts. This review isolates key policies, incentives and factors in the various studies and assessments reviewed which appear to have generic applicability and which might be examined in more detail in area specific case studies.
4. A detailed series of case studies of ten Atlanta station areas. The stations which have been selected represent a range of traffic levels, economic conditions of surrounding neighborhoods, levels of involvement of private organizations and citizen groups and governmental support policies. The historical, present and projected development is detailed for each of the stations. Although the analysis is comprehensive, the following areas are focused:
 - * Perceptions and plans of major private sector firms and developers.
 - * Explicit policies instituted in the station areas to control or direct land-use such as zoning or similar ordinances.
 - * Explicit policies in the station area or region-wide to stimulate private investment associated with the rail implementation.
 - * Activities by private groups to promote business activities around stations.

The following stations have been selected along the East-West line: Ashby, Five Points, and Decatur. Those on the North-South line include: Lenox Square, Arts Center, North Avenue, Civic Center, West End, Midtown and Peachtree Center.

5. Summary of findings and recommendations. The conclusions of this research are designed as a reference for use by planners and policy officials of other transit systems. A summary is provided of local policy options and strategies which appear most effective in directing growth around stations.

V. METHODOLOGY

The general approach to the study makes extensive use of existing research on joint development, growth management and transit impact analyses. Selected systems (BART, WMATA, New Jersey, San Diego, Portland, Buffalo, Baltimore, Miami, and Toronto) were studied in detail to gain perspective on development trends and tools that may have applicability in Atlanta. Primary sources of data such as "Before and After" studies and system impact studies are supported by newspaper accounts of development activities.

After analyzing these sources, site visits were made to each of the systems to gain first hand knowledge of on-going development activities and to update data on station impact. Structured interviews provided guidelines to measures that have the greatest potential to guide development.

ARC's Transit Impact Monitoring Program (TIMP) is the major source of data for the Atlanta case studies. TIMP provides an annual update of the impact of MARTA's rail system. The TSAD studies provide the basis for the comparative analysis of proposed station impacts to what has actually taken place nearly five years after the system opened. Newspaper articles, interviews with key city and MARTA officials, and discussions with local and national developers have also given insight into the impact that the transit stations have had on development decisions.

VI. REVIEW OF PERTINENT LITERATURE

This research effort explores the linkages between transportation and urban development in Atlanta. More specifically, it reviews the impact on development of MARTA's rail stations. A number of relevant studies provide a theoretical foundation for such an inquiry. Gerald Kraft and his associates concluded the following in their volume entitled; The Role of Transportation in Regional Economic Development that....."regulation of transportation in particular, can by omission or commission aid or retard development" (51). This observation challenges the traditional assumption that transportation systems are designed to overcome the friction (distances, natural obstacles, etc.) imposed by geography and as such, they shape the distribution of activities and influence the shape by which each region contributes to the gross national product. Therefore, inappropriate and incompatible transportation plans and policies certainly contribute to a less than positive effect on economic development in the targeted area.

In a 1977 study entitled "Land-Use Impacts of Rapid Transit: Implication of Recent Experience," Knight and Trygg reviewed evidence of land-use improvements and drew conclusions concerning the extent and nature of such impacts and the conditions under which they occur. Through analysis of impact studies done by

various researchers in several cities, Knight and Trygg conclude that rapid transit can have substantial growth focusing impacts. In addition to conclusions on general patterns of land-use impact and causes, recommendations and federal policy implications were proposed (49).

In addition to addressing the impact of transportation on economic development, another related focus has been on the impact of transportation on residential and employment decisions. In his paper, "Effects of Employment and Residential Location Choices on Urban Structure: A Dynamic Stochastic Simulation," Tardiff concluded that the pattern of home-to-work linkages in urban areas is affected by household mobility decisions. He described a dynamic stochastic simulation model designed to illustrate the effects of mobility decisions on urban structure. Experiments consist of alternative input assumptions involving factors such as city size, number and locations of job centers and dwelling units, initial patterns of home to job linkages, moving rate and importance of accessibility in selecting new locations.

Of course the series of studies in the BART Impact program relating to land-use policies provide invaluable sources of information. To cite a few, Land-Use and Urban Development Impacts of BART (93), The Impact of BART on Land-Use and Urban Development (70), and BART in the San Francisco Bay Area (69), are particularly relevant. More recent impact analyses (96) of Washington's Metro System extend the knowledge gained from the BART analysis.

VII. JOINT DEVELOPMENT

Between 1970 and 1980, there has been more than a thirty percent increase in downtown office development in major United States cities (109). In an effort to maintain downtown economic growth and the general revitalization of the central business districts, American cities have been compelled to undertake major public transportation improvements to provide better downtown mobility. Utilizing the concept of joint development (a real estate development linked to a public transportation facility) cities have sought urban revitalization and increased employment opportunities. Though, mass transit is largely viewed as a government responsibility and land development is primarily a private function, transit has been used as a lever to influence private investment since the early years of the century. New York's Grand Central Station, for example, is a result of this early relationship.

Transportation is closely related to city form and urban land-use. The existing urban structure (i.e., housing and employment) determines present transportation needs. It also acts as a prerequisite for future urban development. The nature in which

new transit facilities are provided has a potentially significant influence on community evolution.

There are several key issues which have had notable impact on transportation planning and land-use. One contributing factor to the resurgence of transit development has been the steady increase of federal assistance. Federal assistance for urban mass transportation first became explicit in the Housing Act of 1961. Later, the Urban Mass Transportation Assistance Act of 1964 provided assistance for joint development near transit facilities. Under this legislation and subsequent amendments, (e. g., the 1974 Young Amendment), which provided for federal funding of transit corridor development corporations, the federal government undertook a modest program of financial support for research and development of public transportation improvement. New rapid transit systems were charged to implement beneficial urban changes by linking transit planning and land-use planning.

In 1970, Federal effort significantly expanded under the enactment of a \$10 billion Capital Assistance program (82). This legislation constituted the first time in U.S. history that such a national program for the improvement of urban mass transportation was initiated on a substantial scale. Under the Mass Transportation Assistance Act, the Secretary of Transportation could make contractual obligations over a 12 year period for such purposes as the improvement and extension of new rail transit systems, the modernization of rail commuter services, and the purchase of buses and related equipment.

Additional legislation, the Urban Initiative Program, established by the Carter Administration in 1979, emphasized the concept of generating transit ridership through joint development. New rail transit facilities were expected to provide increased land values around transit stations.

The Urban Mass Transportation Administration (UMTA) has centered its interest on joint development around stimulating economic development by leveraging public funds to increase private investment. Access to new sources of funds through mechanisms such as tax increment financing, special benefit assessment, dedicated property taxes on station areas and zoning controls can shift some of the financial burden for transit from public to private sectors.

Various studies have been conducted on joint development. For example, Ana's (3) National Science Foundation funded project investigates the theoretical and empirical aspects of joint development. Other areas of research include an investigation of joint development and value potentials at 49 transit stations in 14 United States cities (81) by the Rice Center. M. E. Lovely (60) relates transit and urban development by analyzing transit-related joint development projects in the United States and Canada, the changing economic role of central cities, and a study of downtown growth management. Witherspoon (90) stresses the importances of public planners exploiting transit development potentials.

The Urban Land Institute (90) provides a summary guide designed to inform the public and private sectors of implementation techniques. The summary focuses on three key issues: the necessary agreements and arrangements among developers, transit authorities and other public agencies; how such arrangements are made; how improved transit can be used to guide or to encourage development.

A primary concern of a large portion of the literature on joint development is that of coordination between public and private sectors. The Urban Land Institute argues that the main problem in the execution of joint development is apparently both sector's lack of sufficient knowledge of the complexities of joint development. Practitioners are beginning to realize that successful implementation of joint development depends upon initiatives taken by public and private parties who are aware of a wide variety of joint development techniques. Such implementation efforts are comprised of two distinct but related activities in planning and development: policy making and deal making.

In 1978 and again in 1980, major workshops entitled "The Joint Development Marketplace" were held in Washington to take advantage of the linkage between transportation and urban development. Proceedings (104, 105) of these workshops were published by Public Technology, Inc. The first includes a summary on joint development from the perspective of developers, federal and local officials. It also includes case-studies of successful joint development and a number of related research papers describing the joint development process. The second report focuses on the impact of the rail systems in Baltimore, Miami, Atlanta and Washington

CHAPTER II

I. INTRODUCTION

Before assessing station area development in Atlanta, it is useful to describe joint development activities in other North American cities. Several of these (e.g., Toronto, Miami, San Francisco) with planned or existing rapid rail systems were visited to learn about development trends in areas surrounding the stations.

A consistent analysis format includes the use of source documents detailing development trends collected and analyzed in advance of each site visit. These took the form of impact studies, reports, newspaper articles, etc., detailing the land-use and joint development activities associated with rapid transit implementation. Site visits were then made to update actual development and ascertain mechanisms or tools that proved successful in stimulating that development.

II. JOINT DEVELOPMENT EXPERIENCES

The joint development experiences of the nine systems visited are summarized below.

TORONTO

Toronto has been identified as the model city for positive urban design. Carefully enacted public policies which were designed to assure a return on the transportation investment are the primary factors which contribute to Toronto's reinforced, centralized growth pattern. During the 1960's the construction of major urban complexes and other high-rise developments clustered near transit stations were promoted by supportive public policies. The transit systems provided the level of mobility necessary to support these high density clusters, preserving central Toronto as the center of activity. Between 1952 and 1962, tax assessments in districts paralleling the Yonge Subway line increased by 45 percent in the downtown core and 107 percent in the Eglinton Avenue section of the city. The city averaged an increase of 25 percent during this same period.

Metro Toronto has been so successful in encouraging centralized growth that it has encountered problems of over-burdened municipal facilities. By 1973, over 100,000 people were commuting daily into Metro Toronto. The city then resorted to necessary downzoning of central areas and the encouragement of mixed-use

complexes in other locations, such as Sheppard Centre which has an entrance from the subway system directly into the retail mall as well as an underground concourse from the government office building into the mall.

Both Sheppard Centre and Park Place, another successful example of joint development, are examined by the Urban Land Institute (90). This extensive case study concludes that successful joint development in Toronto was fostered by a recognition by the Toronto Transit Commission of the importance of private sector needs and creation of an atmosphere of agreement and cooperation requiring fewer complex deals between the public and private sectors.

Other examples of major complexes and direct subway connection includes the Eaton Centre, Commerce Court, the Royal Bank Plaza, the Hudson Bay Centre, Cumberland Terrace and College Park.

"There is no doubt that it (the subway) has contributed significantly to much of the major development which has occurred in Metropolitan Toronto" says David Godfrey, Chairman Municipality of Metropolitan Toronto (87).

Yet, though recent real estate surveys have shown that ninety per-cent of office construction and half of the apartment building have occurred within a five-minute walk to the subway system, planners at the Toronto Transit Commission are reluctant to ascribe a cause-effect relationship. This inability to isolate cause-effect linkages is perhaps the major difficulty confronting researchers who are trying to assess the impact that a transit station has on its surrounding area.

SAN FRANCISCO

No rail system has been more extensively studied and evaluated than the Bay Area Rapid Transit (BART) system. As the United States re-entry into major rail construction, BART has served as the model for new systems in Atlanta, Baltimore, Miami and Washington and those under construction or planning in Buffalo, Dallas and Los Angeles. BART was partly sold on the idea of spontaneous generation. While the development potentials forecasted by planners of the system have not been realized, it has been an influential stimulus to downtown San Francisco development and to a lesser extent a factor in suburban Berkeley, Richmond and Walnut Creek.

Of the 22.5 million square feet of office space constructed in downtown San Francisco between 1965 and 1979, ninety percent was built within 1500 feet of BART stations. During this same time frame, such impacts in suburban and economically depressed areas did not occur, a notable exception being the location of the Social

Security Administration building near a BART station in Richmond. In fact, several developable areas in North Berkeley, Rockridge and Orinda were hindered by restrictive zoning as a result of strong community objection to mixed-used transit oriented development (93).

Since the initial work was done on the BART impact studies, several new and proposed development projects have occurred. Though BART had not taken an active role in joint development prior to 1983, BART linked sites have caused some developer interest. Bank of America has selected a site in Concord for its new building, Walnut Creek is booming with major developers putting in speculative office space and Fremont is experiencing residential growth.

BART's present activist approach to joint development is likely to yield several future joint development projects. In any event, over the next couple of years, the Bay area will be an important test case of transit's ability to stimulate development.

WASHINGTON

Washington's Metro System is planned to cover approximately 101 miles transcending Northern Virginia, Washington, DC and Southern Maryland. It will be comprised of 86 stations and serve the function of both a commuter rail line and a downtown circulation system. Construction cost estimates of Metro have more than doubled the original estimate of \$2.5 billion. Recently, there has been considerable discussion concerning whether to extend the system beyond the current 72 miles.

Due to the concern of UMTA over rising cost estimates, Metro was directed to conduct the necessary analyses to reassure the cost-effectiveness of UMTA investments, as well as the realizability of land-use benefits. Consequently, Metro is an important test of the ability of rapid transit to support urban revitalization. An article in the Washingtonian (112) asserts "Metro is promoting the rejuvenation of Washington's downtown area and is shaping new development and retailing in Virginia and Maryland." Further evidence is supplied in a presentation to the Greater Washington Research Center by former WMATA General Manager, Richard S. Page (111). In it he cites Metro as a major impetus to private investment.

In mid 1982, with less than half of the proposed system completed, nearly \$970 million of private development was placed under construction in areas adjacent to Metro rail stations. Five billion dollars in additional construction generating working space for 260,000 employees and residential space for 40,000 people is projected when the full system is completed. WMATA planners have developed both intermediate and long range

station area development plans encompassing 20 and 82 stations respectively. Implementation of the intermediate plan will generate \$20 million in tax revenue, create some 25,000 new jobs and provide \$12 million in annual revenue to WMATA.

Currently, six major joint development projects have either been completed or are under construction. They are 1100 Connecticut Avenue, Rosslyn Center, McPherson Square, Van Ness/UDC, Friendship Heights, and Bethesda. Many of these are immense development projects, for example, the Bethesda development will add nearly 600,000 square feet of office, hotel and commercial space.

With such major successes, it would appear that Washington Metro is a model joint development system. However, many Metro officials feel that the abundance of joint development sites are incidental rather than designed. Route selection was dictated largely by costs and right-of-way requirements. The joint development sites are characterized by strong market conditions and advantageous land ownership patterns.

Metro has been successful in effectuating land-use changes and stimulating economic development in both downtown Washington and suburban Maryland and Virginia. Several changes in metropolitan Washington land-use policies coincide with opening of the rail line. Circumferential development was discouraged in favor of node development around Metrorail stations. A mixed use development district was established for the Rosslyn-Ballston corridor. Crystal City, Pentagon and Friendship Heights all experienced major changes, Crystal City and Pentagon became development districts instead of a proposed industrial park and warehouse location respectively and a transit stimulated shopping center was created at Friendship Heights (111).

Two other major impacts are directly attributable to Metrorail. The focus of downtown development has shifted to an area between the Farragut West and Farragut North rail stations and former deteriorated commercial districts are now the sites of Metrorail growth centers (111).

SAN DIEGO

The San Diego Metropolitan Transit Development Board (MTDB) created in 1975 was charged with the responsibility of developing and implementing a Light Rail Transit System. The resultant system, affectionately known as the "Tijuana Trolley", began operation on July 26, 1981. The thirteen station trolley system stretching 15.9 miles from Center City to the Tijuana border was built to connect Tijuana and San Diego, to relieve crowding and more efficiently service route passengers. Except for the

terminal points, the stations are very modest structures, more correctly identified as shelters.

It is not surprising that the trolley has done little to foster economic development. During its planning, smaller cities within the corridor (e.g., Chula Vista, Otay) were not interested in development impacts. The idea of the trolley was not sold on its ability to provide land-use impacts. In fact, no impacts were looked for. Secondly, most of the system (14.2 miles), operates on the right of way of the San Diego and Arizona Eastern (SSD & AE) Railway. This corridor was selected not for its potential for stimulating development but rather for its cost effectiveness. In this case the system passes through mostly agricultural and warehouse dominated land without much opportunity for any development. Most of the attention focused on the San Diego trolley results from its low cost, speed of implementation and avoidance of federal financial involvement with its attendant procedures, regulations and requirements.

In March of 1983, MTDB issued a joint use and development of property policy designed to "extract the maximum benefits from the utilization of property owned and acquired by the Board consistent with transportation goals and community development objective." This belated attempt saw MTDB advertise (in several local and national papers) land assembled around the stations for development purposes. Although some interest and discussion about locating near the transit stations was generated, developers who were more familiar with dealing with highway-oriented transportation systems generally shied away. A dentist in the area requested space near the station and talk was initiated concerning arcade games around the station. However, little if anything has really occurred yet.

MIAMI

Metrorail is Dade County's 20.5 mile transit system which opened in May 1984 extending South to North from Dadeland through downtown Miami, the Civic Center area, Allapath, Brownsville, Model Cities and then West along Northwest 79th Street to Hialeah. It will include a total of 20 stations positioned about one mile apart.

Initial planning for relief of Metro area's transportation problems took place in the 1964-69 period. During that time, a committee of public employees formulated inputs to the county's overall Master Land-Use Plan, which included a transportation element. Between 1969 and 1972, the transportation element of the Master Land-Use Plan was refined and a Transit Feasibility study was conducted. The study originally recommended construction of 54 miles of rapid transit with 54 stations and extensive local, feeder and express bus improvement (67). After

modifications of the initial plan, with the inclusion of an alternative analysis, the plan was finally adopted in 1975.

The system is anticipated to be the revitalizing catalyst to downtown Miami, according to a study conducted by the Metropolitan Dade County Transportation Commission. Transit planner envision station sites, such as the riot-torn Brownsville and Liberty City neighborhoods to be prime candidates for intensive development. Another area for intense development is the Overtown station, which is expected to serve as one of the most significant community redevelopment projects in the country (based on plans for redevelopment and expansion of present warehouse and wholesaling of the Park West project).

Currently, development has surged at the downtown Brickell station location, where several banks have completed construction of office towers and where work has begun on the Ball Point Commercial Development Project (along Biscayne and across the street from the new 55 story Southeast Bank project). The Brickell area is the most rapidly developing market in Miami, with over one million square feet of office space, 1300 luxury condominiums and 600 hotel rooms under construction or advanced planning.

However, this level of development is not universally desired, particularly at the planned Dadeland station area south of the transit system. Opposition has been voiced by single-family homeowners who resent the increase in housing construction in their area.

Yet, despite the fears of various groups, Metro rail officials strongly believe that the inevitable growth of population in Miami will result in total acceptance of the transit system and have a trickle down effect on the increase in construction. According to Downtown Development Association Executive Director, Ron Kenzie, "about five to six billion dollars of downtown development will result from stage one of Metro rail and Metro mover" (77).

BALTIMORE

Baltimore's rapid transit system was originally planned by a gubernatorial steering committee in 1968 to be a 72 mile, six strand system, built in two phases (a northwest route ending in Randallstown and a 14 mile Anne Arundel County line extending to Marley Neck and the Baltimore-Washington Airport).

However, due to cost overruns, funding problems and political strife, the original plans were replaced by a 14 mile line composed of two sections. The first eight miles of rail extending from Charles Center (in the northwest corner of the City) to the Reistertown Road Plaza Shopping Center opened in late 1983.

