## Mayor and City Council Jacksonville Area Planning Board Lacksonville Transpontation Authority Jacksonville Downtown Development Autho Jacksonville Area Chamber of Commerce

y the Mayor's Reople-Moyer Task Force in cooperation with:

Prepared for the U.S. Department of Transportation Urban Mass Transportation Administration

Pople Svor

Sacconde Downtown

REDRICK W. BOWWAN





#### city of jacksonville, florida

#### .h.nslangT.g.angH ADYAM

#### **CITY COUNCIL**

Farl M. Johnson

John F. Lanahan

President

Nancie Crabb Johnny Sanders Sallye Mathis Hourst Joe Forshee Aardall Amos Charlie Webb McCarthy (Mack) Crenshaw, Jr. McCarthy (Mack) Crenshaw, Jr. President-Pro Tempore Chairman, Finance Committee Jake M. Godbold David E. Harrell Don Brewer, Jr. Don Brewer, Jr.



#### **Recommended Stage** People - Mover System **Previous Transportation Planning Jacksonville's Mass Transportation Program Downtown Jacksonville Summary Proposal Financial Options**

Contents

Appendix

	FIGURES	17	STAGE I PEOPL COSTS vs. REV
	JACKSONVILLE DOWNTOWN AREA	<b>1</b> ه	DEAK HOUR TRA
	POPULATION AND EMPLOYMENT ESTIMATES FOR JUATS AND DOWNTOWN AREA: 1968 - 2000	ō	PEOPLE-MOVER
Ŵ	PERSON TRIPS TO JACKSONVILLE CBD BY PURPOSE AND MODE: 1968, 1975 and 1990	19	PEAK HOUR TR TRAVELING TO
4	JTA RIDERSHIP (1973 - 1976)	20	1981 AND 1990 DOWNTOWN PEO
J	JTA SHUTTLE-BUS RIDERSHIP	21	STAGE I PEOP
თ	STAGE I PEOPLE-MOVER SYSTEM	22	ESTIMATED HO
7	PEOPLE-MOVER SYSTEM LONG-RANGE PLAN	ł	AREA PEOPLE-
œ	SERVICE AREA POPULATION AND EMPLOYMENT: 1975 - 2000	23	STAGE I DOWN HEADWAY AND
Q	PERIPHERAL PARKING LOTS SERVED BY PEOPLE-MOVER	24	SHUTTLE-BUS
5		25	DOWNTOWN ARE COST ESTIMAT
	HOSPITAL-MEDICAL CENTER	26	PRELIMINARY SYSTEM OPER
2	JTA BUS ROUTES: 1975	27	DOWNTOWN PEO
ြ ပ	JACKSONVILLE TRANSPORTATION AUTHORITY PROJECTED OPERATING PERFORMANCE	3	AND MAINTEN
<b>1</b> 4	JTA BUS AND PEOPLE-MOVER SYSTEM INTERFACE: 1981	ľ	SCHEDULE
	BUS TRAVEL TIME SAVING WITH PEOPLE-MOVER SYSTEM	29	STAGE I PEOI
16	STAGE I PEOPLE-MOVER SYSTEM IMPACT ON JTA MASS TRANSPORTATION SYSTEM	30	QUANTIFIABLI PEOPLE-MOVEI

- LE-MOVER IMPACT ON BUS OPERATING VENUE
- AVEL TIME SAVINGS FOR BUS PATRONS TO ANOTHER ROUTE WITH STAGE I SYSTEM
- AVEL TIME SAVINGS FOR BUS PATRONS DOWNTOWN AREA
- O PATRONAGE ESTIMATES FOR STAGE I PLE-MOVER SYSTEM
- LE-MOVER SYSTEM REVENUE PASSENGERS
- JURLY PATRONAGE STAGE I DOWNTOWN
- VTOWN PEOPLE-MOVER SYSTEM
- SERVICE
- EA PEOPLE-MOVER SYSTEM CAPITAL TE
- ESTIMATES DOWNTOWN PEOPLE-MOVER ATING COST (1976 1981 DOLLARS)
- OPLE-MOVER REVENUES vs. OPERATING ANCE COST
- PLE-MOVER SYSTEM IMPLEMENTATION
- PLE-MOVER CAPITAL COST ANALYSIS
- E BENEFITS ACCRUING FROM STAGE I

### 

Summary Proposal

The Consolidated City of Jacksonville has been active-	Today Jacksonville recognizes and has documented the need and benefits of a unique and improved transportation system, the Automated Guideway Transit (AGT) or people-mover system. With this system for moving people (proposed in 1973) this unique city can ascend to its next level of greatness as an example to other medium-sized cities. WHY JACKSONVILLE FOR THE PEOPLE-MOVER PROJECT?	the early sailing snips, steam boats, the electric trolley system and the more recent expressways, bridges and highways have molded and shaped this vibrant riverfront city. In addition, the mass transportation system of the 1960's and particularly since 1973 has played a vital role in strengthening the downtown area.	From the period since the 1770's when it was only a cow crossing, transportation systems, including	the Downtown Revitalization Program in 1971 over \$246 million have been spent by the public and private sector in revitalization.	Jacksonville's downtown has always been the center of its activity and downtown revitalization is a top priority today. Since the official adoption of	zen participation and its public and private investments are the results of thoroughly conceived business decisions.	cracic process. Jacksonville's consolldated government operates effectively in the "sunshine." Its public decisions are made through active citi-	emerged through a great fire, great struggle with elements, competition, challenges of the topography and have clung to a strong commitment to the demo-	Jacksonville's 155-year history is manifest in its physical form a city centered around a great river, the St. John's. It and its people have	INTRODUCTION
The Downtown people-mover system was an integral part of the Jacksonville Area Planning Board (JAPB)	Realizing the value of a people-mover system, the Jacksonville Transportation Authority (JTA), opera- tor of the local public mass transportation system, initiated two Downtown Area shuttle bus routes in early 1974 with the financial assistance of the Florida Department of Transportation and the City of Jacksonville. Ridership is now over 38,000 per month and climbing.	The study produced four technical reports and a summary final report. The recommended Plan fea- tured a Phase I "Immediate Action People-Mover Program with shuttle bus circulation routes and a Phase II "Automated Guideway Transit People-Mover System" involving 10,000 feet of elevated structure.	D. Financial investigation to develop funding	C. Engineering analysis to determine system construction feasibility and capital costs, and	B. Environmental and urban design analysis to assess impact upon adjacent land uses, air pollution, aesthetic views, etc.,	A. Comprehensive travel demand analysis to determine patronage and revenue estimates,	of Transportation (FDOT) and completed in 1973. This study involved:	a \$135,000 detailed and comprehensive feasibility study of a people-mover system within the Jacksonville Downtown Area was conducted by the Florida Department	automated guideway transit or people-mover system since a group of city and state officials, public and	



19. S.



\$225,000 1973-1974 Jacksonville Urban Area Mass Transportation Study which recommended a threephase mass transportation program for the period 1974-1990. Most recently the \$105,000 Central Area Transportation Planning Program completed in 1976 again emphasized the impact of the AGT system and recommended it as the top priority project for the Downtown Revitalization Program.

This latter program was adopted originally by the City Council in 1971 and is continually revised and updated by the Downtown Development Authority (DDA) in cooperation with the JAPB, the JTA, the City Public Works Department and other State and City agencies, as well as the private sector.

Immediately following the April 5 announcement by the U.S. Department of Transportation, Urban Mass Transportation Administration (UMTA), to demonstrate the benefits of fully automated people-mover systems in urban downtown areas, the Mayor of Jacksonville established a "People-Mover Task Force" to revise and appropriately modify Jacksonville's People-Mover System Plan and submit a written proposal to UMTA by June 30, 1976.

The Mayor's Task Force is composed of a wellqualified staff representing the JTA, JAPB, DDA and FDOT, as well as the Jacksonville Chamber of Commerce and the consultant firm of Daniel, Mann, Johnson and Mendenhall, who had previously developed the 1973 Jacksonville Downtown People-Mover Plan. Following numerous Task Force work sessions and meetings and several presentations to Jacksonville citizens and local decision-makers, the Stage I and Stage II Automated Guideway Transit People-Mover System for the Downtown Area was developed. Figure 7 displays the general alignment and station sites for both stages, as well as potential future extensions.