Since the initial plans were developed, a considerable amount of debate has occurred concerning the transit system's effect in

stimulating development. However, planners believe the system will be a catalyst for millions of dollars of real estate development. In 1974, the Baltimore City Planning Department (with assistance from UMTA) launched a comprehensive study of the areas around the planned station sites. Their primary objective was to attract new industries (business and housing), while stimulating the city's tax base. To achieve this objective, planners designated urban renewal areas around those stations where none existed and modified existing urban renewal areas to encourage increased development (31).

Presently, more than \$50 million worth of new office, residential and commercial projects have emerged within 2000 feet of the transit line, while hundreds of millions of dollars worth of development remain in the planning stage.

A survey of current and/or planned development under way or planned activity around the nine transit stations reveals a substantial difference in the level of development; the bulk of activity being concentrated at either end of the line.

Planners believe that the overall impact of Baltimore's Metro will encourage development within the region because of the existing demand. State Center, potentially one of the busiest stations already has a substantial concentration of state offices. Lexington Market, Penn-North and Reisterstown Road Plaza are other major development areas. The Rouse Company currently has major land holdings paralleling route alignment from suburban Baltimore to Owings Mills.

BUFFALO

The 6.4 mile Light Rail Rapid Transit (LRRT) system scheduled for opening in 1984, unlike those in San Diego and Portland, incorporates features of heavy rail systems. The 14 stations are more substantial and are located at key surface transportation interfaces near densely settled residential areas or in the vicinity of high concentrations of employment within the CBD (75).

Interviews with leaders in Buffalo lend support to the system's claim as catalyst to downtown revitalization. The Buffalo Light Rail Transit system is seen as the single most important unifying component of a revitalized central business district. Since 1950, Buffalo has witnessed a substantial shift of people and development away from the inner city to the suburban area (75).

In 1978, more than 12 years after identification of the need for a rapid transit line in one of Buffalo's most important transportation corridors, the federal government granted \$439 million to finance the construction of the initial 6.4 miles of the LRRT Amherst-Corridor (75). Original design of the system called for a 12 mile line serving the suburban town of Amherst and the State University of New York at Buffalo's north campus. It now seems likely, however, that the initial 6.4 miles is all that will be built.

A number of investments have begun to occur in anticipation of the transit project. In Buffalo, transit investment is under very tightly controlled conditions. The land development associated with transit occurs in discrete packages which have specific measurable and significant regional impact (75). Parker-Simon and Paaswell point out that the potential for the future development of the Buffalo region does exist. They believe that overall regional growth is possible through the careful selection of private development based upon characteristics of the changing population, their employment, and the market they create, with public funding utilized as a catalyst. Evidence of such growth is the appreciation rate of housing in Buffalo near transit stations, even in low economic areas. It is expected to have positive impact on economic development via increased service employment and stimulated private investment, enhancement of downtown attractiveness, a larger share of regional retail trade and encouragement of private sector investments. Buffalo is simultaneously implementing an LRRT and attempting an economic comeback.

PORTLAND

Portland merits attention on two counts: (1) the Portland Mall and (2) the Banfield Light Rail project. Transit malls are designed to revitalize or stimulate the downtown. Initiated in 1970 by a coalition of downtown business leaders and property owners, the mall which began transit operations in December of 1977 encompasses an 11 block area in downtown Portland. Although the mall has not been a boom to major downtown development, (one new office building and one retail space saved) it can be classified as an economic and symbolic success. Before the mall, the downtown was declining with little or no major retail. The mall was symbolic of the commitment to redevelop the downtown. There is a perceived sense that the mall will stimulate development and focus national attention on Portland. In a study done by researchers at Portland State (34) it was found that "the mall has made transit service more understandable and easier to use, reinforced downtown development objectives, and increased ridership levels and potential capacity."

The Banfield Light Rail (LRT) is the community's choice over a new freeway to relieve traffic congestion. The 15 mile Portland to Gresham line is scheduled to open in 1985. The Portland Development Corporation, an urban renewal agency has been created to guide development. By law, not many benefit sharing incentives exist in Portland. TRI-MET has been mandated to buy as little right of way as possible and to choose existing right of way where feasible. Though it is too early to measure real benefits, the Banfield transit way project has an estimated impact of \$300 million and extensive commercial development projected for Gresham. One major commercial center located on the east side of Portland is

Lloyd Center with 130 blocks slated for development, comprising the largest subcenter outside of downtown.

Significant development response to the LRT is not expected until its opening in 1985. Market consultants, Economic Research Associates, report that the business community is generally optimistic about long term development impacts.

This brief summary shows that development has been sporadic around rapid rail stations. Strong markets, incentive actions and legislation and willing joint development partners characterize the success stories. On the other hand, where these characteristics were absent little or no development has been fostered by rail station implementation. Early involvement in planning the rail system is a key ingredient for successful joint development.

CHAPTER III

I. INTRODUCTION

The high cost of construction and small percentage of traffic handled by rapid rail systems make it implausible to justify them solely on their merits as transportation systems. The concept of joint development was initiated as a means of justifying these systems based upon the additional economic benefits they can potentially generate. Though the concept has been around for some time, it is one that is still evolving and thus one that merits further study. Below are three attempts to define joint development:

- (1) The simultaneous development of large scale, high capital transportation systems and adjacent land development.¹
- (2) Projects where a city and a private developer coordinate development around a major transportation facility.²
- (3) The use of property for more than one purpose including surface and/or airspace development at a transit station.³

While the focus of joint development as explored in this report is closer to the narrow definition given in (3), it also incorporates the broader interpretations of (1) and (2). Thus joint development in this context is defined as public/private partnerships to stimulate or enhance development or redevelopment opportunities around rapid transit stations. That development is not exclusively land development, but also includes economic development.

Based on successful experience in Toronto, the federal government has become quite interested in joint development opportunities created by investment in rail systems. The improved accessibility and substantial traffic generated at rapid transit station nodes suggest higher property values and more opportunity for mixed-use and higher intensity develop-

¹Robert Paaswell, Research on Transportation-Land-Use Interactions, Buffalo, 1980, p. 77.

²Urban Land Institute, Gladstone Assoc., Joint Development" Making the Real Estate Connection, Washington, 1979.

³MTDB Policies and Procedures, March 8, 1982.

ment in the vicinity of these stations. The previous chapter has summarized these trends in several United States cities. Washington has achieved much success in generating intense development and developer interest around its metro stations. Baltimore, Buffalo and Miami have incorporated joint development programs into station area planning and design. Less comprehensive systems such as those in San Diego and Portland will experience substantially smaller development impacts. Belatedly, San Francisco is attempting to recapture development opportunities enhanced by the presence of BART and MUNI stations.

This chapter describes several so-called growth management, innovative financing, benefit sharing and/or value capture tools that can stimulate or enhance realization of these development potentials. Subsequent chapters will provide detailed case studies of these and other techniques applied to station areas of Atlanta's MARTA system.

II. DEVELOPMENT TOOLS

The purpose of the tools described in this section is to influence private investment decisions in a coordinated manner consistent with an area's growth and development plan. How these tools and mechanisms are implemented will largely determine the success of a region's efforts to revitalize, especially the downtown corridor.

The results of a survey to determine levels of usage of twenty-one growth management tools is reported in Figures 2 and 3. A complete discussion of these may be found in (99, 101, 103). Results of this survey indicate that early developer involvement and development agreements worked out in advance are crucial for joint development success. Land banking allows the transit system or local jurisdiction to acquire the most desirable tracts of land prior to system construction. It must be pointed out, however, that in most of the systems reviewed, legislation prohibiting land banking had been adopted. Another important incentive for stimulating developer interest is the public underwriting of initial joint development feasibility studies.

A brief description of the most commonly used measures concludes this section.

Development Agreements permit developers and local officials to identify and agree to the conditions and rules under which development may proceed. This type of agreement is welcomed by developers because it eliminates any uncertainty and misunderstanding that may crop up in later stages of a development project.

Early Developer Involvement provides for early consultation between a public development agency and potential developers to ensure that the project will conform to the requirements of private investors and developers. Early developer involvement in route

Respondents	Tools																				
	1. Certificates of Participation	2. Cost Recovery Districts	3. Development Agreements	4. Early Developer Agreements	5. Exactions	6. Interest Arbitrage	7. Land Banking	8. Leasing/Selling Development Rights	9. Lease Purchase Agreements	10. Metro Districts	11. Negotiated Investment	12. Point-permit Developer Incentive Plan	13. Professional Packagers	14. Public Profit Sharing	15. Public Underwriting of Initial Feasibility Studies	16. Quasi-Public Development Corporation	17. Staging & Phasing Plans	18. Special Benefits Assessments	19. Tax Increment Financing	20. Transit Impact Requirements	21. Tailoring Public Assistance
1. Baltimore			x	x			x	x							x	x					
2. Buffalo (Div. of Planning)			x	x			x			x		x	x		x	x					
3. Buffalo (NFTA)			x	x		x	x		x		x	x			x						x
4. Chicago			x	x											x						
5. Portland (Metro Service District)	x	x			x	x	x	x				x	x		x						
6. Portland (Tri-Met)			x	x	x			x				x			x	x					
7. San Diego (City)			x																		
8. San Diego (MTBD)			x				x	x							x						
9. San Francisco City Planning (MUNI)			x		x		x	x			x	x					x		x		
10. Fairfax County Virginia					x					x	x										
11. Prince George County, Maryland		x																			
12. DC of Planning			x	x				x	x						x					x	x
13. Arlington			x	x	x		x	x		x		x									x
14. Silver Springs			x	x	x		x	x		x	x	x		x		x					
15. Washington (WMATA)					x	x		x		x	x	x									

Figure 2

Growth Management Tools

selection, station location and design decisions can substantially impact the interest in the rate of development once the transportation project has begun.

Exactions imposed on a developer as a condition for development approval may take the form of land and facilities or money. Because they may be levied at any point in the development process, most developers prefer impact taxes or fees to exactions.

Land Banking is the advanced acquisition and holding of land for planned future uses. This allows transit agencies or municipal governments to acquire the most desirable tracts of land at prices substantially below what the market value will be after announcement and/or construction of the facility.

Leasing/Selling Development Rights, usually air or subsurface rights are sold or leased to private developers. In most instances transit agencies prefer to lease the excess land held in the vicinity of its transit facility.

Negotiated Investment occurs when a developer commits to contribute to the cost of public improvements necessary to support his new development.

Point-Permit Plans are incentives offered to developers to pay for public improvements. The incentive is development approval from the local jurisdiction.

Public Underwriting of Feasibility Studies, initial project feasibility support is financed and/or partly financed by public funds. The usual mechanism is for a local government or other public entity to apply for federal funding, e.g. Community Block Grants, to underwrite the initial study.

Staging and Phasing Plans identify the level of future development that can be served adequately by programmed levels of future capital improvement.

The success of these tools has been sporadic. Buffalo utilized public investment in the form of a transit mall and public housing to stimulate private investment. The city also acquired several structures along the transit corridor for future rehabilitation. A quasi-public foundation was set up to assemble property for future development.

Early developer involvement in planning for recent stations in Toronto has been cited as a major reason for development success. Long term leases, sharing connection cost to stations with developers and operating subway concessions generate about three percent of the Toronto Transit Commission revenues. Perhaps the most important element in Toronto's growth management program was creation of the Subway Property Committee. Developers viewed the committee as businessmen with whom they could negotiate rather than public officials who had various other constituents and agendas to satisfy.

New zoning adopted in 1968 for San Francisco's downtown district was designed to reorient the community to the rail system. It imposed limitations on parking in the core and established a floor area bonus system giving incentives for

transit related features. Non-zoning mechanisms included controlled access, property leases, partial takings and special assessment districts. However, the special assessment process in San Francisco is so politically and administratively cumbersome it is practically nonexistent.

Creation of urban renewal districts and use of bonus incentives are major Baltimore development controls. A negotiated agreement with a private developer in exchange for land acquisition resulted in a large mixed-use office/hotel complex in air rights over Miami's Dadeland South Station. The transit administration decided to negotiate with a single developer rather than solicit bids because previous solicitation proved to be ineffective. The process was supported by the Rapid Transit Zoning Ordinance.

Chapter IV presents an overview of development trends in the Atlanta Metropolitan region. This base will be used to compare transit-linked development in Atlanta (Chapter V) utilizing many of the tools described above.

CHAPTER IV

I. INTRODUCTION

Metropolitan Atlanta is a seven county region (Figure 5) consisting of 1.8 million people. Atlanta with a population of 425 thousand, is the largest of the more than fifty cities comprising the region. Regional population density is fairly low, at 800 people per square mile. However, the MARTA service area (Figure 6) has a much higher density, some 1353 people per square mile. CBD employment, in 1980 figures, is placed at 94,000.

During the first six months of 1983, new construction in metro Atlanta topped the \$1 billion mark with a record of \$1.37 billion (Figure 4). The construction boom in metro Atlanta

METRO ATLANTA construction contracts, January-June*

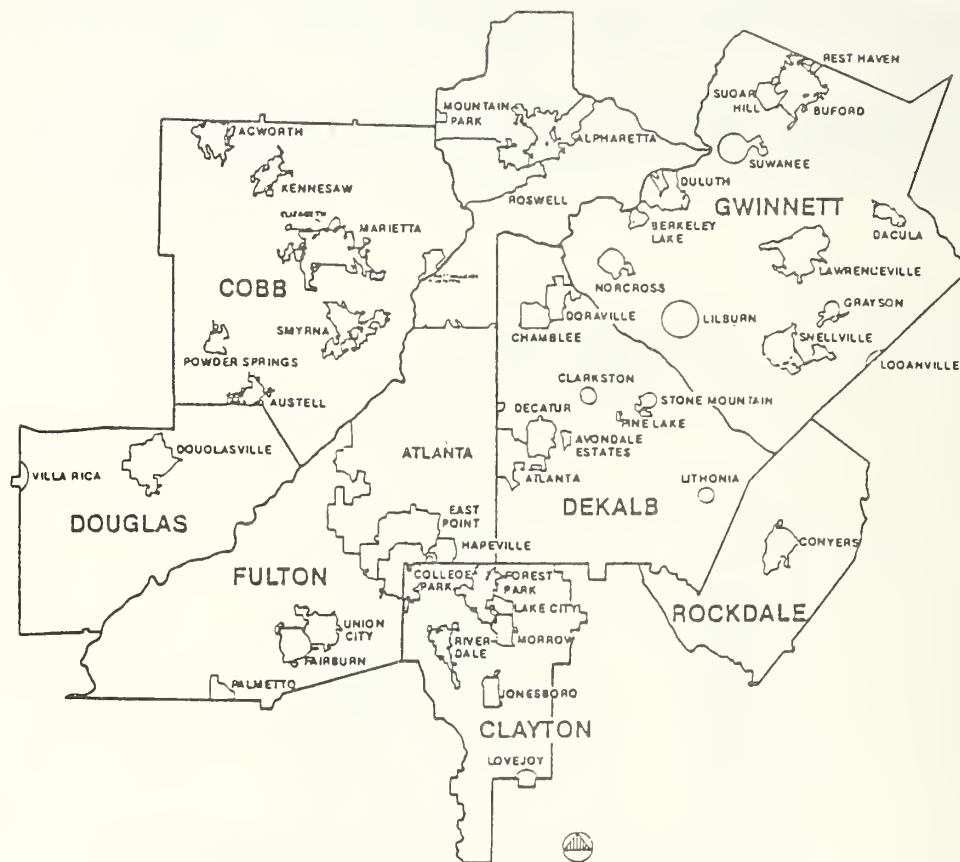
*The 15-county Atlanta SMSA

1975	\$388.3 million
1976	326.4 million
1977	487.4 million
1978	574.5 million
1979	634.9 million
1980	716.9 million
1981	727.2 million
1982	941.1 million
1983	1.37 billion

Source: F. W. Dodge Division, McGraw-Hill
Information Systems Company

Figure 4

FIGURE 5
MUNICIPALITIES IN THE ATLANTA REGION



SOURCE: Atlanta Regional Commission



Figure 6 MARTA Service Area

coincides with trends in the southeastern region. The seven state region shows a thirty-five percent increase over 1982 contracts.

Occupied office space in Atlanta rose to 36 million square feet during the one year period ending June 30, 1983. New construction, however, pushed the vacancy rate from 12.9 to 15.9 percent. Downtown continues to set the pace (Figure 7) with 11.3 million square feet of non-government rental space with an average rental of \$14.50 per square foot. Northwestern metro Atlanta (Perimeter, Northwest Cobb, Buckhead) shows a slight decline over the previous year but continues to be a strong market. These suburban rents range between \$11.35 and \$20 per square foot compared to downtown's \$12.50 to \$27 per square foot.

ATLANTA OFFICE-LEASING PATTERN
 Metro-area office space
 finished and under construction

	Total space (millions sq. ft.)	percent leased	
		June '83	June '82
Downtown	11.3	78.0	73.8
Perimeter Ctr.	9.0	78.5	90.2
Northwest-Cobb	7.3	76.0	72.8
Buckhead	4.5	78.0	79.6
N. Druid Hills	3.5	84.3	82.3
Northeast-Tucker	3.2	84.4	87.0

Source: AFCO Realty Associates, Inc.

Figure 7

Employment in the seven county metro region mimics office and residential development with the greatest increases occurring north of the city in Cobb and Gwinnett Counties (Figure 8).

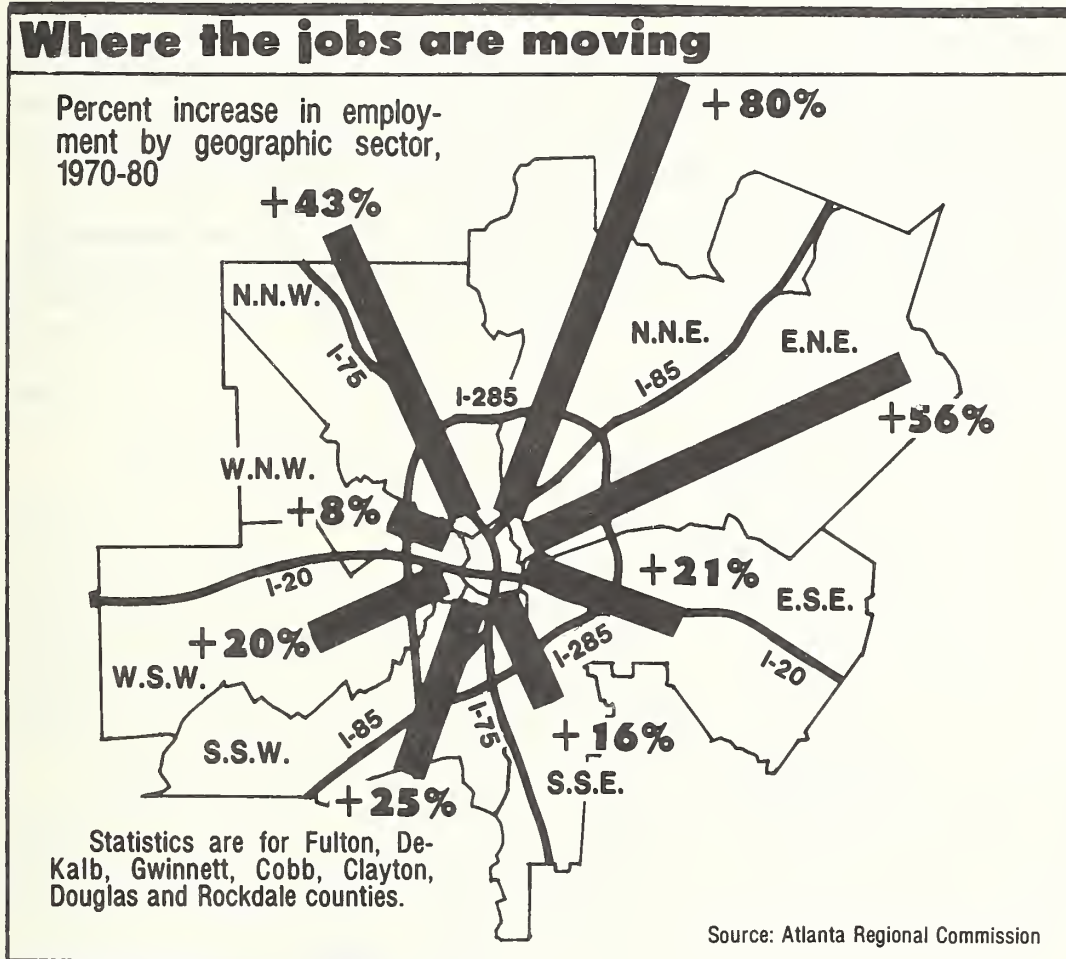


Figure 8

These trends support most planners contention that growth during the next several decades will continue to be centered in suburban areas located twenty to thirty miles north of downtown Atlanta.

II. ATLANTA DEVELOPMENT TRENDS

Throughout the sixties and seventies, north Atlanta saw intensive development while the southern section of the city saw

little construction or economic expansion. Office, retail and residential construction was predominantly a suburban phenomena. This trend has continued into the eighties with two of the hotspots, Perimeter Center and Gwinnett County, experiencing substantial growth. Cobb County's Cumberland, however, remains the number one growth area in Metro Atlanta topping the area in office leasing with no end to its growth in sight. These areas located beyond Atlanta's Perimeter have excellent freeway access and abundant developable land. Local commercial retail estate broker's believe that the suburban areas will continue to lead the region in new commercial development.

Internationally renowned architects, John Portman and Kevin Roche, plan projects that will compete with Atlanta's Ackerman and Company's mixed-use development in the Perimeter Center area (Figure 9).

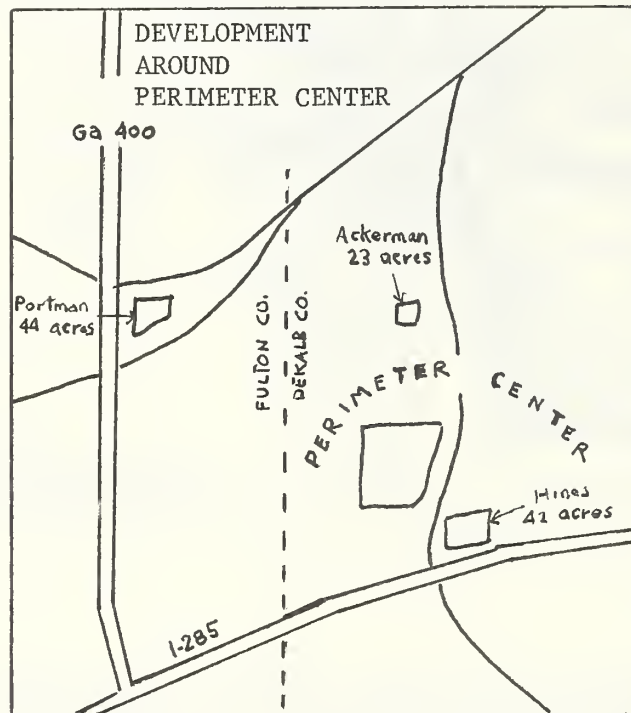


Figure 9

Portman and his partner Hal Barry are planning a mixed-use development of 44 acres located at Abernathy Road and Georgia 400. Georgia 400 is a new four-lane highway that has faced stiff opposition from Perimeter residents who are trying to forestall the urban sprawl of this highway project. Roche is the designer of the Gerald Hines development. Mr. Hines, a Houston developer, has been quite active in the Atlanta market and has had special interest in transit station area development (See Decatur case).

Perimeter Center, the sprawling 2.9 million square foot office park is surrounded by affluent residential Dunwoody. Residents fear that the planned 2 million square foot (by 1985) of office space added to the existing 7.5 million in the general area is too much growth. This total of competitive office space is second only to downtown Atlanta's 11.4 million square feet and is the reason that this area in north Atlanta has often been called a "second downtown."

Ackerman's project (scheduled to open in early 1985) began construction in April of 1984, with initial development of a ten-story office building and a ten-story hotel. The total project will involve two additional five-story buildings for a total of 530,000 square feet of office space. The Hines development broke ground in late 1983 with construction of a seventeen-story office building. When completed, the six year project will include another seventeen-story office building and two eighteen-story office buildings for a total of 1.5 million square feet. Future construction will add a hotel to this complex.

Gwinnett County is one of America's fastest growing counties with the population increasing from 72,000 to 167,000 during the seventies. Projections are that by 1990, the population will have increased by 296,000 making Gwinnett the state's third largest county. Gwinnett Place, the 1.2 million square foot mall, opened in February, will anchor more than 3 million square feet of commercial development (Figure 10). The mall was constructed by the Cadillac-Fairview Corporation. Surrounding it will be five small "strip" shopping centers, three office centers, and three recently announced apartment complexes totaling 5000 units. Gwinnett Place development is similar to that which took place around Cumberland Mall.

By almost any measure, Cumberland is the leading metro growth area. Atlanta based REDI/Databank, Inc. estimates that retail and office market growth in the area increased by 272 percent between 1975 and 1983, compared to a downtown market growth of 52 percent and a suburban market growth of 141 percent during the same period. Office leasing in Cumberland leads the metro area and residential single family housing construction leads the rest of metro Atlanta. Abundant office parks surrounding

Cumberland Mall house 6.1 million square feet of space. Seven office buildings totaling 1.7 million square feet are presently under construction. When completed, Cumberland will be the third largest office market. The new Galleria Mall adds abundant retail space and includes the 400 room Waverly Hotel.

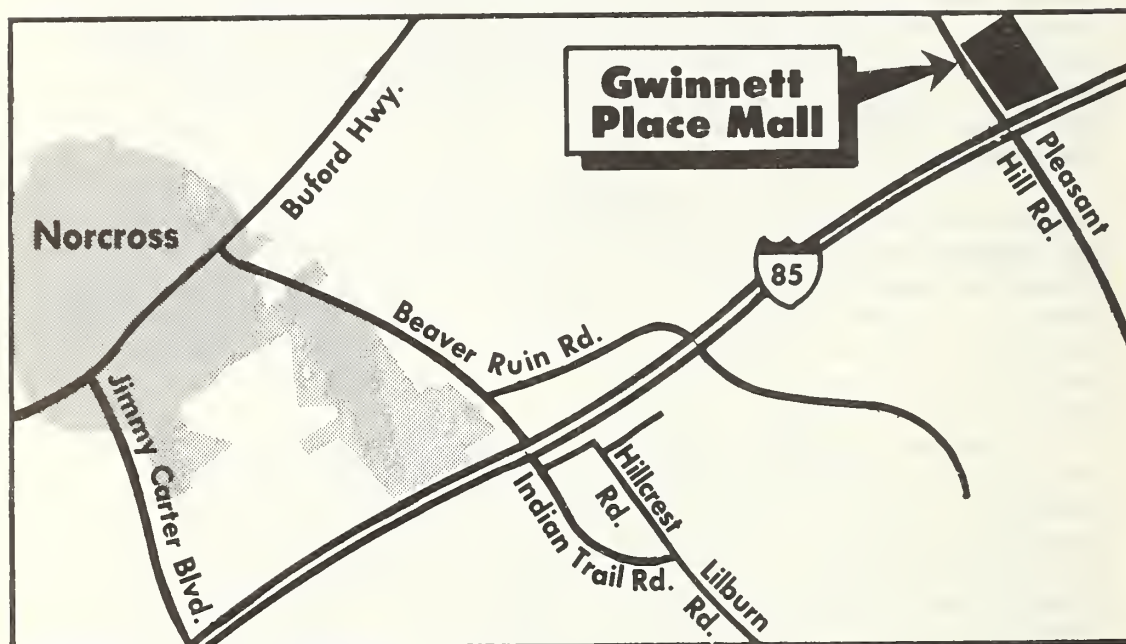


Figure 10

Architect-developer, John Portman is perhaps downtown Atlanta's most ardent supporter. He and others see the decade of 1985-1995 as a significant development period for the downtown core. Bolstered by the city's commitment to redevelop Underground Atlanta as the major entertainment complex in metro, nearly \$450 million of new downtown construction is underway. Major hotels, the Marriott Marquis and the Ritz-Carlton Atlanta along with the recently opened Georgia Pacific Headquarters are changing Atlanta's skyline. All are within a short walk to downtown MARTA rail stations. Figure 11 give graphical evidence of significant new interest in the downtown.

Balanced growth in the region is sought by metro planners by luring some of the major suburban development back to downtown Atlanta. One strategy is the new urban enterprise zone. The first created is located west of downtown where the city will use tax incentives to attract business. Commercial development of substantial city holdings in the West End area and new ways to stimulate growth in the industrial southside are major thrusts of city officials. The importance of MARTA are

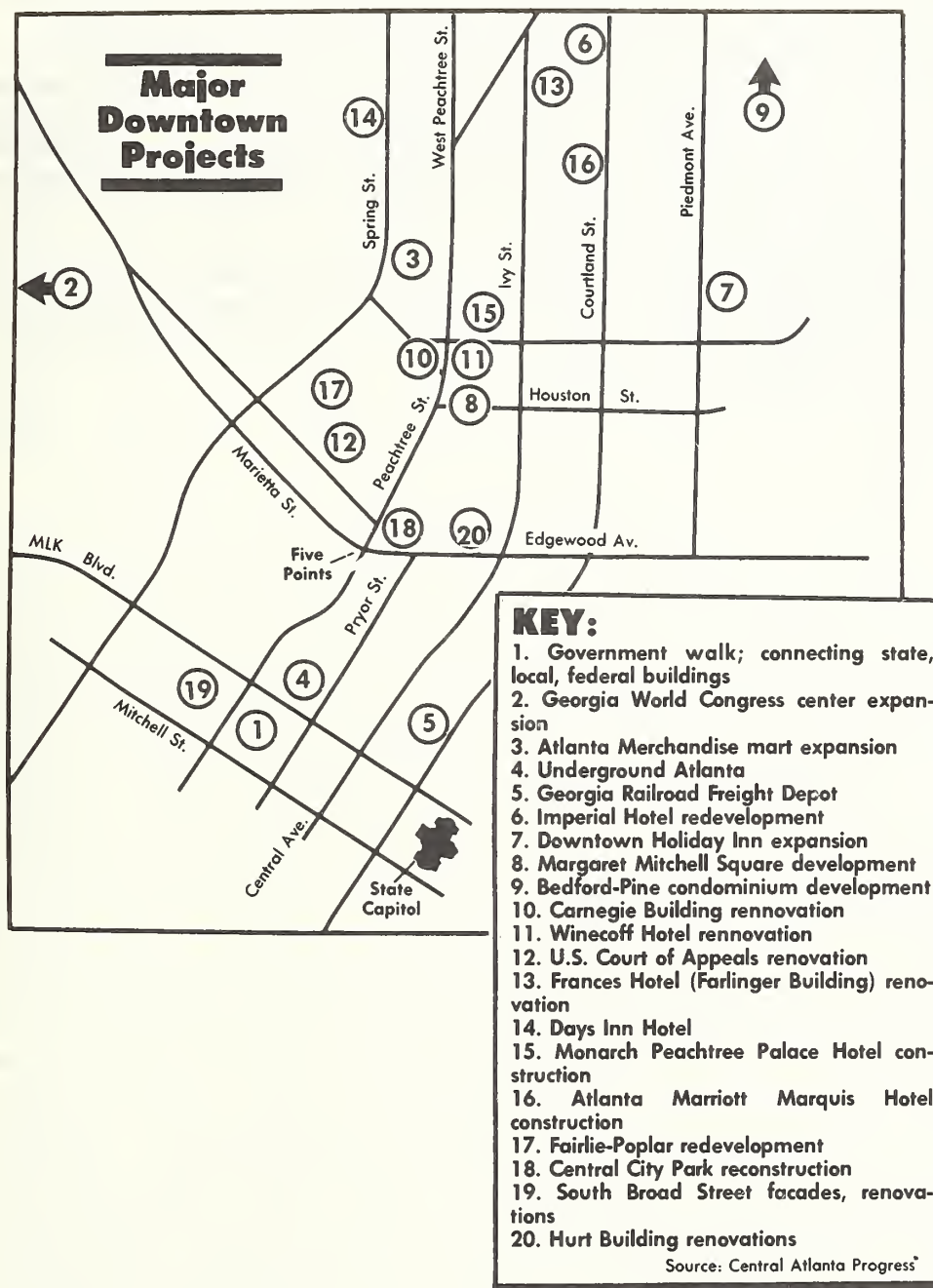


FIGURE 11

cited both by the city's Chief of Economic Development, Richard Stogner and Richard Courtney, ARC's Chief Land-Use Planner. Stogner lists MARTA's north south rail extension among positive city developments. Coupled with the extension of the Georgia World Congress Center, new downtown hotels and revitalization of Underground Atlanta (all within walking distance of MARTA stations), MARTA rail is an important factor in the city's future development. Courtney believes that an increase in high intensity development around the rail station and the successful redevelopment of downtown Atlanta are major elements needed to direct growth anticipated in the suburban northside,

This brief summary of development trends in metropolitan Atlanta provides a base line with which to compare development impact of MARTA's rail system. Chapter five summarizes development in ten MARTA station areas.

CHAPTER V

I. INTRODUCTION

Experience suggests that development around rail stations occurs in conjunction with a strong market situation and supportive zoning policies. Station design and the access provided by the station enhance development but market seems to be the most important factor. Development trends in Atlanta follow what has happened in other rail cities. Those stations located in strong market areas (Lenox, Downtown) are booming with major office and hotel construction, whereas low market areas (Ashby, Hightower) have felt little impact from the station. This chapter details the economic impact of MARTA's rapid rail system. While no claim can be made that introduction of a transit station is the sole stimulant to development, it is not accidental that much of the major downtown development has occurred within walking distance of the stations.

As a part of its Transit Impact Monitoring Program (TIMP), the Atlanta Regional Commission (ARC) has developed five development policy classifications for MARTA station areas. The five are (1) high intensity urban node, (2) mixed-use regional node, (3) commuter, (4) community center, and (5) neighborhood. Located primarily in the CBD and areas with high commercial use, high intensity urban node stations have objectives that promote the highest intensity, large scale development projects. Prospective community or regional shopping and office centers are planned for the mixed-use regional node stations. Commuter stations, typically end of line stations, generally have little development potential. Community center station policies encourage residential preservation, redevelopment and the creation of neighborhood centers of activity. Neighborhood protection by prohibiting commercial and/or industrial development is the focus of planning in neighborhood station areas. Low or medium-density residential uses are the recommended development in these areas.

To present a comprehensive assessment of transit-linked development in Atlanta, it was first assumed that one station area from each of the five categories listed above would be examined. This assumption was predicted upon the desire to represent a broad range of traffic levels, economic conditions in surrounding neighborhoods, involvement of private, public and citizen groups and governmental supporting policies. However, preliminary examination and consultation with city, county and MARTA transportation planners resulted in the selection of the following ten stations: Arts Center, Midtown, North Avenue, Civic Center, Peachtree Center, Five Points, Decatur, Ashby,

West End, Lenox. Since these did not conveniently fit ARC classifications, they were grouped into the following categories for analysis; Category I: Peachtree Center and Five Points located in the downtown core, represent areas of high intensity development potential. Category II: Arts Center, Midtown, Civic Center and North Avenue are high intensity nodes located just outside the downtown core, therefore, free of the space limitations of Category I. Decatur and Lenox, though on the opposite end of the scale as far as realized development, are both mixed-use regional node stations and comprise Category III. The final (Category IV) is made up of two stations located in predominately black neighborhoods. Ashby and West End do not fit conveniently into one of the five ARC designations. For TSADS purposes, West End is classified as a community center station and Ashby as a high intensity node. This study views both stations as hybrids of community center and neighborhood types. This suggests that neighborhood preservation is desired but that the desire is not so strong as to totally prohibit development.

The first three categories are development encouraging and as such should represent nodes that have increased residential, office and retail sales and new residential and office construction. Category IV is more development restrictive, however, the Ashby Street Station was projected to be a revitalizing agent in the Atlanta University, Martin Luther King Blvd. area. West End, which recently opened is the focus of intense city interest in fostering development and economic revitalization in the city's south side corridor.

II. CATEGORY I

FIVE POINTS

Beginning the case studies with the Five Points station is appropriate since it is the hub of the MARTA system. The largest of all stations, it is the transfer point between the East-West and North-South lines. Constructed at a cost of \$45 million, the station is located north of the intersection of Peachtree and Alabama Streets and has no parking facilities.

Five Points was once the commercial hub of Atlanta but is now an area populated by office use to the north and retail establishments to the south. The station has direct entrance to Rich's Department Store which remains a major retail anchor to downtown Atlanta. The tunnel connecting Rich's to MARTA was built by the department store, which was charged a modest connection fee. Negotiation between Rich's and MARTA began in early 1976, culminating in a construction agreement in June 1979.

STATION DATA

FIVE POINTS

- | | | |
|-------------------------------------|--|---------|
| 1. Boundaries: | Bounded by Alabama Street on the South, Peachtree on the East, Forsyth on the West and Marietta on the North. | |
| 2. Cost: | \$45 Million | |
| 3. <u>Opening Date</u> : | June 1980 | |
| 4. Average Daily <u>Ridership</u> : | As of June 1983 | 27,000 |
| | TSADS projections | 100,000 |
| 5. <u>Other</u> : | Has both side and center platforms, four levels, 3 elevators and 28 escalators. Pedestrian tunnel connecting to Rich's Department Store. | |

This agreement provided that Rich's reimburse MARTA \$265,000 for construction of its direct access tunnel. In addition Rich's would be responsible for all maintenance and would pay a \$1,000 per year connection fee for 25 years.

A. UNDERGROUND

The "Heart of Atlanta" development plan prepared by the Rouse subsidiary, American City Corporation, has as its primary focus redevelopment of Underground Atlanta. It is significant that American City sees the location of the Five Points station with a direct connection to Underground as a major positive factor supporting this redevelopment. Many area residents firmly believe that MARTA construction in large measure was responsible for Underground's demise. Disruption caused by subway construction along with the onslaught of rats are often cited as major causes. Subway construction was blamed for funneling large population of rats into

Underground. Though these were contributing factors, the image of crime, decline and threat to public safety were probably the real cause. Lack of developer control over all properties and under-capitalization are also frequently cited reasons.

The proposed 120 million dollar Underground development will feature a market place similar to Faneuil Hall in Boston and Harbor Place in Baltimore, other Rouse projects. The Market Place will be augmented by a multimedia theater, period museum, railroad display and outdoor amphitheater. A series of interconnected plazas and open spaces will serve as activity centers and provide relief from the closed-in feeling of Underground. The Five Points Plaza would be a major festive plaza and also serve as a major entry into Underground. Located adjacent to the MARTA Station, the plaza would encompass approximately 82,000 square feet and enjoy the accessibility provided by MARTA.

Subsequent phases of the project include construction of major new office buildings and hotels. In addition, residential development should follow once the ambiance of the area takes hold. Table I summarizes uses to be included in the core project.

The economic impact of Underground is projected as \$70 million during its first full year in 1987 expanding to \$90 million in 1990. The project is expected to attract 11.5 million visitors annually with more than half of those being convention delegates and tourists. Retail sales taxes of \$3.8 million in the first year and \$4.5 million in 1990, employment for 2000 to 2500 persons and business opportunities for an estimated 75 to 100 merchants attest to the significant economic impact. Visitors to the project will increase transit ridership by 2.4 to 3.0 million annually. The catalytic impact in stimulating other southside business development is placed at over \$200 million (2).