The Consolidated City of Jacksonville advocates eventual development of both the Stage I and Stage II AGT system chiefly because:

> derived from one square mile of its downtown area from \$5 million in 1971, \$8 million in 1975, and up to \$30 million in 1990. The people-mover system will accelerate the attainment of the 1990 goal by 3 to 5 years and will provide new opportunities for joint development downtown. Furthermore, the AGT system Jacksonville has determined that downtown is a number one priority and has committed itself to revitalization ment include a major increase in the tax revenues thority and the Downtown Council of the Chamber of through the creation of its Downtown Development Authe officially adopted Downtown Revitalization Plan. tion of the entire central area in accordance with will substantially contribute toward the revitalizacost-benefit analysis results described within this area. commerce. form of new ad valorem taxes. between four to eight dollars are returned in the for each dollar of public capital investment Jacksonville is committed to its downtown Downtown development economists show that (This doesn't include

 It will significantly reduce the future annual operating deficit of the JTA mass transportation system while maintaining and improving the regional mass transit system,

3) It will expand and improve the peripheral parking program already underway, along with the complementary system of Downtown Area shuttle bus routes,

4) It will attract a wide variety of person trip purposes at all hours of the day. The system directly interconnects a large hospital-medical complex, a relatively high density residential area with mostly "captive" riders, a new Downtown Florida Junior College, the Central Business District (CBD) retail shopping and commercial areas, the expanding Government Center, the CBD financial center, major longterm parking facilities and several planned land developments; these diverse activities should lead to a wide range of trip makers on the AGT system throughout the day, in addition, the unique interface with

13) It will significantly contribute toward the	12) It will contribute toward the minimization of energy consumption,	<pre>11) It will complement the planned Downtown Hogan Street Pedestrian Mall and elevated Skywalk System,</pre>	10) It will be a vital factor in maintaining and "recycling" the economic vitality and strengthening of the retail and commercial activities in the CBD,	9) It will eventually provide an effective means of travel across a major access barrier, the St. Johns River which now separates the south downtown from the CBD, and	8) It will effectively contribute to better utiliza- tion of the present mass transportation system,	7) It will significantly alleviate traffic conges- tion, air pollution and enhance safety of pedestrians and auto drivers,	oniversity and st. Lukes Hospitals, private develop- ers, citizen groups and the news media; over 30 resolutions and letters of endorsement for the sys- tem outline the mutual goal of building this important first phase people mover system by both the public and private sectors,	6) It has the strong and united support of the Mayor and City Council of Jacksonville, JTA, JAPB, DDA, FDOT, the Jacksonville Chamber of Commerce, the Downtown Florida Junior College, the Methodist,	5) It is consistent with the regional Jacksonville Urban Area Transportation Study (JUATS) plans and is included in the JUATS Transportation Improvement Program for 1976-1980,	the JTA bus system will assure a comparatively high ridership on the AGT system from its initial day of operation,
require a significant amount of additional funding capital from UMTA, FDOT and City sources. Therefore,	a st. Jonns River crossing which has yet to be in- vestigated in sufficient depth in terms of environ- mental and engineering concerns. It would also	While the need for and benefits of Stage II are also evident, it will require the construction of	low rapid placement of pre-cast guideway struct d d) the area has very favorable weather condit lowing for year-round construction.	tive ease and within a comparatively short time frame due to: a) the rapid decision-making process in Jacksonville (Consolidated Government); b) all of the AGT route rights-of-way are publicly owned;	merits of the system for application in other cities. Jacksonville's Stage I AGT system can be constructed	It is realized that UMTA is anxious to construct and operate the AGT system in the shortest time	Although Jacksonville strongly supports the develop- ment of both Stage I and Stage II AGT system routes in the near future, and is fully aware of the multi- plicity of benefits that would be accured by both Stages, the City proposes to build only Stage I initially.	office amphitheater and parking building. The city riverfront parking and activity center and convention hotel complex will incorporate a major people-mover station as well.	mover station as a part of the design. These pro- jects include the 37-story Independent Tower, the University Hospital complex and Hope Haven Childrens Hospital, the 15,000-student Downtown Florida Junior	strengthening of the Downtown Area tax base. For example, five major new building investments exist along the proposed people-mover route. Four of



while the construction of Stage I is comparatively simple, the Stage II system will require more time, money and investigation and would be undertaken only after the success of Stage I.

In addition to the previously stated reasons for developing the AGT system, which all have national significance, the following points stress Jacksonville's merit as one of the selected Downtown Area Demonstration Projects:

- The City will choose, through a competitive procurement process, one of the existing peoplemover technologies with minimum modifications to adapt it for deployment in the Downtown area, thus reducing any time delay between the UMTA grant award and an operational AGT system.
- 2) Upon completion of the installation, testing and initial public operation of the people-mover system, the JTA will continue to operate and maintain the system. Since the JTA took over public operation of the bus system in December 1972, it has had an impressively successful mass transportation program.
- 3) Jacksonville has a growing demand for mass transportation services. A large number of Jacksonville citizens are included in the "captive" group which requires public transportation services for their mobility. There is also a continuing trend of increased "non-captive" transit patronage. During the past three and a half years, the JTA has been developing a more aggressive and effective mass transit system through City, State and Federal assistance. The result has been a 40 per cent increase in transit patronage from December 1972 to April 1976.
- Jacksonville has strong local and state technical expertise to efficiently plan, construct and operate the ACT system.

- 5) City Council has committed itself to provide its share of the People-Mover system capital costs, and through private and Florida Department of Transportation funding sources, Jacksonville will have the financial capability to finance the local share of capital costs and operational costs. The City of Jacksonville and its legislative delegation, business and governmental leadership have taken a major step in creating new tax incentive legislation opening the way for stronger public and private joint venturing in the redevelopment. Tax incentive legislation passed both Legislative bodies on May 25, 1976.
- 6) The Jacksonville Transportation Authority, with City and State assistance, would fund any deficits that may result from continuing operations and maintenance of the AGT system.
- 7) The AGT System has had a significant amount of investigation as far as impact upon the downtown businesses, residential and other activities along the People-Mover route. This investigation has included a significant program of public education and encouragement from Jacksonville citizens.



ON HOGAN STREET NEAR FORSYTHE

RECOMMENDED STAGE I PEOPLE-MOVER SYSTEM ROUTE

The Mayor's People-Mover Task Force held numerous work sessions during April and May of 1976 to revise and update the 1973 Automated Guideway Transit People-Mover System Plan. On May 18 the Task Force adopted a plan recommendation. Figure 6 displays the recommended Stage I AGT System route alignment and <u>station</u>\_sites. The two-way automated guideway route traverses 9,900 feet or 1.88 miles and has seven stations.

The route begins in the Government Center south of the Jacksonville City Hall and extends westward along Water Street to Hogan Street. The route then turns northward through the Downtown Core Area along the Hogan Street Pedestrian Mall north to the Downtown Florida Junior College. From there, it generally parallels the Hogan Creek Flood Plain all the way northwest to Eighth Street within the University-Methodist-St. Lukes Hospitals and Medical Center.

The Stage I People-Mover System has been endorsed by the Mayor and City Council of Jacksonville, the Florida Department of Transportation, the Jacksonville Transportation Authority, the Jacksonville Area Planning Board, the Downtown Development Authority, the Jacksonville Urban Area Transportation Study Technical Coordinating and Policy Committees, the Jacksonville Chamber of Commerce, the City Housing and Urban Development agency, the Downtown Florida Junior College, the St. Lukes, Methodist and University Hospitals, the Citizen's Advisory Committee of Subarea 6 (Downtown Area), and other public and private groups and organizations (See Appendix for letters and resolutions of endorsement).

## STATIONS AND AREA ACTIVITIES

Government Center Station - The Stage I easternmcst station is Tocated between Newman and Market

> Streets, and the City Hall and adjacent city parking lot. At present, there are about 6,000 workers within a five-minute walk from the station (See Figure 8). By the year 2000, about 14,000 are expected.

In addition to workers in the Police Administration Building, the City Hall, Courthouse. State Office Building and their future annexes and extensions, these governmental facilities attract a large number of non-work person trips throughout the entire day. As a result, this people-mover station is expected to handle a large volume of people each weekday.

Independent Square-Riverfront Plaza Station - This station will be located in the center of the major financial office complexes in the Core Area. At present there are 8,000 people working within a five-minute access to the station. By the year 2000, the number is expected to triple totaling 25,400. In addition to the 37-story Independent Square Office Tower, the 18-story Atlantic Bank Tower, the 17-story Seaboard Coast Line Building, and the 16-story American Heritage Life Building, the station directly serves the Jacksonville Civic Auditorium and a 350,000 square foot Sears Roebuck Store.

Future planned developments include the massive Seaboard Coast Line Office-Hotel-Retail complex and the Riverfront Plaza, featuring a hotel, parking structure and recreational-cultural activity shops.

Hemming Park Station - This station is centered within the retail shopping area of the Core Area. It would be highly infegrated with the planned pedestrian mall down Hogan Street. The major stores include May Cohens, Iveys, J. C. Penney, Rosenblums, Purcell's and Woolworths.

About 12,000 people now work within a five-minute



walk of the station. By the year 2000, it is expected that over 16,000 workers could be served by this station.

The Universal Marion Building, the Florida First National Bank Building, the Barnett Bank Buildings and the Southern Bell Telephone Building are the major office complexes. In addition, the U. S. Post Office and Robert Meyer Hotel are within a block of the station. All of the bus routes coming from the east would serve this station.

Northside Downtown Station - This station located on Hogan Street between Beaver and Union Streets would be constructed in conjunction with the peripheral parking program. Initially, between 1,000 and 1,500 surface spaces would be available. Eventually, multi-level parking structures would be constructed with direct pedestrian access provided to the station.