Spinoffs from the Underground project will be felt in the area surrounding MARTA's Garnett Street station. Presently, underdeveloped, this area presents an opportunity to stimulate private investment as a result of the improving image created by its Underground neighbor. Residential development should take place featuring a mixture of low and mid-rise dwellings within walking distance of the Garnett, Georgia State and Five Points stations.

Private sector participation in the project would involve fee simple transfer or property ownership of long term leases. The private developer would then be responsible for construction, operation and maintenance of discreet use components. The four major components undertaken by private developers are (1) the marketplace retail center; (2) remerchandised convention retail space; (3) renovated professional office space; and (4) the "Atlanta Experience" Theatre.

Growth Management tools to ensure success of the Underground project are

- (1) acquisition of private properties;

TABLE I

CORE PROJECT PRELIMINARY DEVELOPMENT PLANPhase One

* Five Points Plaza	82,000 Sq. Ft.
* Depot Plaza	160,000 Sq. Ft.
* Marketplace Retail Center	145,000 Sq. Ft.
* "Atlanta Experience" Theater	10,000 Sq. Ft. GLA
* Period Museum	22,500 Sq. Ft. GBA
* Railroad Display	-
* Outdoor	-
* Remerchandised Conventional Retail Space	37,700 Sq. Ft. GLA
* Renovated Professional Office Space	135,900 Sq. Ft. GLA
* Structured Parking	1,200 spaces

Subsequent Phases

* State Office Building	340,000 Sq. Ft. GLA
* Peachtree/Decatur Office Tower	680,000 Sq. Ft. GLA
* Marietta/Forsyth Office and Retail	312,000 Sq. Ft. GLA
* Plaza Hotel	325 rooms

Source: American City Corporation

- (2) establishing control over public properties;
- (3) establishing a single entity to exercise control over all properties, negotiate private sector agreements, and orchestrate implementation of other supportive actions required for project success;
- (4) Creation of "Heart of Atlanta Business Improvement District" establishing renovation standards for store fronts in the immediate area.

Financing arrangements include joint financing by MARTA, the city and local development agencies of the initial feasibility study and favorable construction financing arrangements. These

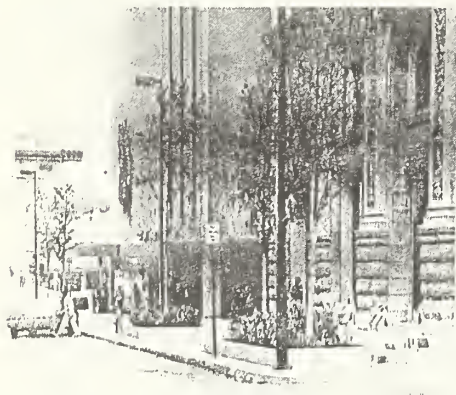
arrangements call for the city to underwrite major portions of the construction cost and were a major issue threatening final approval of the project by the city council.

B. FAIRLIE - POPLAR

Located midway between the Five Points and Peachtree Center stations is this joint public/private effort to enhance downtown retail and office space. The project, coordinated by Central Atlanta Progress, uses Community Development Block Grants, Economic Development Administration and Land and Water Conservation funds combined with tax incentives to revitalize this core downtown area. Between 1978 and 1982, nearly \$68 million in private monies were invested in the district. Acquisition and building renovation comprise the major portion of the project. However, street-scape treatments, busway and street construction and upgraded park facilities are all part of the effort.

C. BROAD STREET MALL

The Broad Street Pedestrian Mall connecting the Five Points and Garnett Stations is a \$700,000 joint development financed by the City of Atlanta, MARTA and Community Development Block Grant funds. The primary north-south pedestrian corridor in the Fairlie-Popular district, Broad Street was closed to vehicular traffic except buses. The street has been reduced from four to two lanes, the sidewalks widened and resurfaced and enhanced by landscaping and street furniture. Streetscaping of two blocks of Poplar between Forsyth and Cone create a pedestrian walkway populated by fast food restaurants and a few unique eateries. On-going and future building renovation is designed to turn the area into a quality retail and dining district.



Completed streetscapes along Broad, Poplar

D. GOVERNMENT WALK

This \$74.3 million project is intended to ensure design coordination between public and private projects to be located in the ten block area bounded between the Five Points and Garnett Stations (north/south) and the State Capitol and the federal office building on the east and west. The three-phase project includes streetscape improvements and a mid-block mall in Phases I and II respectively. Conversion of the old Post Office for federal office space, construction of a \$60 million Fulton County intergovernmental office complex and renovation of the Georgia Railroad Freight Bureau comprise Phase III.

Phase I of Government Walk includes street improvements to Mitchell Street and Martin Luther King, Jr. Drive and sidewalk improvements in front of the Georgia Railroad Freight Depot. These will be funded by a \$260,000 Community Development Block Grant. A pedestrian connection from the Richard B. Russell building to the State Capitol is the cornerstone of Phase II.

The dearth of vacant land and MARTA policy prohibiting development of air rights over the Five Points station limit high intensity development potential in the immediate area. However, with a concentration of parks and pedestrian plazas and the thrust to revive Underground, the "Heart of Atlanta" will be the major downtown entertainment, retail and social district the city needs.

PEACHTREE CENTER

The second major downtown development node is the Peachtree Center Station area. Located 110 feet beneath Peachtree Street between Ellis and Harris Street, the station opens into the Peachtree Center complex. This office and retail center was built by John Portman beginning in the early sixties.

High intensity uses within 600 to 1,000 feet of the station, promotion of a southside growth strategy and development of street level retail, service and entertainment were TSADS goals in 1976. The southside is an area extending south of downtown to the Airport and west to encompass the Atlanta University Center. It is mostly underdeveloped land in depressed neighborhoods.

With John Portman planning to begin construction on a \$50 million 450,000 square foot office tower addition to his center in 1984, it seems that TSADS goals are being realized at this node. The project, which was originally scheduled for 1980, encountered financing difficulty and thus delayed until now. Already Portman has begun construction on a \$50 million 600,000 square foot addition to the Merchandise Mart (Figure 12). Two major hotels, The Marriott Marquis and the Ritz-Carlton Atlanta, each with easy access to the Peachtree Center Station are nearing completion.

STATION DATA

PEACHTREE CENTER

- | | |
|------------------------------------|--|
| 1. <u>Boundaries:</u> | Located approximately 110 feet beneath Peachtree Street with a north/south orientation between Harris and Ellis Streets. |
| 2. <u>Cost:</u> | \$75 million |
| 3. <u>Opening Date:</u> | April, 1983 |
| 4. <u>Average Daily Ridership:</u> | As of June, 1983 |
| | Proposed 115,000 |
| 5. <u>Other:</u> | Four entrances; Gas Light Tower, Merchandise Mart, Georgia Pacific, Library and Carnegie Way. |

The Marriott Marquis will add 1674 new rooms with the top floors aimed at a luxury market. This 52-story addition to Peachtree Center is the city's largest convention hotel. Only a block away across from one entrance to the Peachtree Center Station is W. B. Johnson's 25-story 500 room Ritz-Carlton Atlanta. This luxury hotel is aimed at the same market as the Marriott.

Coincident with the unveiling of Rouse's plan for Underground was an announcement by Portman to add a \$60 million futuristic entertainment/retail complex to Peachtree Center. Although some concern existed over the ability of the two projects to be successful simultaneously, city officials offered support for both of them. Portman, who thus far, has been unsuccessful in his negotiation with Rich's Department Store to move to Peachtree Center has withdrawn his plan. It is interesting that Rich's is also a crucial anchor to the Underground proposal.

In late 1982, Georgia Pacific began moving into its 52-story office complex known as Georgia-Pacific Center. The office tower will have a direct connection to the Peachtree Center Station. Combining its corporate headquarters with speculative office and retail space is a unique concept for Atlanta. The building cost \$90 million and Georgia Pacific expects to occupy about half of

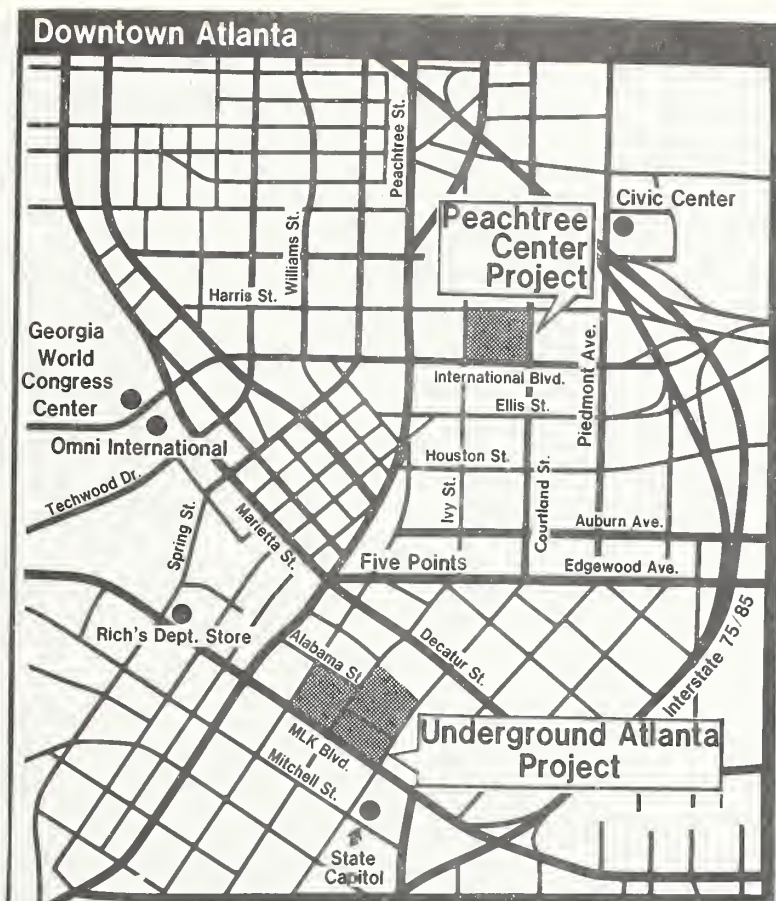


Figure 12

the space. The company has also acquired other property in the area and is very interested in acquiring air rights over the Peachtree Station. Knockout panels have been constructed in The Georgia Pacific building which will eventually yield direct access to the Peachtree Center station.

Figures 13, 14, 15, are 1967, 1975 and 1983 aerial views of the downtown. Though not showing the exact same view for all three years, these aerials clearly show the activity centered on the downtown station areas.

III. CATEGORY II

Atlanta's "Midtown" is located less than a mile from the CBD between Eighth and Sixteenth Street along the Peachtree corridor. Once a booming residential and shopping center, the area began a period of deterioration during the late sixties. First it became home to hippies and itinerant residents, giving way after the hippy movement to porno businesses and massage parlors during the early seventies. In 1975, Central Atlanta Progress, a nonprofit civic



Figure 13 1967 Aerial View of Downtown Atlanta

COPYRIGHT © 1972 BY THE UNIVERSITY OF MICHIGAN AERIAL PHOTOGRAPHY, INC. ALL RIGHTS RESERVED



COPYRIGHT © 1975 BY DILLON AERIAL PHOTOGRAPHY, INC. ALL RIGHTS RESERVED.

Figure 14 1975 Aerial View of Downtown Atlanta



COPYRIGHT © 1983 BY DILLON AERIAL PHOTOGRAPHY INC. ALL RIGHTS RESERVED

Figure 15 1983 Aerial View of Downtown Atlanta

and development organization, and local businesses instituted the Peachtree Walk Project. The project was designed to clean up the Midtown area, ridding Atlanta of this embarrassing "Red Light" district. Through enactment of nuisance laws and other ordinances, prostitutes and pornographic businesses were made unwelcome.

Today, Midtown, which is the center of Atlanta's art and theatre communities, is considered an "in-place" to live. Approximately 18,000 residents comprise the middle and upper-middle class communities of Midtown, Ansley Park, Sherwood Forest and Virginia Highlands. The High Museum of Art, Atlanta Symphony, Atlanta College of Art, Atlanta Ballet and a host of art galleries and small theatres call Midtown their home.

Three stations serve this area: North Avenue, Midtown and Arts Center. Civic Center although not serving the Midtown area is similar in character to the Arts Center and Midtown Stations and thus is included in Category II.

The Midtown station is located two miles from Five Points west of Peachtree between Tenth Street and Peachtree Place at Columbia Avenue. Its proximity to Piedmont Park, which hosts major arts festivals and concerts, is important as Midtown strives to become the cultural center of Atlanta. The Civic Center Station lies just south of Midtown between the North Avenue and Peachtree Center Stations. Spanning interstates I-75/85 at West Peachtree Street, the Civic Center Station has a direct connection to the Peachtree Summit, a multi-use office complex that serves as MARTA's headquarters. Located beneath Southern Bell's new headquarters, the North Avenue Station is the northern end of the CBD and the southern end of Midtown.

One-half mile north of the Midtown Station is the Arts Center Station. Designed to complement Atlanta's Memorial Arts Center, the Arts Center Station has a broad plaza as a part of its West Peachtree entrance. A direct connection (pedestrian bridge) between the Memorial Arts Center and the station was financed jointly by MARTA, the City and the State. The Arts Center Station is located on a 6.3 acre site bounded on the east by Lombardy Way and on the west by West Peachtree near Pershing Point. The site is located in an area with medium density office-industrial and residential uses.

The primary land-uses recommended by TSADS for the four station areas include preservation of the Georgia Tech, Midtown and Bedford Pines neighborhoods through the restriction of high-intensity development on a corridor basis. However, high-intensity mixed-use developments are recommended in nodes immediately adjacent to the stations. Special district zoning for the Civic Center area encourages pedestrian space in the form of parks, plazas and bikeways. Medium-density residential construction is recommended to buffer Midtown from the primary impact area. In-town residential housing is recommended for Bedford Pines through the Bedford Pines Redevelopment Project. The major emphasis of the Midtown node is to create an

STATION DATA

ARTS CENTER

1. Boundaries: Built on a 6.3 acre triangular shaped block bounded on the east by Lombardy Way and on the west by West Peachtree.
2. Cost: \$15.7 million
3. Opening Date: December 1982
4. Average Daily Ridership: As of June 1983 14,300

MIDTOWN

1. Boundaries: Located under Columbia Avenue between Peachtree and Tenth Street.
2. Cost: \$11.9 million
3. Opening Date: December 1982
4. Average Daily Ridership: As of June 1983 4,100

NORTH AVENUE

1. Boundaries: On the north by Ponce de Leon Avenue, the south by North Avenue, the west by West Peachtree and the east by Peachtree Street.
2. Cost: \$12.7 million
3. Opening Date: December 1981
4. Average Daily Ridership: As of June 1983 6,700

CIVIC CENTER

1. Boundaries: Spans I-75/85 at West Peachtree.
2. Cost: \$17.2 million
3. Opening Date: December 1981
4. Average Daily Ridership: As of June 1983 1,800

employment, shopping, living and entertainment center. It is seen as a key in the continuing efforts to restore the area to prominence and reverse the trend of deterioration that began in the sixties.

A. PEACHTREE WALK PARK PROJECT

A joint venture between the City of Atlanta, MARTA, Central Atlanta Progress and the Midtown Business Association, the Peachtree Walk Park is an important amenity designed to attract new development to the Midtown area. The Park Project proposes to create "a ribbon of green space" stretching more than a mile between the North Avenue and Arts Center rail stations. Parallel-ling the Peachtree corridor, this 1982 proposal is a refinement of the original open space component of TSADS for the North Avenue, Midtown and Arts Center station area plans. This joint development effort is important both for its immediate impact, and also because it requires substantial public and private commitment and cooperation to implement.

Composed of walkways and trees, passive areas for people, new lighting standards, benches and trash receptacles, the park will create a visually appealing and functional area. Residents have agreed to provide temporary easements and private developers have expressed a willingness to incorporate the park concept into their designs. The total projected cost of the project is \$400,000 and is to be completed in three phases.

B. PEACHTREE SUMMIT

Diamond and Kaye Properties and P. C. Associates combined for proposed construction of this \$150 million complex on West Peachtree. Original plans called for a mall over the downtown expressway and three "trend setting" high-rise glass office towers consisting of 3 million square feet. A proposed people mover connecting the complex to the Atlanta Civic Center was never built, but the complex which houses MARTA along with Coca-Cola and Continental Insurance among its principal occupants does have a direct connection to the Civic Center Station. Only one building (\$34 million, 30-story, 900,000 square feet) of the three has been constructed. The proposed level of retail has not materialized, as a newsstand, three restaurants, a cafeteria and sandwich shop, are all that exist. The Peachtree Summit represents an early example of transit-linked development in Atlanta.

C. PEACHTREE PROMENADE

The proposed "Peachtree Promenade" is a series of parklike pedestrian walkways and plazas built over the highway linking the Civic Center and the MARTA Civic Center Station. As continued expansion and widening of Interstate 75 and 85 produces wider

separation of the city, this promenade is an important connection. Highway officials are constructing the foundation for the promenade during the freeway construction. The promenade offers the potential to generate more transit patronage because of its access to the station. The physical attractiveness will enhance development potential and provide space for arts festivals, shops and outdoor restaurants. Proponents of the promenade envision it as a substitute for the people mover required by MARTA under provisions of the referendum system.

D. RENAISSANCE PARK

Renaissance Park is the name given to developer Charles Ackerman's condominium project located in the Bedford Pines neighborhood just east of the Civic Center station. This is the outgrowth of the Bedford Pines Redevelopment Project that began nearly ten years ago to transform the former Buttermilk Bottom neighborhood into an attractive middle income neighborhood.

The original Renaissance Park Project has been scaled down from 800 units with two high-rise buildings to between three and four hundred units. Twenty-eight units were constructed in the first phase. Financing difficulties for the second phase were overcome when six Atlanta banks agreed to share the risk. Ackerman began the second phase in January which adds 56 one and two bedroom units. Recognizing that the loan would not be very profitable, the banks saw their contribution as important to stimulating downtown housing development. The attractive financing arrangement called for an interest rate one percent above prime and no fees for administration of the loan.

E. SOUTHERN BELL

In the mid-seventies, Southern Bell was negotiating purchase of the Peachtree Corner, on which the old Fox Theatre stood, for its new regional headquarters. Public outcry resulted in a "Save the Fox" campaign that ended with Atlanta Landmarks a real estate development firm implementing a land swap with Southern Bell. The deal gave Southern Bell the rest of the block in exchange for the Fox. Although portrayed as a villain during much of this fourteen month negotiation, several Atlanta real estate firms believe that Southern Bell was instrumental in concluding the deal that saved the Fox.

To date, the \$100 million, 1.9 million square foot Southern Bell building is the most significant private development in a MARTA transit station area. The 47 story-complex of shops, restaurants, and office space has allowed Southern Bell to consolidate more than 3500 employees from twelve different locations. The 2.8 acre retail mall has space for 28 shops. Originally planned

for 25,000 square feet of retail, demand has expanded this to close to 40,000 square feet.

Constructed over the air rights of MARTA's North Avenue Station, Bell scaled-down its parking lot at the request of both the City and MARTA. MARTA had convinced Bell that its station would be open in time to service the Bell complex. Construction delays at the Peachtree Center Station threatened opening of the North Avenue Station. Delays of up to a year after Bell's opening seemed probable. In an unprecedented move, the MARTA Board authorized opening of the North-South line before completion of the Peachtree Center Station. A one-track shuttle through the unfinished Peachtree Center station terminating at North Avenue was the solution implemented. This is an example of the extraordinary cooperation necessary to successfully implement joint development projects, and of the extreme measures MARTA was willing to take to accommodate one of its joint development partners.

F. OTHER DEVELOPMENTS

Midtown represents a tremendous opportunity for developers. Its close proximity to downtown and abundance of developable land make the area extremely attractive. Shortly after the referendum approving the rail system, several developers assembled tracts of land adjacent to the stations at substantially depressed prices. Midtown planners and merchants complain that this land is now being held for speculation and thus retards commercial development along the Peachtree corridor.

Hooker Barnes, a major Atlanta developer, began land assembly in 1982 and today holds nearly ten acres around the Midtown Station. This \$10 million investment spawns a twenty-five year plan to replace existing buildings with multi-use developments known as the Tenth Street Project. The \$400 million Tenth Street Project consists of 1.6 million square feet of office space in about a dozen 22 to 35 floor buildings. Five mid-rise structures will add 650 residential units. A 500-room hotel and 100-room apartment-style executive hotel will complete the project. The project, to be built in four quadrants around the Midtown Station, will include 150,000 to 200,000 square feet of retail.

Holder Management is developing the first phase of its 225,000 square feet of speculative office space to be known as One Midtown Plaza. The \$40 million project located adjacent to the Midtown station opened August of 1984.

Across from the High Museum near the Arts Center Station, Carter and Associates has completed its seven story, 150,000 square foot headquarters which opened in September of 1984. A spectacular \$15 million expansion of the High Museum completed in December 1983, doubles its exhibition space.

The Murphree Company has negotiated a long-term lease agreement with MARTA to build a 500,000 square foot complex on their Arts Center property. In 1981, AT&T completed construction on its \$45 million twelve-story headquarters. The building located one block east of the Arts Center Station has 385,000 square feet and 650 parking spaces. On a 7.4 acre site surrounding the Arts Center Station, Colony Park Development Consulta of America plans to construct 700 condominium units with a mix of low and high-rise structures. The \$75 million project is planned over a six-year period. The first phase of the project began in late 1984 with construction of 121 units.

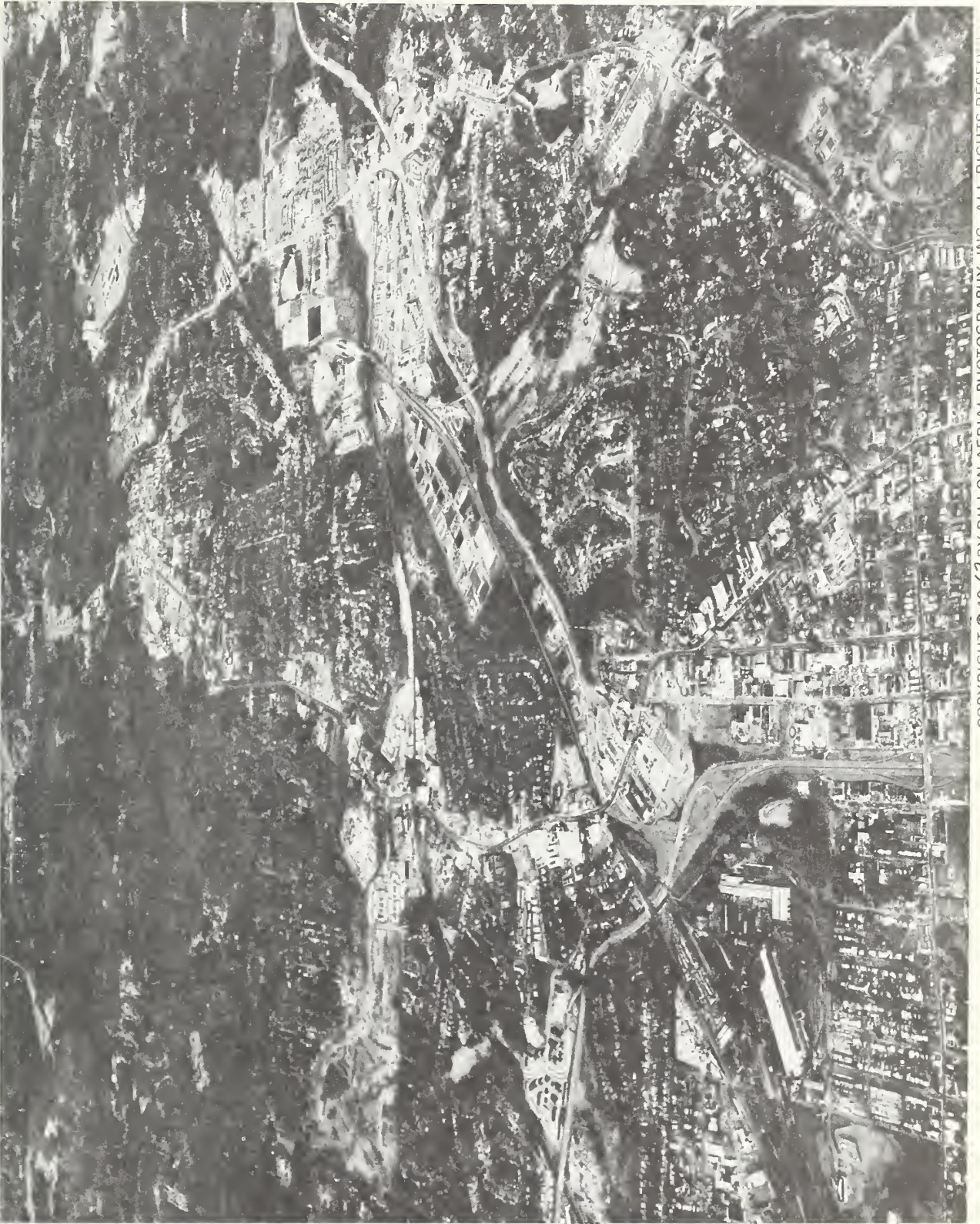
A joint venture between Construction Management Systems Development Company and Pei Property Development Corporation will result in a 600-room \$50 million hotel complex adjacent to the Atlanta Civic Center.

The Midtown area is bustling with development. Speculative office space, new corporate headquarters, hotels and residential units attest to its vitality. The area's location and ambiance are factors in its revitalization. So too are the availability of developable land and the access provided by the three rail stations. However, a great deal of credit must go to (1) MARTA which as developed realistic policies to dispose of its excess land, (2) Central Atlanta Progress for its diligence and commitment to restoring the area to its lost prominence and especially to the (3) Midtown Business Association a group of neighborhood businessmen and women whose continued involvement has rid the area of its porno image, pushed to implement the parks and street-scaping and development of a marketing approach to attract legitimate business. Key developments are highlighted in these 1967, 1975, and 1983 aerial photos of the Midtown area (Figures 16-19).

IV. CATEGORY III

ASHBY

Ashby Street Station is located north of Martin Luther King Blvd. at the intersection of Ashby and Carter Streets near the Atlanta University Center complex in the heart of the former Hunter/Ashby black commercial district. The station area plan proposes redevelopment with a mixed-use activity center including a shopping mall, offices, entertainment, housing, community services and open spaces. To enhance the strong community focus, housing, linear parks, bikeways and improved bus access are encouraged. The University West Project was the vehicle through which the TSADS proposal would be implemented.



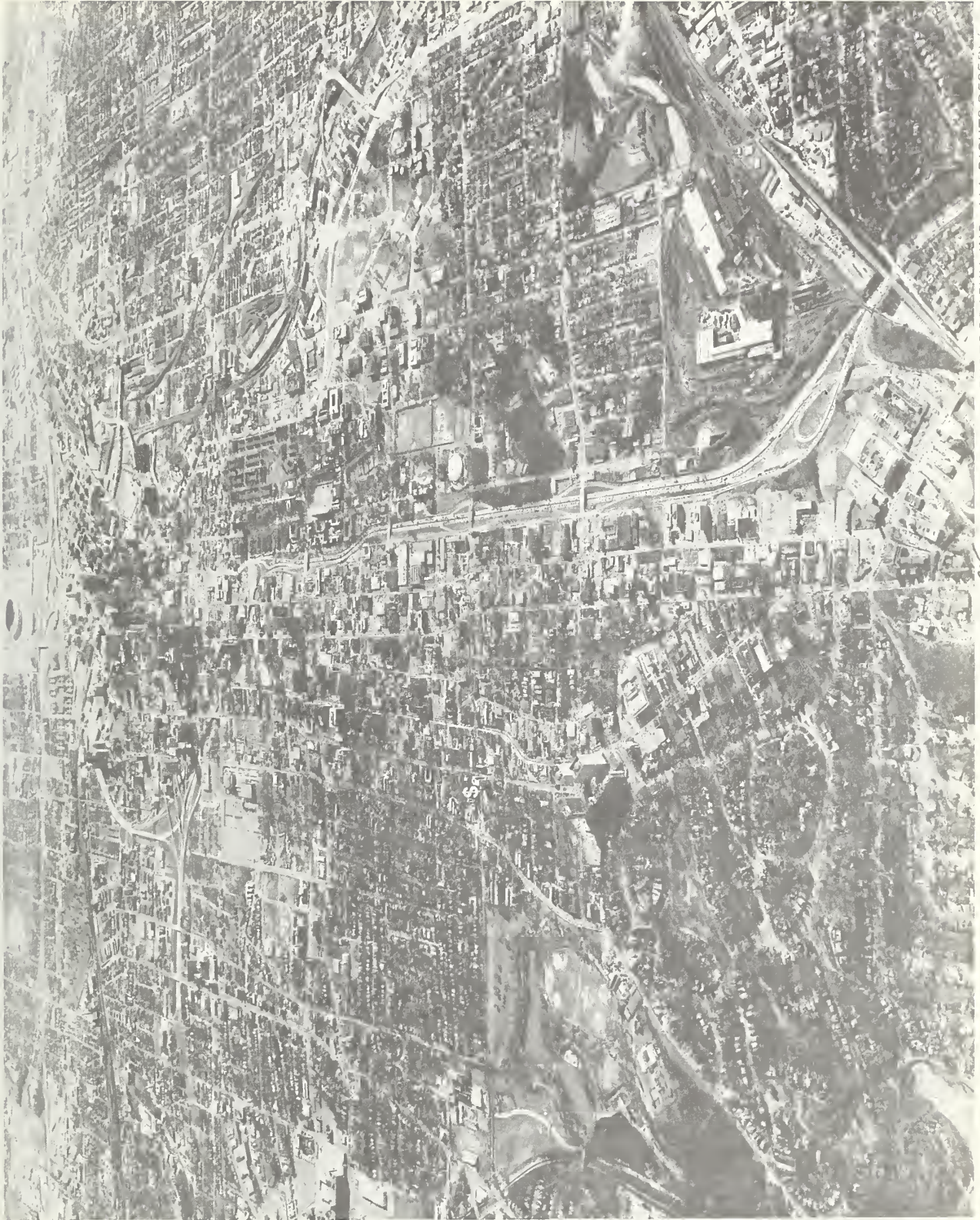
COPYRIGHT © 1967 BY DILLON AERIAL PHOTOGRAPHY, INC. ALL RIGHTS RESERVED.

Figure 16 1967 Aerial View of Midtown



COPYRIGHT © 1975 BY DILLON AERIAL PHOTOGRAPHY, INC. ALL RIGHTS RESERVED.

Figure 17 1975 Aerial View of Midtown



COPYRIGHT © 1975 BY DILLON AERIAL PHOTOGRAPHY, INC. ALL RIGHTS RESERVED

Figure 18 1975 Aerial View of Midtown



COPYRIGHT © 1983 BY DILLON AERIAL PHOTOGRAPHY INC. ALL RIGHTS RESERVED

Figure 19 1983 Aerial View of Midtown

STATION DATA

ASHBY

- | | |
|--------------------------------------|---|
| 1. <u>Boundaries:</u> | Lena Street on the north, Howell Street on the south, Mason Turner on the east, and Ashby Street on the west. |
| 2. <u>Cost:</u> | \$15.2 million (including parking lot) |
| 3. <u>Opening Date:</u> | December, 1979 |
| 4. <u>Averaging Daily Ridership:</u> | As of June, 1983 3,400
TSADS projections 14,000 |

UNIVERSITY WEST

The organization which was created principally to spur and coordinate development in the area surrounding the Ashby Street Station was University West, Inc. On March 16, 1976- the Inner-City Development Corporation's Board of Directors realizing that many analyses and studies had been made, but that no "road map" had been developed for accomplishing and implementing the program of development proposed in TSADS passed a resolution. This resolution directed the Hunter Street (MLK Drive) Business Association to investigate, determine and develop a mechanism for the development of the MLK/Ashby corridor. University West, Inc. (a non-profit corporation) was the product of that effort.

The MLK neighborhood located on the edge of the CBD has long had various educational and civic institutions which have helped to create a cohesive community. These include the Atlanta University Center, Booker T. Washington High School, Paschal's Hotel and Restaurant and Washington Park. The area is simultaneously the black business center, the pulse of Black politics and a cultural and education center. However, in the early seventies community growth had begun to fall behind that of other parts of the city. Opening of the Ashby Street Station was looked to provide a catalyst for new growth within the community.

In August of 1976, F. A. Johnson and Associates, a private developer, submitted its framework to guide development in the

core Ashby area. Emphasizing community-based participation in transit-area development, the proposal called for a three-phase approach. Phase I provided for parking for 350 cars, a mixed-use complex housing a museum, library, theater, conference center and industry exhibition space. This was to be augmented by two levels of retail space and a service facility. Phase II called for the construction of two mid-rise office facilities. The first would house retail on the first two floors and office space on the third and fourth. The second was to be devoted to research offices and a club facility. An additional 600-space parking facility would be added in this phase. The final phase (III), consisted of a 10 to 30 floor high-rise office building, 100 apartment units and a 300-room hotel with convention facilities.

The project would be augmented by a Central Market Place. This open air market/trade fair would serve as a satellite of the Atlanta Merchandise Mart. It was seen as a stimulant for other economic development in the form of lodging, restaurants, and entertainment.

A \$3.7 million Urban Development Action Grant was the leveraging agent to secure private financing. University West also sought \$10 million in bonds to meet HUD's private financing requirement for the UDAG Grant. Sale of these bonds were counted on to generate an additional \$10 million in tax free funds. Although the complicated financing never totally materialized, University West did acquire MARTA air rights for \$400,000 and committed to build 150 parking spaces. The City issued Johnson and Associates a \$700,000 loan and authorized University West to issue \$10 million in private industrial revenue bonds. In 1980, HUD gave approval to the updated project and released a \$3.75 million federal grant to the City.

In 1981, National Consumers Cooperative Bank foreclosed the University West Project. Since that time the only development in the vicinity of the Ashby Street station has been in the form of fast food franchises and service stations. A Gulf Service Mart located at the corner of MLK and Ashby opened about the same time as a Kentucky Fried Chicken franchise at 23 Ashby Street. Across the street from the Gulf Service Mart, the Pizza Escape and Electronic Fun Center opened in November, 1983. Sun Runners Deli and Restaurant featuring natural foods opened beside the Ashby Street Station. Sun Runners' manager chose the site primarily because of its proximity to MARTA.

WEST END

West End is currently being touted by city officials as "the area" to stimulate revitalization of southwest Atlanta. However, area residents, merchants and developers have less optimism and enthusiasm, as they recall that only a few years ago similar claims

were made for the University West Project. Located less than a mile away, University West was then being trumpeted as the catalyst to southside redevelopment.

West End is south Atlanta's reviving neighborhood similar to north Atlanta's Virginia Highlands, Midtown and east Atlanta's Inman Park. The area is populated by renovated Victorian homes clustered among more modest dwellings and apartments. The area boasts of the diversity of its residents as well as its residences. A mixture of young and old, black and white, blue-collar and professional make up the neighborhood.

Located on the south line corridor, the West End station resides in an area dotted with industrial and warehousing activities. The area is a mix of a community shopping center (Mall West End), banks and the Candler Warehouse complex. Within a short walk lies the Atlanta University Complex that houses some 9,100 students.

The station area development plan proposes light industrial development, medium and high-density residential, preservation of the Victorian homes and planned shopping development as opposed to strip commercial. An abundance of developable land was acquired by the City through its West End Urban Renewal Project. Included among the nearly 100 acres is prime land on either side of the West End rail station.

The City under the West End Urban Redevelopment project is actively marketing five parcels of land. In an effort to encourage unified development the parcels are to be sold as a single tract. All the parcels are zoned C-3 (Commercial/Residential). As a part of its marketing efforts, the City has put together a set of proposal guidelines that include (1) general application procedure, (2) selection criteria and (3) development guidelines. The guidelines list permitted uses, density requirements, building configuration, access and architectural design requirements and timetable. The initial invitation for proposals resulted in only one bid that was rejected because it missed the submission deadline.

STATION DATA

WEST END

- | | |
|------------------------------------|--|
| 1. <u>Boundaries:</u> | Bounded on the west by Lee Street, north by Gordon and the east by Candler Warehouse Property. |
| 2. <u>Cost:</u> | \$17 million |
| 3. <u>Opening Date:</u> | September, 1982 |
| 4. <u>Average Daily Ridership:</u> | As of June, 1983 17,000 |
| 5. <u>Other:</u> | |

To encourage developer interest, the Atlanta Economic Development Corporation (AEDC) recommends that the City be very specific in its criteria and goals. Unclear goals and subjective proposal evaluation discourages developers interest. AEDC also recommends streamlining the proposal process and requiring a developer to prequalify before submitting a proposal.

It is much too early to predict the outcome of development activity in the West End area. The Victorian Square Corporation is currently constructing 58 townhouse units. However, there is very little other evidence supporting the city's enthusiasm.

Aerial photographs of the West End area show little change between 1967 and 1983.