Approximately 5,300 workers are within a fiveminute walk from the station today. Future employment in the service area is expected to remain constant.

Downtown Florida Junior College Station - The Junior College station will be located above the present right-of-way of Hogan Street between Orange and State Streets. It will be constructed between the Administration Academic Building now under construction and its future extension to the east. This building complex will contain career education learning resources, student services and auxiliary services. Access to the station will be direct from inside the building.

The Downtown Florida Junior College Master Plan completed in February, 1974, incorporated the elevated People-Mover Guideway and station site. It is expected that this station will handle a high volume of pedestrian traffic throughout the day.

The Downtown Campus enrollment (headcount) in 1976

is about 11,000. That figure is anticipated to grow to 14,604 and 16,300 students by 1981 and 1984.

Hogan Creek-Springfield Station - This station will serve one of the most densely populated residential areas in Jacksonville.

Approximately 2,000 Springfield residents live within a five-minute walk of the station site today. It is important to emphasize that the majority of these citizens are "captive" transit users or "transit dependent" (low income, elderly, young), and thus would utilize the People-Mover System to a large extent. This will be especially true because of the faster service to and from the downtown retail centers and the more convenient transfers to other bus routes serving other areas of Jacksonville.

Adjacent to the Hogan Creek-Springfield Station is, the City Housing and Urban Development office. This agency has been working diligently on a rehabilitation and redevelopment program (Hogan Creek) for several years. Hundreds of old, rundown housing units have been removed and will be replaced in the coming years along with a small retail shopping center. Thus, the people-mover system will be serving even more residents in the 1980's. By the year 2000, there will be nearly 3,200 persons living in proximity to the station.

Hospital-Medical Center Station - This station would be the northernmost extension of the Stage I People-Mover Route. It is located within the rapidly growing Hospital-Medical Center of Jacksonville, equally accessible to the Methodist Hospital, the University Hospital and the St. Luke's Hospital and their respective medical facilities, as well as the Jacksonville Health Center Office. Numerous other medical or related activities are also located within the Center.

Today nearly 5,000 persons work within easy access

to the station. It is anticipated that there will be at least 9,000 workers in the area by the year	also provide direct access to the People-Mover station.
heavily utilized activity centers in Jacksonville today with numerous transit dependent residents	Three other shuttle-bus routes will be the South west-Riverside, the Southside-northside and the
requiring access several times a month.	East-West Downtown services, each providing five
SHUTTLE-BUS AND PEOPLE-MOVER INTERFACE	off-peak hours for 15¢ a ride.
To supplement the People-Mover System service, shuttle-bus service similar to the existing Jacksonville Transportation Authority "Spirit	PERIPHERAL PARKING PROGRAM
Special" routes will be established. These routes would extend from peripheral parking	One of the key elements of the total transporta- tion system for the Revitalization Program for
areas into the CBD, and should also circulate	Downtown Jacksonville is the peripheral parking
areas not directly served by the People-Mover or	program. Parking lots located at the tringes of the downtown CBD would be provided for workers
regular bus service. These minibus routes may be prototypes for eventual fixed-quideways if	to park all day. Each lot would be served by th Stare I People-Mover System or the JTA shuttle-b
the Riverside and Southside areas develop suf- ficient trip demands.	routes.
Figure 24 displays the five proposed shuttle-bus	Figure 9 shows the 1981 peripheral parking progr in conjunction with the people-mover and shuttle
routes serving the Downtown Area and their interface with the AGT system. The Springfield area shuttle	bus systems. About 4,000 parking spaces would b available at about 25 lots.
the east and west of the Hogan Creek Flood Plain including the Hogan Creek urban renewal, and inter-	STAGE I PEOPLE-MOVER SYSTEM CAPITAL COST
face with the two northernmost People-Mover stations. Shuttle-buses would provide 10-minute service each	Figure 25 shows the estimated capital outlay for the Stage I People-Mover System at \$33,515,800
weekday.	(in 1976 dollars). This excludes peripheral par ing facilities, rights-of-way, and pedestrian
The Confederate Park-Government Center Shuttle would serve the planned 208-unit high-rise resi-	skywalk station access facilities which total an estimated \$7,500,000. This latter amount would
dential tower for senior citizens, Confederate Park, several peripheral parking lots in the	be financed through City, State and private sources.
Towers senior citizen neighborhood and the Govern- ment Center. Five-minute service would be pro-	The City of Jacksonville is requesting that the U. S. Department of Transportation, Urban Mass
vided during peak travel periods and ten-minute service other times. These shuttle-buses would	Transportation Administration finance 80% of the \$33,515,800 figure or \$26,812,640. This amount

ninute service during peak and or 15¢ a ride. wn services, each providing fivethe Southside-northside and the tle-bus routes will be the South-

### NG PROGRAM

0 would be provided for workers . Each lot would be served by the Mover System or the JTA shuttle-bus ig lots located at the fringes of wille is the peripheral parking the Revitalization Program for lements of the total transporta-

with the people-mover and shuttle-bout 4,000 parking spaces would be out 25 lots. he 1981 peripheral parking program

## NOVER SYSTEM CAPITAL COST

This excludes peripheral park-

## DOWNTOWN AREA PEOPLE-MOVER SYSTEM CAPITAL COST ESTIMATE (1976 DOLLARS)

# STAGE I (North Side) -- Hospital/Medical Center to City Hall (9900 ft.)

### CONSTRUCTION COST

Sub Total	PEDESTRIAN SKYWALK STATION ACCESS	<u>RIGHT-OF-WAY</u> (Parking at Union & Beaver) (Portions of Guideway) (Air rights)	PARKING FACILITIES(Union at Beaver St., 8th at Jefferson)	Total Construction	Sub Total	START-UP/TRAINING/MANNING	VEHICLES	SYSTEM TESTING	ADMINISTRATION & LEGAL	CONTINGENCY	ENGINEERING & ARCHITECTURE	Sub Total Construction	Guideway Utilities & Traffic Power Distribution Communication & Controls Aerial Stations Yards & Shops
7,500,000	1,000,000	1,500,000 1,000,000 2,000,000	2,000,000	33,515,800	10,720,800	250,000	5,000,000	683,850	1,139,750	2,279,500	1,367,700	22,795,000	\$ 9,900,000 2,475,000 1,485,000 2,735,000 5,600,000 600,000

TOTAL SYSTEM CAPITAL COST

\$ 41,015,800

1981 is 14,700,000 passengers. There is expected to be a wide variety of trip makers, including students, senior citizens, young, tourists, workers, shoppers, and others. About 12,500 persons, or 44% of the ridership, would be transferring bus riders. Today, about 35,000 person trips are made	riders on the Stage I people-mover system in 1981 is 49,000 (See Figures 20 and 21), based upon a fare of \$0.15. Estimated annual ridership for	The total estimated number of average weekday	PEOPLE-MOVER SYSTEM PATRONAGE	the system.	Authority through City financial support will pro- vide the necessary funds to maintain and operate	portation system. If, however, there is any deficit in any year, the Jacksonville Transportation	years of operation. This surplus would be used to improve and maintain the regional mass trans-	the Stage I People-Mover System is estimated to net a profit of \$10,639,000 over its initial ten	Dassenger revenue are estimated to be 026,588 and \$29,664,400, respectively.	For the ten-year period, the total operating cost	are based on the 1981 patronage estimates and a base fare of $15$ ¢.	be \$1,764,000. The estimated net operating income would be \$450,604 to the credit. These estimates	ng and maintenance People-Mover Syste ed annual operating 313,396 and the 1981	Figure 27 illustrates the estimated annual	ANNUAL OPERATING AND MAINTENANCE COSTS	is actually only a little over 65% of the total capital cost estimate of \$41,015,800.	
to, from and through bus system. By 1981 is expected to grow 3,900, or 8% of the is estimated to be p	(1) .15¢ Fa	TOTALS 19,C	1990(2) 2,6	1989(2) 2,4	1988(2) 2,2	1987(2) 2,(	1986(2) 1,9	1985(1) 1,	1984(1) 1,(	1983(1) 1,	1982(1) 1,	1981(1) 1,:	Year C	REVENUES/VE			
n the downtow 1, this volum to at least AGT system r persons diver	Fare (2)	19,026,588 2	2,625,484	,431,004	2,250,929	2,084,194	1,929,809	,786,860	,654,500	1,531,945	1,418,467	,313,396	Operating Cost	/VERSUS OPERATING	DOWNTOWN PE	FIGURE	
rough the downtown area via the JTA 1981, this volume of transit riders grow to at least 55,000. About the AGT system ridership, in 1981, be persons diverted from buses to	2) .25¢ Fare	29,665,400	4,147,800	4,067,200	3,973,200	3,865,800	3,745,000	2,166,480	2,077,920	1,981,320	1,876,680	1,764,000	Revenues	Qo	PEOPLE-MOVER	le 27	
ie JTA riders t 1981, s to	r e	10,638,812	1,522,316	1,636,196	1,722,271	1,781,606	1,815,191	379,620	423,420	449,375	458,213	450,604	Net Income	MAINTENANCE COST			

#### FIGURE 21

## STAGE I PEOPLE-MOVER SYSTEM

### REVENUE PASSENGERS

<u>Year</u> 1981 1982 1983 1983	Annual <u>Patronage</u> 14,700,000 16,040,000 16,380,000 17,380,000 18,720,000	% No Fare Or Passes 20% 22% 24% 24%	Annual Revenue Passengers 11,760,000 12,511,200 12,511,200 13,208,800 13,852,800
1982	16,040,000	22%	12,5
1983	17,380,000	24%	13,2
1984	18,720,000	26%	13,8
1985	20,060,000	28%	14,443,200
1986	21,400,000	30%	14,980,000
1987	22,740,000	32%	15,463,200
1988	24,080,000	34%	15,892,800
1989	25,420,000	36%	16,268,800
1990	26,760,000	38%	16,591,200

the people-mover due to deletion of some bus route coverage, as well as faster people-mover service.