V. CATEGORY IV

DECATUR

The Decatur station, located .8 miles from the terminus of the East line, is one of the the ten subway stations on the MARTA system as presently configured. The station located at Sycamore Street between North McDonough Street and East Court Square is in the heart of the oldest city in the Atlanta region. There are two subway entrances on the square. The old Decatur entrance exits directly onto the west side of the square whereas the new entrance moves from the subway mezzanine to a shopping bazaar. The course is a montage of bright modern murals, chrome and glass. The station was designed so as not to obstruct the view of the old Decatur Courthouse built in 1898. Parking facilities

STATION DATA

DECATUR

- | | |
|------------------------------------|--|
| 1. <u>Boundaries:</u> | Bounded by East Court Square to the North, McDonough to the South, Swanton Way to the West, and Church Street to the East. It is located between the Avondale Station and the East Lake Station. |
| 2. <u>Cost:</u> | \$13.8 million |
| 3. <u>Opening Date:</u> | June 30, 1979 |
| 4. <u>Average Daily Ridership:</u> | As of June, 1983 4,700
Projected by TSADS 11,000 |
| 5. <u>Other:</u> | a) It is the only underground station on the East Line. |

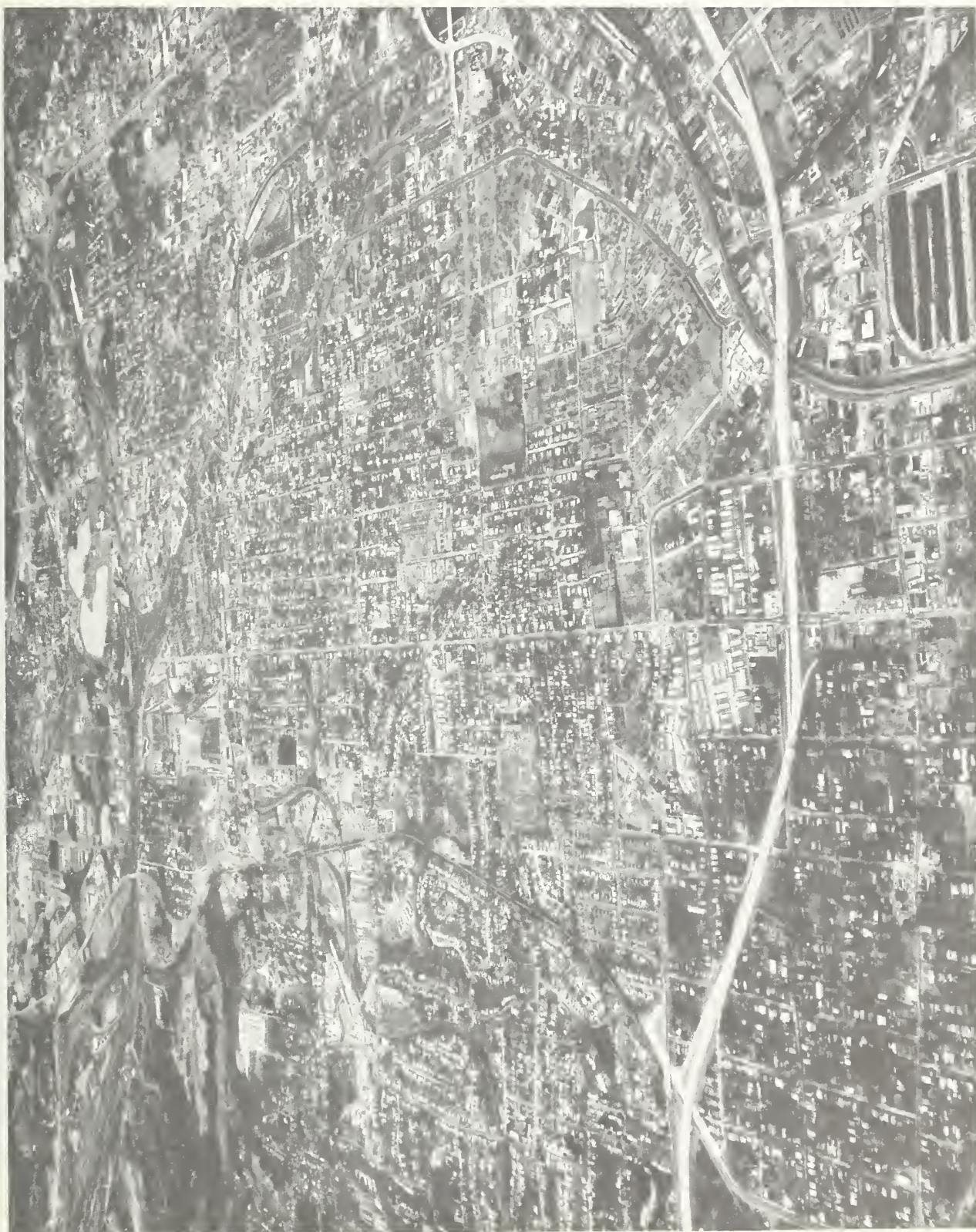
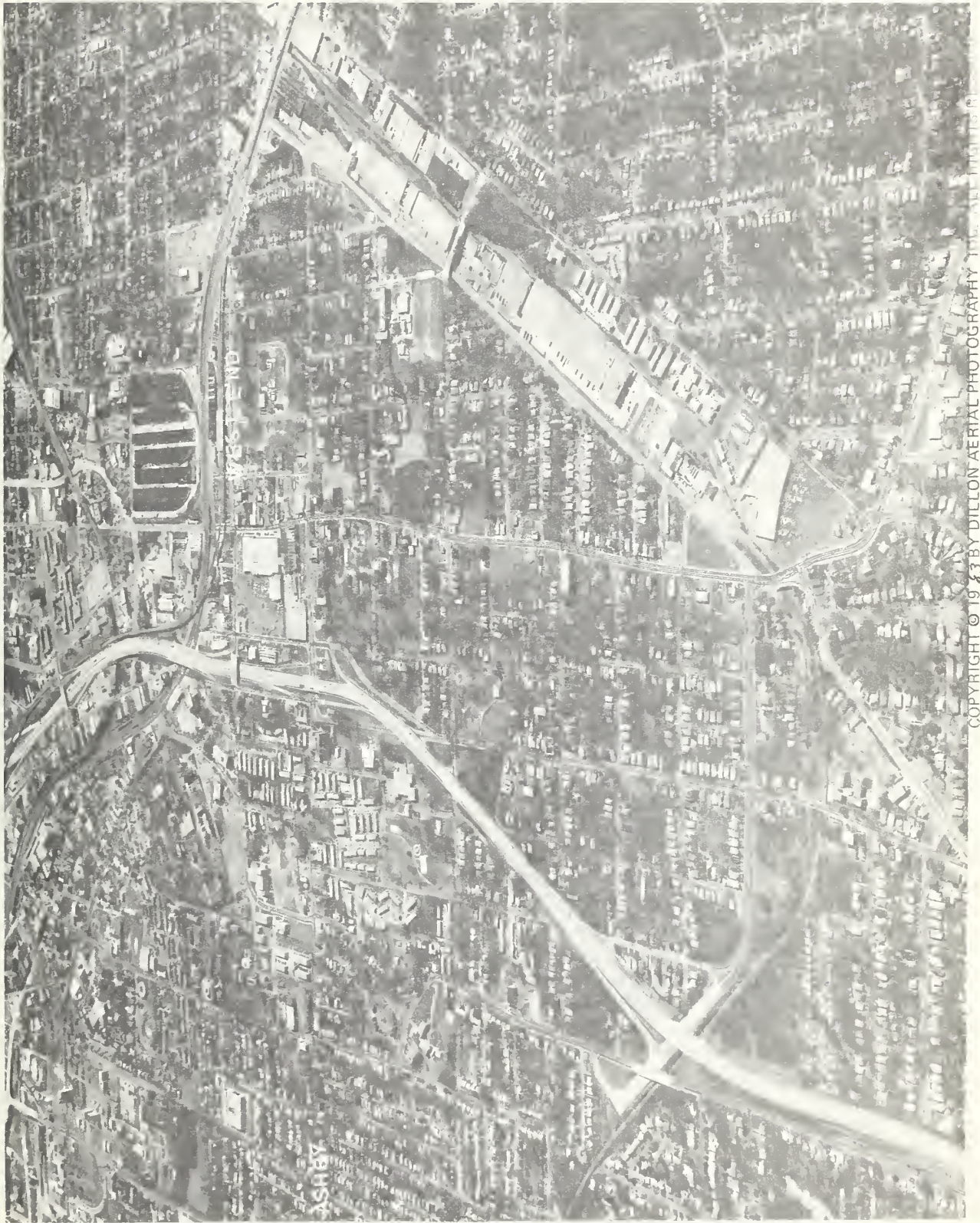


Figure 20 1967 Aerial View of West End



COPYRIGHT © 1975 BY DILLON AERIAL PHOTOGRAPHY, INC. ALL RIGHTS RESERVED.

Figure 21 1975 Aerial View of West End



COPYRIGHT © 1983 BY DILLON AERIAL PHOTOGRAPHY, INC., WEST HIGHTS, N

Figure 22 1983 Aerial View of West End

are forbidden and vehicle movement is restricted to maintain the physical character of this historic site.

The City of Decatur is a stable single family community of about 22,000. Its residents, largely middle and upper income, wish to maintain its small town atmosphere. This prevailing attitude has created problems for redevelopment of the downtown core. Current DeKalb County Commission Chairman Manuel Maloof is a very vocal supporter of downtown redevelopment. He sees a major quality high rise hotel to attract the overflow convention business from Atlanta as an anchor to this development. However, many residents don't want Decatur to change and have thus far resisted attempts at this type of development.

Once a thriving retail center, the downtown is now experiencing an increasing office function with scores of government workers, lawyers and other office workers populating the core. However, at five o'clock, these workers promptly leave the downtown headed for residential areas in Decatur, Stone Mountain, Doraville or Dunwoody.

Review of the literature indicates a mixed story concerning station-linked development in Decatur. Former MARTA director of planning, Manuel Padron, in describing the TSADS process points to the city as "one of the most successful examples" of the intergrated station area planning process. He cites coordinated efforts between MARTA, city officials and citizens which resulted in changes of several design features which enhance the area surrounding the Decatur station. The most significant of which was the creation of the pedestrain mall on top of the station.

Since 1978, there have been several efforts to implement comprehensive development in the Decatur Station area. The major planning efforts are described below:

1978 CANDLER BLOCK HOTEL PLAN

Prior to 1978, local developer, Bill Probst, assembled a seven and one-half acre tract located less than 200 feet from the station. It was to be used for a mixed-use complex consisting of a high-rise residential area, office and retail stores and pedestrain amenities. The first phase was to include 200,000 square feet of office space, 60 units of middle income apartments and 10-15,000 square feet of retail. Future construction called for a hotel with auditorium facilities. The plan was never implemented.

THE SUBWAY MALL

An extensive planning effort as a part of the TSADS program was carried out by Decatur officials, citizens and MARTA to maximize the positive benfits of the station. As a result of

this cooperation, the roof of the station was raised above ground and two blocks of Sycamore and Swanston Street were closed to form the Subway Mall.

1979 SYCAMORE BLOCK PLAN

Gerald D. Hines, a Houston-based developer, contracted with the city prior to station completion to design an office/hotel complex adjacent to the station. Existing buildings were to be torn down and merchants were to be relocated in the new complex. The Federal government approved a grant to prepare financial packaging for the project. Opposition to the plan was immediate and overwhelming. Merchants argued that the planned complex would destroy the "small town retail nature" of Decatur's CBD. Of the merchants interviewed, only two in the area directly impacted by the plan favored it. Those two believed that any plan to stem the economic decline of the CBD had merit. However, those opposed preferred economic stimulation alternatives that involved renovation rather than redevelopment.

The Hines plan included construction of three office buildings (1/2 million square feet), a four hundred room hotel, a small civic center, one thousand parking spaces and sixty thousand square feet of retail. After extensive debate, the Hines project was finally shelved.

1980 DECATUR COMMERCE ASSOCIATION PLAN

Desire to have more citizen involvement in the planning for Decatur's development led to formation of the Decatur Merchants Association whose mission is to plan for improvement of the CBD's economic base. Essentially, this 1980 plan, known as the sketch plan, is quite similar to the Hines proposal. Different parcels of land not requiring condemnation are to be used but the basic developments remain unchanged. UMTA has financed a feasibility study and citizens groups formed to participate in the planning process have accepted proposals from developers. Citizen participation in the planning is the important element that was missing in earlier attempts at Decatur Development.

Polk and Land, Metropolitan Atlanta developers, have proposed:

- (1) Revitalization of small shops to be located off the subway mall.
- (2) Putting the Candler Hotel block under option.
- (3) Building two office buildings, hotel, conference center and additional parking area.

To date, several shops, (two eating establishments, a law office, an insurance agency, and a book store/card shop) have been revitalized but the office-hotel-conference center still remains a plan, and the Candler Hotel block remains under option.

THE 1983 PLAN

According to Decatur Economic Development Director, Hugh Saxon, future plans call for a 125,000 square foot office building, condominium and townhouse construction, a 200 apartment - 175 high-rise complex and further renovations of in-filling housing. Stressing revitalization without ravaging the city's cozy neighborhoods, the current plan recommends construction that will not destroy the small city atmosphere of Decatur.

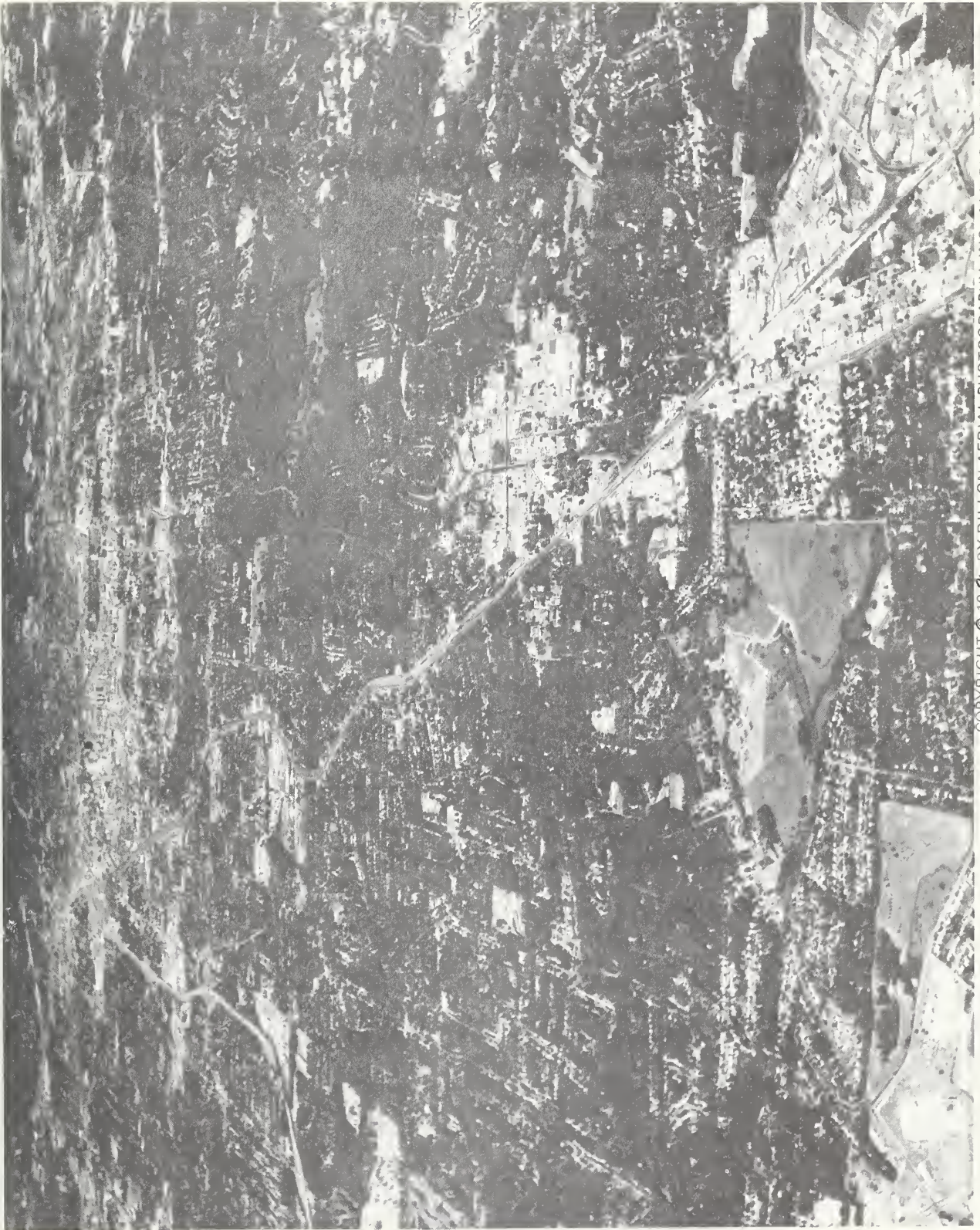
Several views of Decatur over a period of thirteen years reflect the lack of development that has occurred (See Figures 23, 24, 25).

LENOX STATION

Probably nowhere on the system will development be as pronounced as that which is taking place near the proposed Lenox Station. Already a booming area dotted with office complexes, hotels and two luxury malls, Lenox Square and Phipps Plaza, developers are rushing to build new office space and hotels. The boom began some 24 years ago with the opening of Lenox Square Shopping Center and has not subsided.

The Lenox Station lies on the old Southern Railway right-of-way and is bounded on the east by Lakeside Drive, on the south by Railway Avenue and on the west by Oak Valley Road (Figure 26). The three leveled station will accommodate trains on the bottom level, buses on the middle level and passengers entering from the top. The opening of Lenox is counted on to relieve the traffic generated by Lenox Square and its surrounding development. This area is second only to downtown in the amount of traffic generated. However, the opening of MARTA is a mixed blessing. Real estate agents predict that MARTA will be a stimulant to further development, thus accenting the already overburdened traffic infrastructure.

Construction and/or planning for eight condominium and townhouse developments (Figure 26) is underway. Cited (by developers) among the attractions of the Lenox area is its proximity to downtown, shopping conveniences and MARTA. Major Lenox area commercial buildings are displayed in Figure 27. When completed, total rental area in the Buckhead/Lenox area will approach a million square feet. Other major developments in the station area include the \$90 million Monarch Plaza. Initially, this development will include a 583 room hotel and 408 square feet of office space. Several instances of Land Assembly involve a ten acre-tract assembled along Peachtree Road across from Phipps Plaza by the Atlantic Realty Company and a 4.5 acre-site adjacent to this property bought by Bristol Development Company of Atlanta and an affiliate of Jaymont Properties of Chicago.



COPYRIGHT © 1974 BY DILLON AERIAL PHOTOGRAPHY, INC. ALL RIGHTS RESERVED

Figure 23 1970 Aerial View of Decatur



COPYRIGHT © 1975 BY DILLON AERIAL PHOTOGRAPHY, INC. ALL RIGHTS RESERVED

Figure 24 1975 Aerial View of Decatur



COPYRIGHT © 1983 BY DILLON AERIAL PHOTOGRAPHY, INC. ALL RIGHTS RESERVED.

Figure 25 1983 Aerial View of Decatur

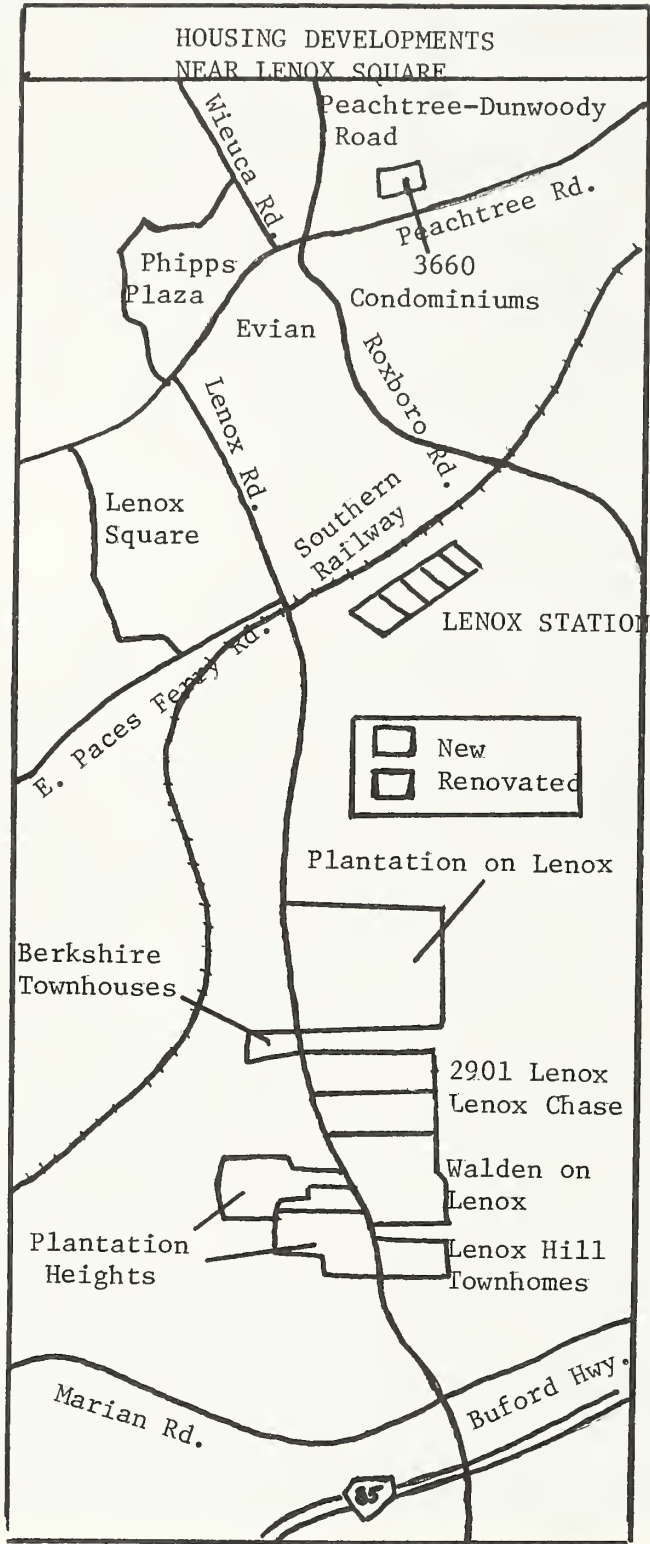


Figure 26

SOURCE: ATLANTA JOURNAL

STATION DATA

LENOX

1. Boundaries: Bounded on the east by Lakeside Drive, on the north by Railway Avenue and on the south by Oak Valley Road.
2. Cost: \$22 million
3. Opening Date: Scheduled December 1984
4. Average Daily Ridership: Proposed in year 2000
67,400
5. Other:
 - (a) Will be the third busiest and second largest station on the system.
 - (b) Parking garage for 2000 and surface parking for 700.

Atlantic Realty plans to develop a mixed-use project while the Bristol/Jaymont joint venture will be an office building. Retail expansion of Rich's Department Store in Lenox Square, Lenox's and Saks Fifth Avenue and construction of Around Lenox add to the continued retail vitality of the area.

Two projects deserve special note: Technology Park/Atlanta's Standard Club Project and Resurgens Plaza.

STANDARD CLUB

This \$300 million proposed mixed-use office residential complex has been fraught with problems. Residents oppose construction on the 165 acre tract citing a disruption to their community. DeKalb County planners initially opposed construction fearing that the project would place undue demands on county services. Technology Park/Atlanta amended its rezoning application proposing construction of 1.6 million square feet of office space, a 600-room hotel

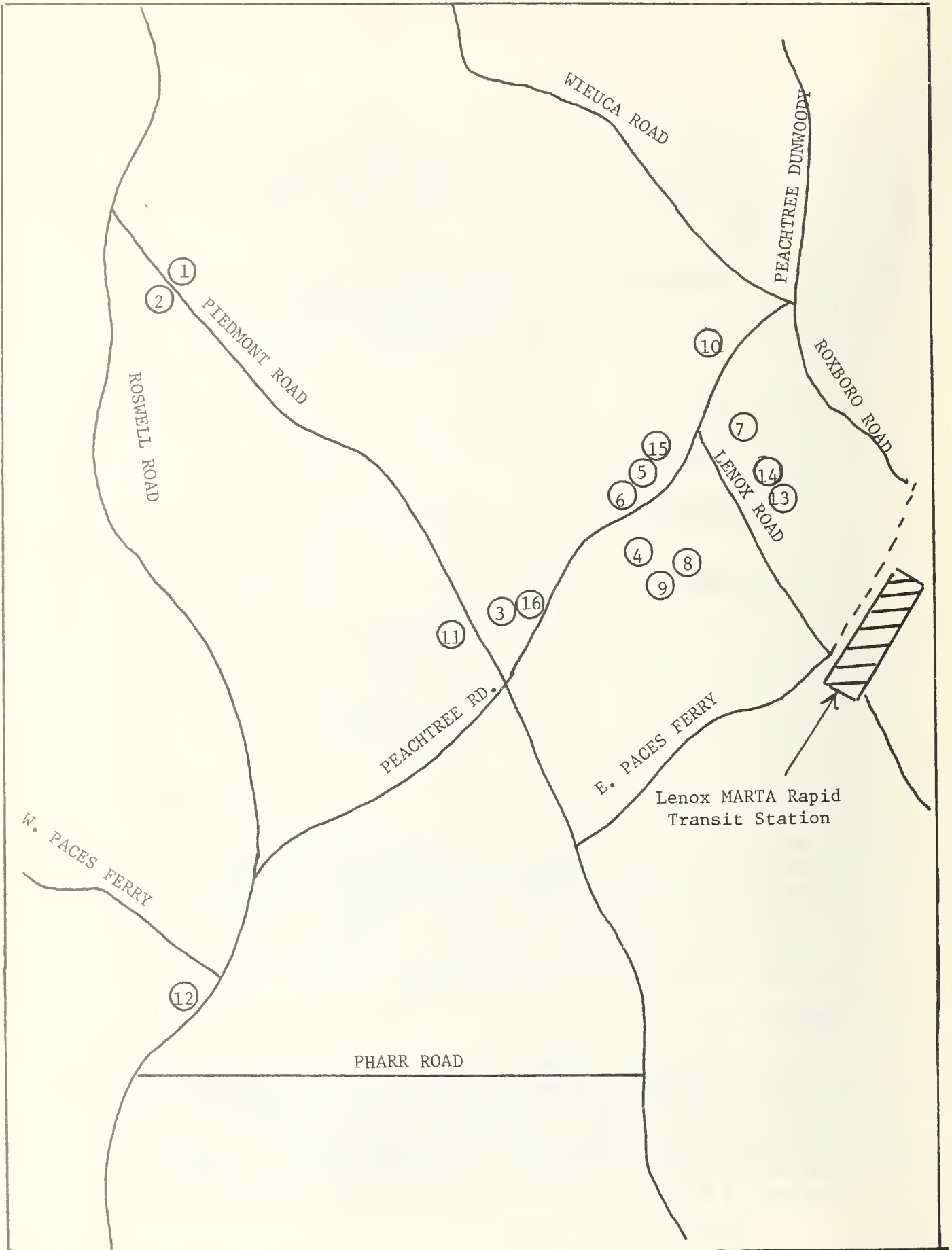


FIGURE 27

SOURCE: LANDAUER

Figure 27

BUCKHEAD/LENOX AREAMAJOR COMMERCIAL BUILDINGSLEGENDOffice

1. Piedmont Center
2. Homart
3. Tower Place
4. Atlanta Financial Center (Under Construction)
5. Monarch Plaza (Under Construction)
6. Lenox Towers
7. Live Oak Center (Includes MSA Building)

Retail

8. Lenox Square
9. Around Lenox
10. Phipps Plaza
11. Piedmont-Peachtree Crossing
12. Sears Store

Hotel/Motel

13. Terrace Garden Inn
14. Roadway Inn
15. Monarch Plaza Hotel (Under Construction)
16. Tower Place Hotel

Source: Landauer

and 2040 residential units. The developer agreed to construct a \$2.5 million people move linking the development to the Lenox MARTA station. In a concession to area residents, the developer also agreed to move the more dense development to the center of the project ringing the borders with detached single family housing to serve as a buffer. Not completely satisfied, residents also called for deletion of plans to build a hotel.

Finally, gaining approval of the DeKalb County Commission, the project still faces substantial obstacles. Atlanta City Council and the Zoning Review Board have rejected the project. Their approval is required since a 28 acre portion of the site lies within the city limits.

RESURGENS PLAZA

Before describing this joint development project, some background on the Johnstown Community will shed light on the difficulty of land assembly in anticipation of development.

Johnstown, a small poor and low-income community of about 20 houses occupied the prime location for the MARTA Lenox Station. The original plan called for the station to be constructed in the heart of the Community. Residents, in 1974 formed the Johnstown Community Development Corporation (JCD) as its vehicle to participate in the areas redevelopment and share in the financial rewards generated by construction of the transit station. The brain-child of Black Atlantian, T. M. Alexander, JCD's primary objective was to secure air rights over the proposed station and to lease the land for construction of a multimillion dollar mixed-use complex.

In 1977, the City contracted with JCD to conduct a land assemblage program which consisted of:

- (1) research on methods of using the air rights over MARTA parking lots,
- (2) ascertaining methods of retaining ownership of the air rights for community residents,
- (3) educating the homeowners about development concepts,
- (4) conducting title searches,
- (5) preliminary land-use planning and zoning analysis, and
- (6) a feasibility study for a multi-use complex.

Ensuing years brought on a continuing conflict pitting JCD against the Buckhead Business Association on where to locate the station. The Association favored moving the location closer to Lenox Square reasoning that most of the traffic would be generated by the mall. Fearing a loss for their valuable property, JCD mounted considerable support, including former Mayor Maynard Jackson, for retaining the original location. Resolution of the conflict came when MARTA chose a double concourse configuration with

entrances to both the Johnsontown Community and Lenox Square.

MARTA acquired property rights from property owners in Johnsontown for subsurfaces and surface for the entire area, partial air rights and touchdown rights in Johnsontown South and partial air rights for Johnsontown North. Johnsontown North contains 5.3 acres and is the site for the first and second phases of the project. Johnsontown South is 1.3 acres and will house the third phase sometime in the future. MARTA acquired property rights necessary for station and parking needs. The previous Johnsontown residents retained ownership of the remaining air rights and touchdown rights in Johnsontown South. These were then sold to Resurgens Plaza Company at a price in excess of \$8 per square foot of horizontal space.

Resurgens Plaza is a joint development project with a planned connection to the Lenox Station consisting of a 34-floor office, retail and residential condominium tower. The project is to provide a 900 space parking garage to be used by tenants of the building, a 630 space parking garage and a "Kiss and Ride" facility to serve MARTA transit patrons. The 955,000 square feet to be constructed by the J. T. Holding Company at a cost of nearly \$60 million includes 350,000 square feet of office space, 50,000 square feet of retail and 50 residential condominiums. Timed to open in conjunction with the Lenox rail station, the developer believes that meeting this schedule is critical to the project's success.

A joint development agreement between Resurgens Plaza and MARTA specifies procedures for construction of the project in MARTA air rights and establishes lease arrangements between the two. Part of the joint development agreement requires the developer to build the 630 space parking garage and "Kiss and Ride" facility, a portion of the covered weather platform protector, including escalators, elevators and stairs. A UDAG grant in the amount of \$6 million at 10% is the gap financing needed for feasibility since the MARTA facilities will produce no revenue to the developer. This below market financing is an extremely important tool for stimulating private investment in the joint development project.

The economic impact of the project will result in creating jobs (total of 1900 of which 1200 are new) and improving the city's tax base (incremental tax revenue of nearly \$800,000 per year). The project is precedent setting in that it represents the first private project (excluding public utility projects such as Southern Bell, AT&T) constructed at a MARTA station. This signal that private sector development in transit station area is desirable and marketable is important to future Atlanta growth.

Recently, American Homes Equities, Inc. (formerly J. T. Holding Company) announced plans to scale down the Resurgens Plaza project. The two 34 story office retail-residential towers are to be replaced by a mid-rise office complex totaling 800,000 square feet. An eight story 169,000 square foot office building will be constructed in the first phase with subsequent phases adding two thirteen story buildings and one nine story building. Aerial photos of the Lenox area show the beginning of development that is timed to coincide with the opening of the Lenox Station in December 1984.



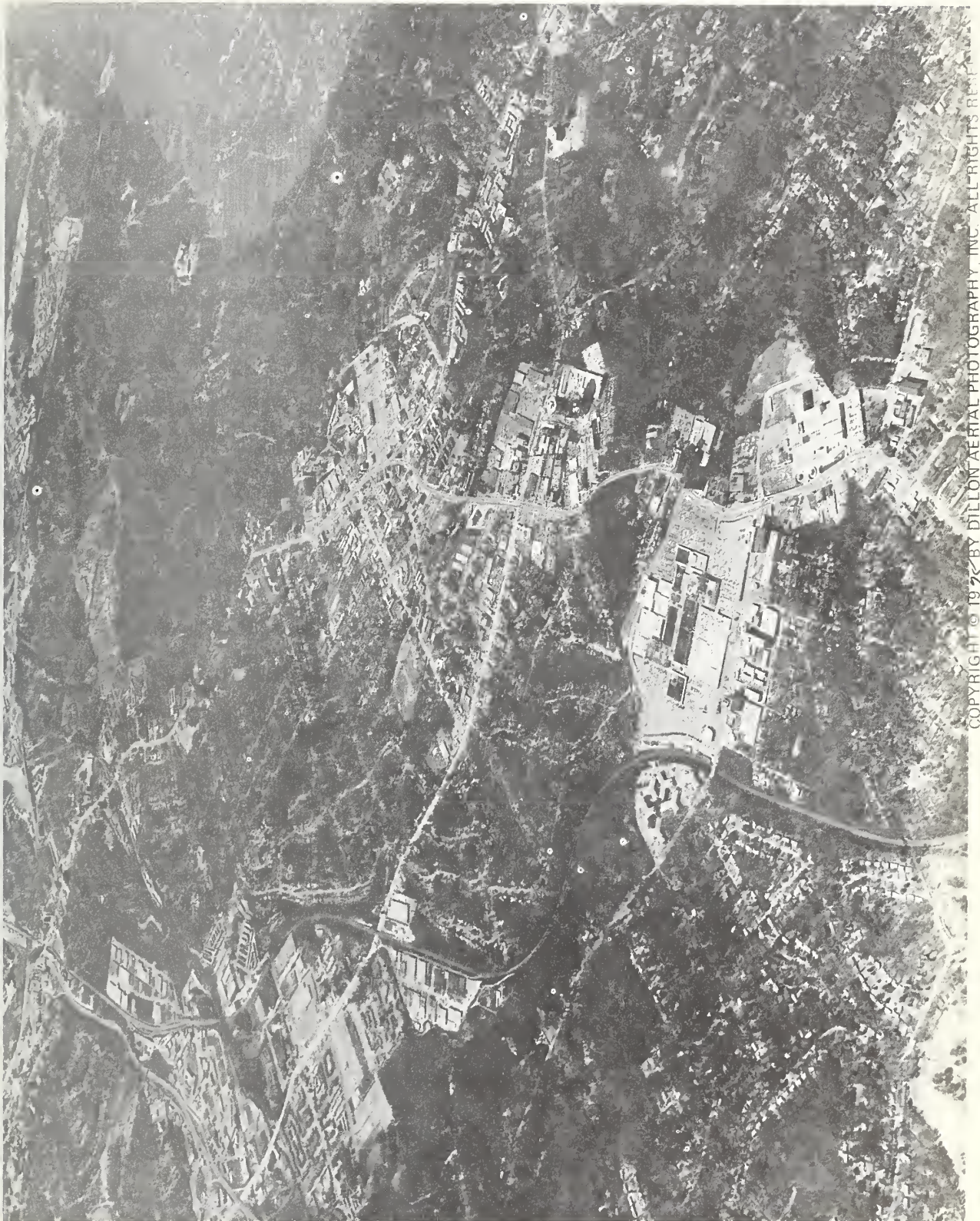
COPYRIGHT © 1967 BY DILLON AERIAL PHOTOGRAPHY, INC. ALL RIGHTS RESERVED

Figure 28 1967 Aerial Photo of Lenox



COPYRIGHT © 1977 BY DILLON AERIAL PHOTOGRAPHY, INC. ALL RIGHTS RESERVED

Figure 29 1975 Aerial Photo of Lenox



COPYRIGHT © 1975 BY DILLON AERIAL PHOTOGRAPHY, INC. ALL RIGHTS RESERVED.



COPYRIGHT © 1983 BY DILLON AERIAL PHOTOGRAPHY, INC. ALL RIGHTS RESERVED

Figure 30 1983 Aerial Photo of Lenox

CHAPTER VI

I. INTRODUCTION

It is generally accepted that construction of a rail system will not guarantee development. It is also true that combined with comprehensive planning, supportive zoning and tax procedures and financial incentives, it can play a substantial role in guiding land use and development. This chapter summarizes those mechanisms that have been utilized to guide growth and development around rapid transit systems in North America.

The conclusions of the study are offered in the form of recommendations for those cities undertaking plans for rail construction or expansion.

II. SUMMARY AND RECOMMENDATIONS

PUBLIC ACQUISITION OF LAND

Several important lessons emerge from examination of the systems in this study. Strong markets, although essential for development, create assemblage problems. Private unassisted land assemblies are risky and expensive. Therefore a public policy supporting land banking and public assemblage of land are important elements of joint development activities. Public land assembly can help in eliminating holdout parcels and in keeping the price of land low enough to attract private developers.

In Buffalo public acquisition and assembly of property through subsidiary of quasi-public foundation promoted development around planned LRRT stations. Also legislation approving public acquisition and holding of structures for future rehabilitation stimulated major renovations and redevelopment in close proximity to the stations.

Public acquisition can also prevent land speculation along the transit route. In Washington the lack of anticipated new jobs and businesses that were expected to parallel Metro routes can be traced to rampant land speculation. Several Washington Council members favor a site value tax lowering the tax rate on homes and commercial buildings while increasing the tax rate on land values, as a measure to stem this speculation.

Similar problems have cropped up in Atlanta's Midtown area. Special Public Interest Zones permitting up to 12 square feet of building space for every square foot of land are expected to enhance development in the future. However, in the short run, major tracts have been assembled for speculative purposes. These property owners are refusing to grant short-term leases to restaurants and small businesses in the area. The Midtown Business Association fears that land speculation will drive out the small merchants and commercial activity that is eager to operate immediately. According to an ARC study, between 1978 and 1983, 190 commercial, industrial and vacant properties valued at \$100 million changed ownership within the Arts Center Station's 317-acre impact area. Similar assemblages near the Midtown Station are being held for future development.

DEVELOP A TRUE PARTNERSHIP

The public sector looks mainly on the private sector as a source of funds, rather than as a resource for building a highly successful system. What the private sector wants is a secure partnership, a team concept where both sides can win. Developers do not necessarily concede that a subway station has value, therefore the transit agency or local government must actively and aggressively support and promote joint development. The developer usually wants some assurance that the transit facility will be built and that there will be follow through and flexibility on the part of the transit agency if a problem arises. Developers look to local governments or the transit agency for assistance in low interest financing (especially for parking decks). They also look for a one-stop process or single access point of entry.

In Toronto, a quasi-public agency, the Subway Property Committee, was established to guide development. Developers viewed this as a professional organization that would deal in a business manner with them rather than a political group that must satisfy certain special constituencies. As previously stated, Buffalo also set up a quasi-public foundation to facilitate land assembly. Reorganization of Atlanta's Department of Community Development has made it much easier for developers to do business with the city. Before reorganization, a developer had to go through as many as seven different departments often requiring as much as six months time. Now negotiation with this single department can be accomplished in a single month.

ZONING

Local government land use controls (e.g. Zoning) are very important. However, in changing markets, inflexible zoning can work against a developer. Development in Toronto was fostered by supportive zoning and early developer involvement in station area

planning. Buffalo created special zoning review districts surrounding its planned transit stations. In Baltimore Urban Renewal Districts were designed to achieve the maximum benefit from the land adjacent to the stations. In San Francisco, special assessment districts were created. However, the city was so highly politicized that the measure has found little applicability. Because of the different jurisdictional boundaries of the New Jersey Transit System, zoning cannot be developed ahead of time but must be negotiated with each individual developer. Planners in New Jersey are recommending county or state zoning controls to relieve the cumbersome policy.

Atlanta's zoning ordinance, which became effective in 1982, provides flexible techniques to address Atlanta's changing urban development needs. Special Public Interest (SPI) Districts are designed to take advantage of areas that have substantial public investment. These SPI zones were created around three MARTA stations: North Avenue, Midtown, and Arts Center. Also, a special Central Core District encompasses the downtown MARTA Stations: Peachtree Center, Five Points and Garnett.