The next greatest demand on the people-mover will be diverted walk trips, mostly within the CBD. An estimated 120,000 two-way CBD walk trips will be made on an average weekday in 1981 and about 8%,

or 9,500, of these are estimated to be diverted to the people-mover system.

Annual ridership is anticipated to rise steadily until the average weekday patronage reaches about 89,200 persons in 1990, or an 82% gain over 1981. The annual ridership in 1990 would be approaching 27,000,000 passengers.

Figure 22 indicates the estimated hourly demand on the people-mover system in 1981 by type of trip-maker. Nearly 15% of the average weekday people-mover system ridership or 7,250 passenger trips are anticipated to occur during the 12:00 noon to 1:00 P.M. peak hour. While the majority of trip-makers will be shoppers and downtown area employees going shopping and to lunch, a variety of other trips would be made to the Hospital- Medical Center, Junior College and peripheral parking lots.

As shown on Figure 22, the people-mover will serve a significant number of peak hour (7:00 a.m. to 8:00 p.m., 4:00 p.m. to 5:00 p.m. and 12:00 to 1:00 p.m.) person trip travel. However, the system would also be handling around 3,000 or more person trips per hour for about 11 hours each weekday. The principal reason is that the peoplemover interconnects a wide variety of activities, many of which generate and attract all-day long person trips. The Jacksonville people-mover would not be idle during regular off-peak hours.

#### SYSTEM OPERATIONS

The JTA will retain an AGT system supplier as a Management Consultant for one to two years to administer and operate the system. During this period, JTA technicians and other staff will be trained so that JTA will resume sole management and operation of the system.

FIGURE 20

## 1981 and 1990 PATRONAGE ESTIMATES

#### FOR STAGE I

## DOWNTOWN PEOPLE-MOVER SYSTEM

v

	н •	G.	רי י	т •	D.	с.	в.	Α.		Typ Dir
	Other	Private Vehicle	Diversions from Bus System	Transfer from Bus (Non-Work)	Transfer from Bus (Work)	Peripheral Parking Lots (Non-Work)	Peripheral Parking Lots (Work)	Walk		Type of Person Trip Directed to People-Mover
TOTAL										
49,000	3,000	4,700	3,900	11,500	10,000	2,600	3,800	9,500	1981	Average Weekday Trips on People-Mover
89,200	4,200	7,700	5,500	23,000	17,800	8,600	7,500	14,900	1990	ay Trips over

.

## ESTIMATED HOURLY PATRONAGE

## STAGE I DOWNTOWN AREA

## PEOPLE-MOVER SYSTEM: 1981

A - Walk Trip B - Peripheral   C - Peripheral	Total	9 IŐ								2			I	<b></b> .		ω	ł	Weekday Time
Parker (worl	9,500	50	100	vι	лι	ות	$\mathbf{O}$	0	$\mathbf{O}$	85	0	875	$\sim$	0	O	75	50	A
ork) on-work)	3,800	1			лÓ	5	0	0		0	ப	50	S		0	S		Ιœ
	2,600	.	20	20	л 5	J	100	N	0	ப	0	310	0	ъ	0	0	I	0
E - Trat F - Dive G - Priv	10,000	100		<b>)</b> (	лс	$\supset$	0	0	0	0	Q	0	0	0	0	0	0	D
nsfer from B ersions from vate Vehicle	11,500	250	UT C	ло	ວ ເ	רכ	0	Ο	0	0	0	0	Ο	0	0	0	0	lm
us (non-w Bus Syst Diversio	3,900	50	$\circ$	л (	⊃ •	1	0	σ	0	σ	Ο	300	0	Ο	0	0	N	רי-
ork) em ns and Other	7,700	100	1	י ת	4	0	տ	1	S	0	0		S	ப	7	S	0	<mark>اھ</mark>
7	49,000	550	. م	• 4	77	85	• 2 5	• 85	<b>,</b> 0	,75	,25	<b>,</b> ] 3	,57	<b>,</b> 30	,27	<b>,</b> 07	$\mathbf{N}$	Total

DCBA 1 I ł

ŧ

Walk Trip Peripheral Parker (work) Peripheral Parker (non-work) Transfer from Bus (work)

FIGURE 22

Since all of the Stage I route alignment and sta- tions are within existing public rights-of-way, time parame required for land acquisition will be held to a benefi minimum. Furthermore, the use of the St. Johns to the standard	Mover System and actual opening for passenger Operation is shown in Figure 28. Probable minimal time is about four years. People	ΣI	Since the longest trip on the people-mover from the Hospital-Medical Center to the Government Center requires only 7.8 minutes travel time including all station stops, off-line stations are mated guined; each train will stop at all intermediate stations. Station dwell times would vary between 10 or 15 seconds off-peak hours up to 20 to 25 seconds during peak hours. The trains will be fully automatically controlled; some form of communication or even television monitoring would be provided between the vehicles and the central control console. Automatic fare collections should how well also be incorporated, although it is recommended pare to the table of table	Operations for the recommended Stage I System town a include two-way, automated guideway, people-mover the previce at 3 minute headways from 7 to 9 am; 11:30 am to 1:30 pm and the 4 to 6 pm peak travel periods; 5.2 minute headways during day-time off-peak hours; and 7.8 minute headways during the 6 to 7 am morning period and 6 to 10 pm evening operation operation operation (See Figure 23).
portion of the quantifiable benefits accruing from the Stage I people-mover system. Only 5 parameters were used to estimate the cumulative benefits over the 1981-2000 period. Hence, the \$6.81 of benefits for each \$1.00 of capital invest-	the ana	Answers to these questions, as well as others, are critical. At present, a detailed analysis of the potential induced regional and community benefits of the AGT system has not been completed. However, benefit-cost evaluation will be part of the pre- liminary engineering and design program, as well as the socio-economic studies during the initial years of system operation.	BENEFITS ACCRUED FROM AGT SYSTEM The decision to develop and implement an auto- mated guideway transit system serving the downtown area will directly or indirectly affect the daily lifestyle of most Jacksonville citizens. What type and annual value of benefits could the average citizen expect to receive from this capital invest- ment? Does the proposed Stage I AGT system have the capability to generate a positive economic re- turn on the total capital investment required? How well does the total cumulative benefits com- pare to the total capital costs of the system?	town area should facilitate the construction of the pre-cast guideway. Thus, the total length of time for construction should be comparatively short. Initial revenue passenger service is anticipated in 1980, with 1981 being the first full year of operation.

-

١

FIGURE 23

#### STAGE I

## DOWNTOWN PEOPLE-MOVER SYSTEM HEADWAYS & CAPACITY

# STAGE I (North Side) - Hospital/Medical Center to City Hall (9900 ft)

# PERIODS OF OPERATION -- 6AM to 10PM

	6 pm to 10 pm	4 pm to 6 pm	2 pm to 4 pm	ll am to 2 pm	9 am to 11 am	7 am to 9 am	6 am to 7 am	Time Period
	7.8	3.1	5.2	3.1	5.2	3.1	7.8	Headways
221	31	39	23	58	23	39	8	<pre># of Trains(Period)</pre>
442	62	78	46	116	46	78	16	<pre># of Vehicles(Period)</pre>
	1600	3600	2400	3600	2400	3600	1600	Capacity(hr)*
	6200	7800	4600	11600	4600	7800	1600	Capacity(hr)* Capacity(period

\* Note: Capacity stated is for one track - one direction of operation, and is based on standing to seating ratio of 1.5.

(1)				თ •	4.	ω •	N. •		•
Other benefits not quantified above in savings to auto and truck drivers with CBD; reduced pedestrian and vehicular reduced cost of auto insurance; improv of CBD; improved life style; improved transit-dependent residents; decreased noise pollution; reduced energy consum	Benefit/cost ratio	Stage I capital costs (1976 dollars)	TOTAL QUANTIFIABLE BENEFITS	Time savings benefits for bus riders who utilize people-mover system	Reduced bus operating subsidy	Parking and auto operating cost savings for persons who divert to transit	Auto operating cost savings for persons who use peripheral lots	ho use peripheral parking lots	rking cost savings for pers
nclude time hin downtown accidents; ved vitality mobility of d air and mption; other		49	\$ 7,739,625	4,609,375	1,200,000	1,531,000	46,750	\$ 352,500	Ben Accru 1981
κ •	\$ 6.8]	\$ 41,015,800	16,208,833	9,010,333	3,200,000	2,862,000	121,500	1,015,000	efits ing from over System <u>1990</u>
·	of benefits for each dollar of capital cost		279,436,750	157,723,000	53,600,000	49,813,000	1,998,250	16,302,500	1981-2000 Cumulative Benefits Accruing from People-Mover System

ł

#### FIGURE 30

# QUANTIFIABLE BENEFITS ACCRUING FROM STAGE I PEOPLE-MOVER SYSTEM (only 5 parameters used)

sonably supplement this report and will be shown in later studies.

The quantifiable benefits estimated for 1981, 1990 and the 1981-2000 period were:

- long-term and short-term parking cost savings for persons using peripheral park-ing lots served by the AGT system,
- automobile operating cost savings for

persons who park at the peripheral lots rather than park within the core area,

- parking and auto operating cost savings for persons who divert from their auto to mass transit due to the AGT system,
- 4) reduced annual bus transportation operating subsidy due to the AGT system, and
- 5) time savings benefits for bus patrons who utilize the AGT system.

#### FIGURE 28

# STAGE I PEOPLE-MOVER SYSTEM IMPLEMENTATION SCHEDULE

						Socio-Economic Studies	10.
	]]]]]	££££££££\${\$				Construction	9.
	ļ	1331331				Purchase Vehicles and Testing	8. •
SI						Hearings	7.
LION						Design Vehicle and Guideway	6.
E & A.			1111			Secure Funding	5 •
d 0						Environmental Impact Statement	4.
NIÐ			<b>]]]]</b>			Preliminary Engineering and Design	ω •
BE						Prepare and File UMTA Capital Grant Application	2.
0	o c	19	10			Revise and Update People-Mover Plan	 •
٢۵	00	70	70	4 4	7 1		

The AGT System and Current Development During the mid-1950's, over \$50 million was spent	FINANCE Jacksonville has a long history of financial commitment to a coordinated land use and trans- portation program in the downtown area. This section outlines some of the financial techniques to be considered by the City of Jacksonville in funding its share of the People-Mover costs.	8) increased mobility of handicapped persons. Also, not included is the additional tax base generated by the AGT system which will signi- ficantly contribute toward the revitalization of Downtown Jacksonville, as well as enhance the entire community.	<ul><li>6) decreased air and noise pollution,</li><li>7) reduced energy consumption; and</li></ul>	<ol> <li>4) improved vitality and "liveability" of the downtown area,</li> <li>5) improved mobility of transit-dependent residents.</li> </ol>	3) reduced cost of auto insurance,	2) reduced pedestrian and vehicular accidents,	l) time savings benefits for auto and truck drivers within the CBD,	Other benefits not quantified for this analysis include:
The following are the key developmental and financial techniques that might be employed, particularly at people-mover stations to strength-	Through 1981 an additional \$12 million is budgeted for public capital outlay projects in downtown. In addition to the capital investments already com- mitted by public and private interests, another \$250 million of private investment has been an- nounced. Development Financial Techniques and Sources	Adopted in 1971, the Plan has been the basis for reinvestment in the central area. Private commit- ments since 1971 total \$450 million, of which \$200 million is on the boards or completed in the form of new office buildings and related uses. Public building and utility investments during the same period totaled \$46 million.	initiated the Downtown Plan. The Plan's recommenda- tions, completed in 1971, were used as a basis to create the Downtown Development Authority which was assigned to implement the Downtown Plan.	With the creation of the consolidated government in 1968, there was a re-evaluation of Jacksonville's commitment to its downtown area. As a part of this re-evaluation the Jacksonville Area Planning Board and the Chamber of Commerce Downtown Council		defined as the "Jacksonville Story" in the middle 1950's and the early 1960's.	a federal building, a major Sears and Roebuck Department Store and parking area, and a coliseum.	in creating riverfront parking facilities, a city hall, courthouse, a civic auditorium, Coast Line

-

••;

en committed and proposed projects and to generate new public and private investments in appropriate land uses.

Develop/Hold - Build transit related facilities around stations and lease or rent such facilities.

Develop/Sell - Acquire land in fee simple, then sell surplus land as facilities.

Hold/Sell - Hold land parcels acquired for stations, then later, when development of these parcels meets appropriate public purposes, sell, subject to specific conditions.

Lease - Make long-term ground, air or subsurface rights leases for specific developments.

Participation - Make participation lease or acquire equity participation in joint development enterprises with others, public or private.

Tax Techniques - Use the newly enacted State of Florida tax incentive legislation when provision is made (to be voted on in November 1976). After amendment, the legislature must create the necessary legislation to serve Jacksonville. The legislation will allow tax abatement or the use of tax increment (marginal value) taxation to apply incremental taxes resulting from new development to retirement of improvement bonds issued against these incremental tax revenues.

Development District - Although there is no provision for a Florida city to create special development districts, the Jacksonville City

stations and skywalks.

Council may create a special district upon vote by the freeholders in the subject district. The Downtown Development Authority Act (See Addendum) provides major implementation power upon City Council approval. This is potentially (as implemented through the City Council) a strong vehicle with bonding and development legal provisions.

<u>Revenue Bonds</u> - The City of Jacksonville's <u>share of the capital cost can be provided</u> through the use of non ad valorem revenue bonds. The City would sell revenue bonds based on gross revenues from the People-Mover system, and general operating funds could be pledged for any operating deficits. The currently received State of Florida 8th¢ gas tax is also a source of capital or operating funds. The 9th¢ gas tax is available for transit use in Florida, but it must be enacted through a local referendum.

<u>Sales Tax</u> - A local option sales tax is <u>available</u> for funding mass transportation projects after approval by public referendum.

State of Florida Department of Transportation -Florida's DOT will fund at least 50% of the local share of capital costs of the peoplemover system. In the past the State of Florida has never reneged on payment of its share of a capital grant contract for transit. As far as this project is concerned the FDOT will fund 10% of the \$33,515,800 capital cost, which excludes parking facilities, rights-ofway for the AGT system and pedestrian access to



RELATIVE	SUMMARY
70	٩
STAGE	PERT
	INENT
	FACTS

-

	450,604 surplus 379,620 surplus 1,522,316 surplus	1981) = \$ 1985) = =		
	ue	osts vs Revenue	Annual Operating C	E)
	1,764,000 2,166,480 4,147,800	10% passes)= \$ 18% passes)= 18% passes)=	(1981)(15¢ fare, 2 (1985)(15¢ fare, 2 (1990)(25¢ fare, 3	
<u>System Benefits</u> (1981-2000) = <u>\$157,700,000</u> = \$6.81	(1	(evenue	Annual Passenger R	, D)
	20,060,000 26,760,000	985) 990)		
Capital Cost per Urban Area Resident	4	( 186		
"		atronage	Annual Passenger P	c )
(1981) = 0.70 (1985) = 0.84	1,786,860(1) 2,625,484(1)	990)		
Weekday Passenger Trips per Downtown Area Employee	- ω - ω - ω	80	<u> </u>	
N		osts	Annual Operating C	B)
(1981) = 21.6 (1985) = 27.0	4,101,580 10,101,580	re	5	
Annual Passenger Trips Per Urban Area Resident	,015,8	5 Do MTA	Capital Costs (197	A)
tage I People-Mover proposal is:	relative to the S	information r	Some pertinent	

(1) Cost is in that year's dollars.

Nown J

 THE DOWNTOWN STREET LOOP SYSTEM business leadership joined forces to create a Downtown Revitalization Program. This pro-gram was adopted by City Council in 1971 and the Downtown Development Authority was created to implement the Program. The Program's ob-jective was to strengthen the tax base of the with the Downtown Program. Over \$200 million is already developed. The public sector has spent and committed over \$46 million in capi-tal improvements in the form of new streets, sidewalks and utilities complementing the Pro-gram. (See Figure 1 for Downtown Area Boundary). core area and increase the tax revenues to the City in the form of new ad valorem taxes. Since 1971, the private sector has announced over \$450 million in development in accordance PERIPHERAL PARKING AND AUTOMOBILE INTERCEPT The Jacksonville Area Planning Board and the in its downtown area, was inaugurated. The County governments in 1968, a re-evalua-tion of Jacksonville's growth, particularly As a result of consolidation of City and briefly described as follows: THE DOWNTOWN REVITALIZATION PROGRAM at the heart of downtown around the north-south the present revitalization program are Stage I people-mover system route penetrates this circulation system is under construction. The Hogan/Laura Street spine and Hemming Park. This trian and transit oriented eighteen block area The Loop System is designed to create a pedes-The downtown parking plan is based on a 500% (from 1968 to 1990) increase in the use of mass loop system. five key transportation elements of

Existing parking facilities will either remain place or will be relocated between the streets the "Loop System" and on the riverfront in the form of new multi-use parking buildings or activity centers outlined in the Downtransit. The plans are specifically designed limit the number of new parking spaces in and adjacent to the "Central Business District". 4,000 of these spaces will be provided by 1981 in conjunction with the AGT System and shuttle bus service. (Downtown Parking spaces on peripheral parking sites within one mile of the Downtown district. About cept also provides for 10,000 new parking town Program. The long-range parking con-Action Plan - Conrad/Voorhees 1973-74). ť

amphitheater and parking facility is under construction in conjunction with the peoplemover route in the Government Center. The first multi-use state-office, city

# SECOND LEVEL PEDESTRIAN WALKWAY SYSTEM

The first phase of the second-level pedestrian walkway program is being engineered for construction in 1977-78. Four new office build-Independent Square and the soon to be con-structed state regional office building--along way system--Atlantic Bank and Duval Federal, ings have incorporated their part of the walkthe people-mover route on Hogan Street.