DIRECT STATION CONNECTION

In Atlanta seven of the existing stations have direct connections to office, hotel or retail complexes. These seven, Arts Center, North Avenue, Civic Center, Peachtree Center, Five Points, Omni and Georgia State, all have experienced considerable development within the station areas. Decatur, while not having direct connection, does have a mall occupying the roof of the subway.

WMATA, recognizing the importance of direct connection, developed a "System Interface" policy designed to provide guidelines for connections to its stations. If the private development projects benefits exceed the developer costs, then it is subject to fee negotiation. This residual value can then be shared with the public sector.

"Building bonuses" were used to encourage direct access between BART and high-rise structures in San Francisco. Floor area ratios of up to 20% above usual limits were offered to developers who would provide direct connections to BART stations.

ROUTE SELECTION AND STATION LOCATION

In most of the cities visited, discussions with transportation planners highlighted the importance of development potential in route selection and station location. All too often these decisions have been made in the absence of real development planning. They are usually dictated by cost of right-of-way requirements that in many instances mitigate against successful joint development.

In the case of Washington and belatedly San Francisco, joint development potentials exist even without this careful planning. However, San Diego's rail system passes through mostly agricultural and warehouse dominated land which has limited potential for transit stimulated development.

Atlanta's rail system parallels much of the Southern Railroad's right-of-way. Joint development was not a factor in station location decisions. Land availability, neighborhood groups and political considerations played the predominant role in where they were located. As a result, many of the stations on the East-West Line are not attracting developer interest. Several developers and merchants have indicated that had some of these stations been located a few hundred feet away, their development potential would have been greatly enhanced. A prime example of this being the West End Station. The traffic flows and location of the station make it almost inaccessible to the Mall West End located less than 2000 feet away. Some sort of pedestrian bridge connecting the mall to the station is necessary to alleviate the traffic congestion that in effect blocks passage to the Mall.

The following observations are offered in the form of recommendations to agencies considering rapid rail construction.

1. Consider Joint Development During the Planning Stage

To maximize development potential of a station, the joint development process should take place during planning prior to start of construction. MARTA had little or no coordination between itself and other actors in the development process. As a result location decisions were made whereby some stations were constructed in weak or marginal development areas. MARTA opted for a free market approach, letting development take its own course. Case studies have shown that some sort of public intervention is necessary to stimulate development in marginal areas.

2. Transit Agency should Adopt a Uniform Development Policy

The transit agency should adopt a uniform and express policy toward joint development. The policy should prescribe an active and consistent role for the agency. MARTA currently owns approximately \$25 million worth of real estate in the downtown core. It however does not have a redevelopment policy, but rather a disposition policy. MARTA's enabling legislation restricts it from engaging in activities that are joint development (considered a private enterprise) but does authorize cooperation in comprehensive planning and development. A policy similar to that recently adopted in Los Angeles giving the transit agency express authority to assemble land and promote joint development is recommended.

3. Establish a Single Access Point of Entry

The cumbersome negotiation process leaves developers less than enthusiastic when dealing with public entities. Often times the process involves the transit agency, city and county governments

and can drag on until the proposed project loses feasibility. Decision making for development should reside within the real estate or similar office at the transit authority rather than with the general manager or board. A single contact point that has authority to make deals is much more attractive to developers.

4. Become a True Joint Development Partner

To initiate a successful joint development program requires real commitment from the transit agency. The free market approach adopted by MARTA will lead to some transit stimulated development, however, success on the magnitude of the Toronto system is fostered by a willingness to become totally involved in development. The prevailing attitude among MARTA planners is that their objective is to build a transportation system. Development is viewed mainly as a secondary outcome. As long as this attitude persists development will continue to occur at stations located in strong real estate markets, but the real challenge of utilizing public infrastructure improvements to stimulate provide development will remain unmet.



BIBLIOGRAPHY

1. Administration and Management Research Association of New York City, Inc., "Transit Station Area Development: Strategies for Implementation," February 1976. Economic Case Studies, PB 268-104, Final Report, PB 268-103.
2. American City Corporation, Heart of Atlanta.
3. Anas, A. "Effects of Transportation on the Tax Base and Development of Cities," Northwestern University.
4. Arbogast, R. G., Khasnabis, S. and Opiela, J. S., "Optimizing Joint Development at Transit Station," J. of Transportation Engineering, Vol. 106, No. 5, September 1980, pp. 539-557.
5. "Atlanta's MARTA: Running Well, Still Building," Railway Age, Vol. 182, May 11, 1982, p. 24.
6. "Atlanta Opens Extension of Rapid Transit Line," Jet, Vol. 63, November 8, 1982.
7. "Atlanta the Next Five Years," Business Atlanta, March 1978, p. 13.
8. Atlanta Regional Commission, "Transit Impact Monitoring Program Overview and Findings."
9. Atlanta Regional Commission, "MARTA's Commercial Displacement and Relocation Program: January 1974 through October 1981," Atlanta: May 1982.
10. Atlanta Regional Commission, "The Transit Impact Monitoring Program Annual Report," Atlanta: December 1980.
11. Atlanta Regional Commission, "Results of East Line Pilot Project: 1970-76," Atlanta: April 1978.
12. Atlanta Regional Commission, "Atlanta Plan Review in Rapid Transit Corridor," Atlanta: 1974.
13. Atlanta Regional Commission, "The Development of Air Rights and Excess Property," Atlanta: September 1983.
14. Atlanta Regional Commission, "Land Use Controls and Incentives Conference Processings in TSAD," Atlanta: 1973.

15. Atlanta Regional Commission, Land Use Case Study: A "Before Transit" Conditions Report for the Brookhaven Station Impact Area, May, 1982.
16. Atlanta Regional Commission, "Major Development Announcements Annual Report," Atlanta, December, 1981.
17. Atlanta Regional Commission, Transit Impact Monitoring Program, Commercial Land Impacts, December, 1978.
18. Atlanta Regional Commission, "Major Development Trends Annual Report," Atlanta, December, 1982.
19. Atlanta Regional Commission, Transit Impact Monitoring Program, "Results of Station Area Studies," August, 1981.
20. "Atlanta 2020," Real Estate and Business Atlanta, January - February, 1978, p. 29.
21. Baltimore City Department of Planners, "Transit Area Development and Access Study," Baltimore Planning Commission Department of Planning, Baltimore: 1974.
22. Beck, Preston, E. and Preston, E. R., "The Metro Rail Dade Story: A Place in the Sun for Rapid Transit," Railway Age, Vol. 180, No. 5, March 12, 1979, pp. 36-38.
23. Benham, J. and Patel, B. G., "A Method for Estimating Pedestrian Volume in a Central Business District (Abridgement), Transportation Research Record, No. 629, 1977, pp. 22-26.
24. Brown, H. J. et al, Empirical Models of Urban Land-Use: Suggestions on Research Objectives and Organizations, National Bureau of Economic Research, New York, 1972.
25. Burkhardt, R., "A Plan for Downtown Transit and Joint Development," (Greater Bridgeport Transit District) UMTA-CT-09-7001-79-1, December 1980.
26. Clemens, D. and Corpus, J., "BART-11: Pre-BART Studies of Environment, Land-Use, Retail Sales," (Appendix C - Data Documentation for the Land-Use and Investment Study), Metro Transportation Commission, Department of Housing and Urban Development Final Report, June, 1973.
27. Dade County Transportation Administration, Dadeland North Station: Metrorail Joint Use Propectus, December, 1981.

28. Dade County Transportation Administration, Joint Use Policy, September 1981.
29. Damm, D., Lerman, S. R., et al., "Response of Urban Real Estate Values in Anticipation of the Washington Metro," Journal of Transport Economics, Vol. 14, No. 3, September 1980, pp. 315-336.
30. "Data Complexities and Problems in the Atlanta A.M.S.S.," Atlanta Economic Review, September - October, 1973, pp. 34-40.
31. Department of Planning, "Transit Station Area Development and Access Study," Baltimore City: June 1978.
32. "Development Potential for Southside Atlanta," Real Estate Atlanta, pp. 43-45.
33. District of Columbia Planning and Development Office, "Metro Impact Study II, March 1980.
34. Dueker, K. et. al., "The Portland Mall Impact Study," Center of Urban Studies, Portland State University, December 1982.
35. Edminister, R. and Koffman, D., "Streets for Pedestrian and Transit: An Evaluation of Three Transit Malls in the U. S., DOT-TSC-UMTA-79-F, February 1979.
36. Edwins, S. B., Deacon, J. A., et at, "Urban Transportation and Land-Use: A Bibliography," Kentucky University Bibliography DOT, TSC-FS/145, October 1975.
37. Engelen, Rodney E., "Coordination of Transportation System Management and Land Use Management," National Cooperative Highway Research Program Synthesis of Highway Practice, Vol. 93.
38. Fonts, E. Larry, "Accessible City Atlanta Coming and Going," Real Estate and Business Atlanta, January - February 1978, pp. 36.
39. Gannon, Colin A. and M. Dear, "The Impact of Rail Rapid Transit Systems on Commercial Office Development: The Case of Philadelphia Lindenwold Speed Line," U. S. DOT, Philadelphia: University of Pennsylvania, 1982.
40. Gruen Associates, Inc., "Indirect Environmental Impacts," TM 24-4-77, BART Impact Program Berkeley: Metropolitan Transportation Commission, 1977.
41. Gunts, Edward, "Boondoggle Becomes a Bonanza," The Sunday News Mercia, Baltimore: December 19, 1982.

42. Harmon, R.J. and Khasnabis, S., "Value Capture and Joint Development: Fad or Future," Transportation Research Board Special Report, No. 183, 1978.
43. Hoel, L.A., "Guidelines for Planning Public Transportation Terminals," Transportation Research Record, No. 817, 1981, pp. 36-41.
44. Hoel, L.A., "Planning and Design of Intermodal Transit Facilities," Transportation Research Record, No. 614, 1976, pp. 1-5.
45. Ichnwwshi, Tom, "Moving People" The Philadelphia Success Story."
46. Jackson, N. and Larry Earvin, "Perceptions of Transit-Linked Development in Minority Neighborhoods: Three Case Studies."
47. Jackson, N., "Neighborhood Viability and Transit Development: An Ecological Model for Land-Use Forecasting."
48. Jelavich, M.S., "Estimation of Some Impacts of the Baltimore Rapid Rail System," (Dissertation, the Johns Hopkins University) 1981, University Microfilms International No. KSA 81-06630.
49. Knight, R.L. and Trygg, L.L., "Land-Use Impacts of Rapid Transit: Implications of Recent Experience," Final Report DOT-TPI-10-77-29, August 1977.
50. Korf, J.L. and Memetsky, M.J., "Analysis of Rapid Transit Access Modes Choices," Transportation Research Record, No. 817, 1981, pp. 29-35.
51. Kraft, Gerald. The Role of Transportation in Regional Economic Development, Charles River and Associates, Lexington Books, Lexington, Massachusetts, 1971.
52. L.A. Community Redevelopment Agency, "The Los Angeles Downtown People Mover, December 1977.
53. Land Use and Transportation, "Joint Development: A Historical Perspective," Fall, 1982.
54. "Land-Use: Regional Development Plan Forecast," Atlanta, 1975.
55. Lee, Douglas B. Jr., "Impacts of BART on Prices of Single-Family Residences and Commercial Property," BART Impact Studies, Berkeley: Institute for Urban and Regional Development, University of California, 1973.

56. Lee, Douglas B. Jr., and Wiech, D. F., "Market Street Study," BART Impact Studies, Berkeley: Institute of Urban and Regional Development, University of California, 1972.
57. Lee, D. B. Jr., "How to Do a Transit Station Land-Use Impact Study," Transportation Research Board, No. 77, 1978, pp. 23-33.
58. Lerman, S., "Analysis of Transportation/Retailing Interactions," September 1981.
59. Liskamm, W. H., BART, Architectural Forum, Vol. 138, No. 3, April 1973, pp. 44-48.
60. Lovely, M. E., "Public Transit and Downtown Development," Urban Land, Vol. 38, No. 10, November 1979, pp. 14-22.
61. LRT News, "N. J. Transit Begin Rehabilitation of Newark Subway No. 7, January, 1983.
62. Lutem J. M. and Walker, C. A., "Joint Development Around Inter-modal Transfer Facilities," Transportation Research Record, No. 760, 1980, pp. 33-39.
63. "MARTA: Atlanta's Money Train," Black Enterprise, March 1976, pp. 30-44.
64. "MARTA: Links the Sights of Atlanta," Southern Living, October 1980, p. 52.
65. Mackett, R. L., "Modeling the Impact of Alternative Transport Strategies Upon Social Groups," Transportation Planning and Technology, Vol. 6, No. 4, 1981, pp. 233-243.
66. McCutchen, W. R., "Five Decisions in Transit Station Design," American Society of Civil Engineers Proceedings Paper - 1975, pp. 95-99.
67. Metro Dade County Commission, "Metro Rail Information Guide," Metropolitan Dade County Transportation Improvement Program, November 1980.
68. Metropolitan Atlanta Rapid Transit Authority, "Development Atlanta's Transit Program: Final Report," Technical Studies Grant GA-09-003: 1978.
69. Metropolitan Transportation Commission, "BART in the Bay Area: Final Report of the BART Impact Program," DOT-US-30176, Berkeley, California: June 1979, p. 8.

70. Metropolitan Transportation Commission, "The Impact of BART on Land-Use and Urban Development," December, 1979.
71. Millott, Dan, "Metro-Rail-Rounding Out Dade Mass Transit System," Florida Trend, September 1980, pp. 73-76.
72. National League of Cities, "Transit Joint Development," National League of Cities Final Report, June 1973.
73. Nelson, H. E. and Barnes, W. L., "Chicago Urban Transportation Planning: ASCE Journal of the Urban Planning and Development Division Proceeding, Vol. 103, No. UPI, ASCE 13075, July, 1977, pp. 53-67.
74. Nitkin, D., "Land-Use and Metropolitan Transit," RTAC Forum, Vol. 3, No. 2, 1981, pp. 34-43.
75. Paaswell, R. E., Berechman, J. et al., "An Analysis of Joint Development Projects: Final Report on First Year Task," (UMTA Final Report) UMTA-NY-11-0020, May 1979.
76. Page, John H. and Mandell, Meryl Ann, School of Engineering and Applied Science, University of Virginia, Catalog of Transit Station Impacts Case Studies, "Impacts of Public Transportation Terminals on Land Use and Community Development," August, 1983.
77. Paul, B. H., "Rapid Transit In Miami, Finally," Metro, Mar-April 1984.
78. Pushkarev, B. S. and Zapman, J. M., Public Transportation and Land-Use Policy, Indiana University Press, Bloomington, 1977.
79. Robertson, Kent A., "The Impact of Transportation on Central Business District," Traffic Quarterly, Vol. 34, No. 4, October 1980, pp. 523-537.
80. Schneider, J. B., "Redesigning Urban Transit Systems: A Transit-Center Based Approach," Transportation Research Record, No. 798, 1981, pp. 56-65.
81. Sharpe, C. P. et al., "Joint Development Report," UMTA-TX-11-0006-80-1, June 1979.
82. Shawcroft, R. G., Horwood, E. M. and Lester, M. S., "Potential for Betterment-District Financing and Joint Development Applications to Surface Transit," UMTA Research Report, UMTA-WA-11-0005-71-1, RR-77-7, July 1977.
83. Shoff, D., "Construction of New Urban Rail System," AREA Bulletin, Vol. 81, No. 678, June 1980, pp. 447-457.

84. Skidmore, Owings and Merrill System Design Concepts, Inc.: "An Assessment of Community Planning for Mass Transit," OTA-T-16-T-25, (8 Volumes) 1976.
85. Sweat, Dan, "Atlanta 1977: A Year of Resurgence," Real Estate and Business Atlanta, January-February 1978, p. 7.
86. Talvitie, A., Morris, M. and Anderson, M., "Assessment of Land-Use and Socieconomic Forecasts in the Baltimore Region," Transportation Research Board, No. 775, 1980, pp. 38-42.
87. Toronto Transit Commission, Metropolitan Toronto: The Transit/Development Connection.
88. TRB, Transportation Research Record, "Land Use and Economic Development," Vol. 820.
89. Trygg, Lisa L. and Knight, Robert L., "Evidence of Land-Use Impacts of Rapid Transit Systems," Transportation, Vol. 6, No. 3, September 1977, p. 231.
90. Urban Land Institute, Department of Transportation, "Joint Development: Making the Real Estate-Transit Connection," Executive Summary, #DOT/1-79-13, July 1979.
91. USDOT, "A Study of Minority Business Participation in the Urban Mass Transportation Industry, One America, Inc., July 1977. (Project DC-06-0146) Vol. 1, "Analysis of Minority Business Participation," (P. B. 274-773) Vol. 2, "Developing Successful Minority Business Enterprise Programs for Public Transit Properties: A Manual," (PS-274-774), Vol. 3, "Public Transit Contracting Opportunities for Minority Business Enterprises: A Manual," (P. B. 274-775).
92. USDOT, "Transportation/Land-Use Interactions," NY-11-0022.
93. _____, Land Use and Urban Development Impacts of BART, DOT-P-30-79-09, April 1979.
94. _____, "Development Policies for Urban Mass Transit Station Areas," Urban Land, Vol. 33, No. 8, September 1974, pp. 3-10
95. _____, MARTA Impact Study, Atlanta Regional Commission.
96. _____, Metro Impact Study, Washington.
97. _____, Planning and Designing a Transit Center-Based Transit System: Guidelines and Examples from Case Studies in 22 cities, September, 1980.

98. _____, Economic Impacts of Transportation Restraints, September 1980.
99. _____, A Guide to Innovative Financing Mechanisms for Mass Transportation, December, 1982.
100. _____, The Land Use and Urban Development Impacts of Beltways: Final Report, October 1980.
101. _____, Growth Management and Transportation, June, 1982.
102. _____, Innovative Transit Financing, February, 1979.
103. _____, Transportation and Urban Economic Development, June 1982.
104. _____, Joint Development Marketplace '78 Proceedings, June 1978.
105. _____, Joint Development Marketplace '80, June 1980.
106. _____, Rail Transit Impact Studies: Atlanta, Washington, San Diego, March, 1982.
107. _____, Joint Development and Value Capture in Los Angeles, Local Policy Formulation, January, 1983.
108. U. S. HUD, Managing Design and Development Downtown.
109. U. S. HUD, Revitalizing Downtown Retailing Trends and Opportunities, April, 1983.
110. Vigrass, J. William, "The Lindenwold Hi--Speed Transit Line," Railway Management Review.
111. Washington Metropolitan Area Transit Authority, Joint Development Materials, April 1982.
112. Weiss, M. J., "How Close Is Metro," The Washingtonian, December 1980.
113. Wells, William R., "Rapid Transit Impact on Suburban Planning and Development, Perspective and Case Study," Department of Industrial Engineering, Stanford, California: Stanford University, 1973.
114. Wendt, P. F. Forecasting Transportation Impacts Upon Land-Use, Leiden, 1976.

NOTICE

This document is disseminated under the sponsorship of the Department of Transportation in the interest of information exchange. The United States Government assumes no liability for its contents or use thereof.

The United States Government does not endorse manufacturers or products. Trade names appear in the document only because they are essential to the content of the report.

This report is being distributed
of Transportation's Technology

DOT-I-85-24

Form DOT F 172
FORMERLY FORM DC

HE 203 . A5
Davis, Edw
Transit-11

DOT-I-85-24



TECHNOLOGY SHARING

A PROGRAM OF THE U.S. DEPARTMENT OF TRANSPORTATION