#### MASS TRANSIT

transit service plays a major role in providing convenient access to an estimated 22% of down-town workers today. Preferential treatment for downtown Jacksonville each weekday. vide adequate mass transportation service The present 250 air-conditioned JTA buses pro-Mass to



. .

MESSILL LYNG	Mittour Eur	Downtown Jacksonville has enjoyed remarkable growth in recent years, despite the effects of the national economic downturn. Major new
	XANTING C	Background and Rationale
	AMBER HOUSE	oposal.
Funchaott's	OFFICE	trategies are outlined and projects set hat illustrate the Jacksonville approac articularly as related to this people-m
	KOSENERIUM'S	ok a major review of the Downtown Revitali tion Program in the light of recent nation onomic conditions. A series of developmen
		lanning work. In 1975, the firms of Hamme iler & George, Wallace, McHarg, Todd and oberts and Environmental Design Group unde
		he Downtown Development Authori ole of implementing the Downtown ontinued necessary detailed imp
<u> </u>		CONTINUOUS REVIEW AND DEVELOPMENT STRATEGIES
LEVY WOLF		עייר פרויין עייר פרויין
		rian Mall are budgeted and c n connection with people-mov
HALLMARK CARDS	NATIONAL BANK	<u>UGAN STREET PEDESTRIAN MALL</u> unds for the first phase design of a
Thurster Derse Cine		
		pople-Mover Plan or shuttle bus o well as initial phases of the Ph Mass Transportation Plan Fyproc
		gional mass transit system are kind beyond priority projects. The ready implemented the Phase I "In
		<pre>entries and improve lyer and shuttle bu projects within the endover System and</pre>
TAX X INTER CANER	HELPIE MAYER SILINGU	
private and public investments have been made within the district since 1971. On the other hand, parts of the downtown are experiencing serious pressures of decline and deterioration. New investments in some sectors are being offset by mounting vacancies in others. Equally important, there are increasing evidences of bottlenecks and barriers to further investments that can stifle the development for which there are demonstrated potentials. It is to deal with the negative forces that impact much of downtown and to remove restraints to further and outlined below.

The main negative factors are outlined below:

- 1. Mounting problems of downtown traffic.
- Réstraints on downtown's market magnetism,
- Physical dispersal of downtown development,
- Increasing disintegration of downtown functions,
- 5. Blight in downtown fringe areas.

It was these negative factors or realities that prompted the City to establish the Downtown Development Authority as a primary vehicle for coordinating development policies and actions. There has never been any doubt that downtown development potentials exist; the need for concerted action has been expressed in terms of removing the barriers and providing the incentives for these potentials to be fully realized.

With high-quality expansion areas in all directions, Jacksonville's physical development

has been widely decentralized. At the same time, the central core of downtown Jacksonville has been successful in attracting an impressive complement of highly specialized functions that can perform most effectively in the highly integrated environment of a central location. Several major new buildings -- Independent Life Office Tower, Atlantic Bank Office Tower, Duval Federal Building, to mention the more prominent-have been recently added to the downtown skyline. The new state office building housing a number of regional functions of the state government is under construction on the riverfront at the heart of the core. Other major announced downtown projects are in the active planning stages, including new office and hotel complexes on the Seaboard Coastline property north of the river and in St. John's place south

The excellent condition of the downtown riverfront itself is a positive factor of great importance. Few cities have taken such decisive steps as Jacksonville to reclaim their central waterfront areas and hence provide the setting for new development along or adjacent to the river. The earlier farsighted wisdon of the city in reclaiming its waterfront was an example of an earlier "development strategy" which has paid and will continue to pay great dividends to the city and its economy.

Significantly, despite the negative forces that have caused difficulty for downtown retailing, most of the city's retail complement has remained intact in face of the new suburban competition.

Jacksonville is one of the few cities in the nation that has substantially maintained its complex of downtown department stores in recent years. It has also held together most of its downtown specialty shops.

he five basic obj	rea. There should be no attempt to "force evelopment to take place where it might in- olve an unduly high risk or produce a less han-ontimum return	he Downtown Authority's underlying premi s that the market place should be the ul eterminant of where and when new private estments are put in place within the cen	own Jacksonville. Inese object directly to turning around the s that impact significant parts own economy and to providing th ncentives for generating new pr ncentives for generating new pr lents where they will do the mos	<u>owntown Area Objectives</u> here are five objectives that now must be ought by new redevelopment strategies for	o get the job done.	nd white) gave top priority on its genda to dealing with downtown pro his is a significant point that bo or the adoption of the necessary s	lize downtown's development potentials the 1974 Amelia Island, Florida, Confe e, representing a broad section of izenry (business, labor, finance, blac	pment Authority, and other public and qua ublic groups have expressed a clear deter ination to take the necessary steps to	ems to be met and still others to be anti- ipated in the future. The city government he Chamber of Commerce, the Downtown Devel	hip has "given up" on downtown's develop- ent prospects, despite a realistic recog- ition that there are already serious prob	nlike many cities, downtown Jacksonville as not arrived at a point where its lead
To achieve these objectives, a series of strate- gies is proposed that call for several specific	Downtown Strategies	5. To take major steps to begin the process of eliminating the conditions of fringe area blight around the central area and of pro- viding new investment opportunities in areas that are not now economically productive.	. To create the conditions f development of new close-i higher-income housing for markets that will seek hig locations.	spaces in downtown' ntory, which in turn range of downtown ac nerate new market su	hrough the above processes, to help reate new demands for existing unused o	nvestmentswhich will create strong magnets" for a range of new and expa ctivities in the downtown area.	tence threshold" in downtown facilit through the effective recycling of the downtown market and the addition public facilities to undergind priva	o help achieve the necessary "compe	me and nighttime populationso it can support new and existing prises and facilities in the	o achieve the maximum aggregat he downtown consumer markett he recycling of the "captive"	development strategy are as follows:

-

types of public actions, all pointed toward creating the conditions for an optimum private sector response.

One set of public actions involves an innovative new circulation system for downtown Jacksonville, combining: 1) an automated guideway transit (AGT) elevated people mover system initially



linking from the Hospital-Medical Complex, to the north through the core of the city to the Government Center and eventually to St. John's Place across the river to the south, with future expansions in all directions; and 2) an elevated pedestrian walkway (or skyway) linking key blocks and people-mover stations in the core area north of the river;

Another set of public actions calls for new vehicular gateways into the CBD, including a broad new east-west parkway along the Union-State corridor on the north and a major northsouth boulevard along the right-of-way on the

west side of the core from the Acosta Bridge and the Union-State corridor.

A third set of actions calls for clearance of 22 nearly vacant blocks along two-tiers adjacent to the core, one on the west and one on the north, in which a new environment would be provided for close-in market-rate housing.

A fourth action calls for the development of a major multiuse block on the waterfront between Laura and Hogan streets, where public and private reuses would create a new high-intensity node of activity. (Riverfront Plaza).

A fifth set of actions calls for a number of public improvements relating to transportation--the malling of Hogan Street, new bus rights-of way and preferential treatments, new public parking facilities, and other pedestrian and vehicular improvements.

system--the most recent new office buildings has already prepared itself in part for this central area, undergirding consumer sales time, would be given reliable, effective and weather-controlled access to all parts of the out massive clearance and redevelopment. Under these proposals, Jacksonville would become the first U.S. city to develop a comand people-mover route. connecting with the pedestrian skyway system public and private have made provisions for existing as well as new buildings. The city and spurring new space uses and occupancies in The downtown population, daytime and nightof people--the element of compactness withcient, safe and weather-controlled movement pedestrian skyway system providing for effibined automated people mover system and

Under the proposals, Jacksonville would also become the first U.S. city to attempt to re-

e the blighted collar of underdeveloped erty around its core with a market-ration ing environment. <u>GRAPHIC DATA</u> <u>GRAPHIC DATA</u> <u>GRAPHIC DATA</u> <u>intially anticipated travel demand in town Jacksonville is functionally re- town Jacksonville is functionally re- d to the type and intensity of human vities expected to occur. Future esti s are derived through a knowledge of t ous locations and an understanding of r interaction in producing downtown el. Population, employement, and floo e envisioned for 1980 and 1990 were major demographic data used as the bas peojecting people movement to, from an in the downtown area. -use and transportation planning effor ucted prior to this study as well as fic datasuch as the number of indivi trips to the CBD by purpose, mode and of day - also provided basic input the study. The variety of studies</u>	Constant Con
EMOGRAPHIC DATA	
owntown Jacksonville is functionally re- ated to the type and intensity of human	거나
ates are derived through a knowledge of th ates are derived through a knowledge of th	5 5
heir interaction in producing downtown	- <u> </u>
pace envisioned for 1980 and 1990 were	> ゴ ー
or peojecting people movement to, from and	7 4
ithin the downtown are	DΥ
and-use and transportation planning effort	~~
raffic datasuch as the number of indivi	ゴ =
ual trips to the CBD by purpose, mode an ime of day - also provided basic input	ຊ
or the study. The variety of studies onducted in downtown Jacksonville ref	≺ ∃
he vigorous and ongoing efforts of the	σ
itizenry to improve their urban enviro hese reports and documents used as bas	son vil
referral and data sources for this study	D —h
ical report, "CBD AlternativesUrban	sta
ithin the downtown area significantly aff	o v
dditions to the transportation facilities.	s 1 i 197
BD Alternatives. Volume II. Urban Desig	0 7
ysis Technical Reports - J town People-Mover Study, D	une 415
ssociates, Feb. 1973, 71 Pages.	e

Consequently, each of the land-use planning reports was studied in detail, both from reports and qualitative view of the roe. size and timing of development.

opulation - A knowledge of the expected istribution of future population in the acksonville Urban Area aided in deterining the number of daily arrivals in ne Downtown Area.

he population of the Jacksonville Urban rea was 534,572 in 1968 and grew by 14.2% uring the seven years up to 1975 (See igure 2). The national economic recession reatly slowed this growth during 1974 and 975. However, according to the Jacksonville rea Planning Board, the population still rew by 76,428 persons from 1968 to 1975. ecent conservative population estimates y the JAPB indicate that by the Year 2000 here will be 925,100 people living in the rban area. This represents a conservative ain of nearly 52% from 1975.

mployment - Employment is expected to inrease at a much greater rate than population p to the Year 2000 (See Figure 2). Jackonville and particularly the downtown area ill attract workers living outside the limits f the urban area largely because of the diersity of employment opportunities and subtantial economic growth potential as well s redevelopment taking place in downtown. otal employment in 1968 numbered 195,800, or lightly over 36% of the population. By 975, the employment totaled 246,800 workers, r over 40% of the population. It should be oted that this was during the recession when nemployment was much higher than normal. In he Year 2000, employment is expected to reach 15,000, or 45% of the population total. This epresents almost a 70% gain from 1975.

-

	JUATS
hd j a	ATS
Adjacent t	Urb
tto	
1	zed
Duva1	ወ
	as

1968 1975 1980 2000		1968 1975 1980 2000	<pre>Employment</pre>	1968 1970 1975 1980 2000	Population
19,000 23,635 30,000 40,275 48,000	Downtown CBD Core Area	195,800 246,800 285,000 350,000 415,000	JUATS Area	517,099 528,865 577,900 726,000 817,000	Duval County ( <u>Jacksonville</u> )
14,400 17,000 20,920 22,000	Other Northside Downtown Area	26.0 15.5 18.6	% Gain	15,192 19,100 41,000 65,000 89,000	Clay <u>County</u>
7,600 9,240 11,000 15,240 18,000	Southside Downtown Area	47,400 58,660 90,000 105,000	Downtown Area	1,867 2,200 4,100 13,000 19,100	St. Johns County
6,400 8,785 13,565 17,000	Southwest- Riverside Area	2222 223 254 25. 25. 25. 25. 25. 25. 25. 25. 25. 25.	% Within Downtown Area	534,572 550,165 611,000 804,000 925,100	TOTAL JUATS Area
· ·			• •	111111 1111111111111111111111111111111	5-Year Gain

۰,

Source: Jacksonville Area Planning Board

•

Source: Downto Mayor	l) Includes no 2) Assumes an	%	Total	All Purposes	Non-home Based	Subtotal	Other	Social Recreational	Personal Business	Shop	Work	Home Based	TRIP PURPOSE		
Downtown Jacksonville Mayor's People-Mover	n-home all-bu	92.6	58,550	14,900		43,650	200	3,000	13,825	9,375	17,250		PRIVATE VEHICLE		
	based transi s system with	7.4	4,700			4,700	50	300	650	006	2,800		MASS TRANSIT	1968	
People-Mover Study, DMJM, ask Force Update (1976)	it trips: h State I	100.0	63,250	14,900		48,350	250	3,300	14,475	10,275	20,050		TOTAL		
	: I People-Mover	88.9	71,120	20,700		50,420	860	4,580	15,380	9,700	19,900		PRIVATE VEHICLE		
MJM, 1973 5)	Syste	<b>,</b> , , ,	8,880	8		8,880	240	420	1,020	2,000	5,200		MASS TRANSIT	1975	
73 and	em	100.0	80,000	20,700		59,300	1,100	5,000	16,400	11,700	25,100		TOTAL		
		81.5	103,850	34,850		69,000	1,500	000,8	22,500	13,000	24,000		PRIVATE VEHICLE		
		18.5	23,500	8	•	23,500	500	1,000	3,500	5,000	13,500		MASS TRANSIT	0661	
		100.0	127,350	34,850		92,500	2,000	000, 6	26,000	18,000	37,500		TOTAL		

FIGURE 3 - PERSON TRIPS TO JACKSONVILLE CBD BY PURPOSE AND MODE

The entire downtown area employed about 47,400 workers in 1968, or 25% of the urban area's work force. By 1975, the total employment had grown by 24% and numbered 58,660. The total number of downtown area workers is expected to increase to 105,000 by the Year 2000 and comprise 25.3% of the total urban area employment. The more intensive downtown core area, or CBD, employed 23,635 in 1975 and is expected to grow to 48,275 by the Year 2000. Nearly 12%, or one out of eight Jacksonville workers, is expected to be employed in the CBD by the Year 2000.

## TRAVEL DEMANDS TO THE CBD

The number of people traveling to the Jacksonville downtown area, especially the CBD, is expected to substantially increase during the 1975-1990 period, doubling the 1968 number by the Year 1990. The adopted Plan for Downtown Jacksonville Revitalization shows a projected 9,031,000 square feet of downtown office floor space by 1990.

peak travel hours. Home-based work and both shopping and personal business trips made up about 31 and 35% of the total 1990, this demand is expected to increase by 101% to 127,350 person trips. Current 80,000 person trips were made to the CBD average weekday CBD person trips in 1975, work trips will be made. By 1990, an estimated 37,350 home-based are made to the CBD on an average weekday. more than 22,000 home-based work trips some other purpose (See Figure 3). work, shopping, personal business, or dividual trips were made to the CBD for respectfully. In 1975, an estimated travel into the CBD will occur during the In 1968, over 63,000 average weekday in-Much of this Currently, Вy

on an average weekday. This was over 26% greater than in 1968. By 1990, an average of 127,350 trips is estimated to be made to the CBD, nearly 60% more than today's person trip traffic.

This CBD-oriented traffic increase, coupled with the future increase in through-traffic



will place a much heavier burden on the highway and bridge system and require more effective parking and progressive mass transportation programs. If the Jacksonville Downtown Area is to continue to grow in a planned and orderly fashion, additional transportation facilities will be necessary to better serve the present demand and accommodate anticipated increase. Special emphasis must be placed upon planning and implementing effective mass transportation facilities.

#### DOWNTOWN



### Previous Mass T **Transportation Planning** Jacksonville's

These were a great success and many more soon followed. Finally, the last of the independent companies was secured by Plant and his associates in 1900. In 1901, a fire swept through the city and almost destroyed the street car system. Many power poles were burned, and wires scorched. The fire damaged trolleys everywhere. After the fire, Stone & Webster took over the street railway management system and added additions to the lines as the trolleys spread. For example, in 1911, there were 80 trolleys and 43 cars operating over 43 miles of track. This system employed 300 men and had an annual payroll	drawn, thirty minute headway "horse" railway, running on several streets around the central business district of Jacksonville. Other railways soon joined them, including Pine Street Railway that ran two blocks away from, and parallel to Hogan Street on what is now Main Street. There were other succeeding street railroads, most of which started in the middle of the 1880's. A few years later the electric trolley craze swept over Jacksonville. Mule and horse-drawn vehicles gave way to electric trolleys. The first car ran on Main Street in February, 1893.	EARLY HISTORY Mass transit in Jacksonville dates back over a hundred years. In 1875, with only 7,000 people in the city, the Jacksonville Street Railroad Company was formed. Construction was begun but, due to financial difficulties, the company allowed the franchise to expire. Henry Bradley Plant and Associates formed the Jacksonville Street Railway Company in 1879 and received a charter in 1880. This was a mule-
SYSTEM IMPROVEMENTS DURING 1973-1976 Since the Jacksonville Transportation Authority assumed responsibility for local bus transit opera- tions on December 11, 1972, the Authority, with City, State and UMTA assistance, has made signifi- cant progress toward improving the quantity and quality of service afforded residents of Jackson- ville. Route and schedule adjustments, reductions in fare and acquisitions of new coaches are among the most notable elements of change that have been ing is a chronological listing of key events that occurred since the start of publicly operated transit in Jacksonville: December, 1972 The JTA acquired the rolling		

	mobility to thousands of citizens, including the	mobility to thou	Application was made to the Urban	<u>May, 1975</u>
	of the local bus operation by the Jackson-	Acquisition of t	annual ridership increase of 17%.	
	service received and placed into service.		Two additional "Express Flyer" routes were added. The JTA com-	June, 1974
	14 heavy-duty small coaches for use	<u>April, 1976</u>	added.	
	Section 3, Capital Grant (FL03-0044) presented to UMTA for bus maintenance facility, 30 coaches, radios, etc.	<u>March 9, 1976</u>	were implemented, as five routes began operation from seven outlying shopping centers. Also, another	1
	participation of FDOT and FHWA. Other expansions of Express Flyer services and 10 major improvements including community (Arlington) circulator are implemented.		System Plan, the "Spirit Special" downtown circulator route, is imple- mented serving peripheral parking lots.	March 1074
· .	New "Express Flyer" route from park-n-ride site obtained by ioint	<u>March, 1976</u>	The first phase of the People-Mover	January, 1974
	tion in JTA buses. Ridership for the month was the highest in four years.		Additional fare reductions were made, with zone fares eliminated and a 10¢ off-peak fare instituted for senior citizens.	
	Operating assistance funds are received from UMTA. A two-way radio system is placed in opera-	October, 1975	free transportation was provided, with the promotion resulting in over 77.000 riders that day	
	fleet, reducing the average age of JTA coaches to eight years.		Forty-five new coaches are placed in service on Transportation Dav	October, 1973
	increase of over 7% or more than 900,000 annual riders. Fifty new vehicles are added to the	September, 1975	After little more than half a year of public operation, monthly ridership was up 18% over the previous year.	<u>June, 1973</u>
	The 10¢ off-peak fare was extended to include handicapped persons. JTA completes its second full fiscal year of operations with a patronage	June, 1975	Fares were reduced for most types of rides, with the base fare re- duced from 30¢ to 25¢.	January, 1973
	Mass Transportation Administration of the U.S. Department of Transpor- tation for an operating assistance grant in the amount of \$580,000.		stock and all assets of the Jacksonville Coach Company and assumed responsibility for transit operations.	
		Į.		

744 FOL SLARESTINA TOTALS TOTALS TOTALS TOTALS TOTALS TOTALS	IMMEDIATE ACTION PEOPLE-MOVER PLAN IMPLEMENTED
niddle income, young, elderly and physically handi-	< of
ridership base for the public system, encouraged by further fare reductions and off-peak discount fares.	of "Spirit Special" shuttle bus routes serving the downtown area. This type of new transit service was
Systemwide service and capital improvements and	a result of the "People-Mover Plan" developed in 1973. The Plan recommended shuttle bus or minibus
adjustments beginning in	operation from peripheral parking lots to the down-
	town core area as an "Immediate Action Program."
December 31, 1972, about 10,600,000 passengers	Five Mercedes Benz 16-passenger buses on loan from
were carried on the bus system. For the year ending April 30, 1976, total ridership was 14,400,000	the FDOT provided ten minute headways, serving
passengers.	designated "Red" in conjunction with the Bicentennial
Weekly ridership averages close to 300,000 today. The current weekly record topped 310,000 passengers.	added to connect the CBD to the southside downtown
Ridership continues to climb as improvements are	
creases during the fiscal year are expected to reach \$400,000. Much of this amount has been funnelled back into service additions.	combined snuttle bus annual ridership for 1975 was 275,000 passengers (See Figure 5). One year later it had increased by 40%
Emphasis during the first years after takeover was directed toward capital outlay and route study and realignment; however, attention has turned toward	During its 28 months of existence, the number of peripheral parking lots has grown from one to nine. Some of the lots are owned by the JTA and some are
further development of an even more progressive, productive, cost-effective and responsive transit system serving additional segments of the community. This is being done through interest groups and	leased from city agencies, paved by and at the cost of the City. One lot is leased by a private concern. It is estimated that between 800 and 1,200 cars daily remain out of the CBD as a result of this program.
activities, and public input derived through the Jacksonville Urban Area Transportation Study Major Review Update which is conducted by the Jacksonville Area Planning Board.	JTA has plans for a third route, designated "White", to serve the southwest (Riverside) portion of the CBD. Currently, this plan is on "hold" awaiting upcoming City funding.
Many of the new riders have turned to the mass transit system by <u>choice</u> , relieving congested city streets and bridges of thousands of cars daily, particularly in the downtown area. Intro- duction of suburban express flyers and shuttle	In March, 1976, fourteen 30-passenger heavy duty coaches arrived, replacing the five Mercedes, and were put into immediate service. At JTA's Board meeting of June 15, 1976 funds were included in the 1976-77 budget to start the "White" route
white collar, business and professional people out of their private automobiles.	shuttle operation, thus completing the original trio.

Į











FIGURE 5

# MAJOR TRANSPORTATION PLANNING PROJECTS

The Jacksonville Urban Area has been deeply involved in all aspects of transportation planning ever since the first comprehensive study was completed by the Florida Department of Transportation (State Road Department) in 1960 and, especially, since consolidation of City and County governments in 1968.

The first major comprehensive study for highway needs was initiated in 1968 by the FDOT in cooperation with the JAPB and JTA. This effort produced the Jacksonville Urban Area Transportation Study (JUATS) Comprehensive Plan for Streets and Highways for 1990, which was published in March, 1974.

In late 1972, the first comprehensive study to determine long-range mass transportation needs for the rapidly expanding urban area was begun. It produced a three-phase mass transit development program, up to 1990.

The most recent mass transportation study was the Five-Year Transit Development Program completed in May, 1976. Numerous detailed studies have been completed also for the Downtown Jacksonville Area as an integral part of the continuing comprehensive urban transportation planning process in Jacksonville.

Each of these have been closely integrated with the officially adopted (1971) Plan for Downtown Jacksonville, of which the major transportation elements are: (1) a street loop system (one-way couplets), (2) a peripheral parking program for long-term parkers integrated with mass transit services, (3) an eight-block pedestrian mall down Hogan Street, (4) second-level pedestrian walkways, (5) preferential treatment for mass transit vehicles, and (6) an elevated AGT system. This latter transportation element is the number one priority in the Downtown Revitalization Program.

> This was reaffirmed in the Central Area Transportation Planning Program completed in 1976.

## 1973 PEOPLE-MOVER SYSTEM PLAN

Following Transpo 72, FDOT in cooperation with the JAPB, JTA and the Downtown Development Authority undertook a \$135,000 comprehensive feasibility study of a people-mover system for Downtown Jacksonville.<sup>1</sup> The effort involved: (1) an in-depth travel demand analysis to determine patronage, revenue, operating and maintenance costs, (2) environmental impact and urban design analysis to develop and evaluate alternative people-mover route alighments and station alternatives, (3) engineering analysis to develop capital costs and system interface, and (4) a public involvement program consisting of periodic work sessions and meetings with a citizens group and the Jacksonville Urban Area Transportation Study (JUATS) Technical Coordinating Committee to receive citizen and decision-maker input.

The Recommended People-Mover Plan featured a Phase I "Immediate Action Program" of shuttle-but routes providing internal circulation within downtown and interconnecting southside downtown with the CBD, as well as fringe area or peripheral parking lots.

Phase II featured a two-mile elevated automated guideway transit (AGT) system from the Downtown Florida Junior College through the Central Business District along the Hogan Street Pedestrian Mall, turning eastward on Independent Drive through the Government Center and terminating at the Gator Bowl.

## 1976 PEOPLE-MOVER PLAN

The 1976 "Central Area Transportation Planning Pro-

<sup>1</sup>Copies of the summary report and the three Technical Reports are attached.

6) Reduction of traffic congestion,	5) Potential for more efficient mass transit system (more effective transfers and conven- ience),	4) Potential for reduction of future mass transit subsidy (operating cost savings),	<ol> <li>3) Effective interface with existing and planned bus routes,</li> </ol>	activity centers,		in order to develop the most reasible and desirable people-mover system, the following major planning factors or criteria were used:	way Transit System.	<pre>posal to the Urban Mass Transportation Administration requesting that Jacksonville be selected as one of the use of the Automated Envide-</pre>	The major objective of the Task Force was to update and appropriately modify the 1973 People-Mover Plan	gram" strongly recommended the construction of a People-Mover System. Based upon the completion of this Planning Program, coupled with the April 5th announcement that the Urban Mass Transportation Administration would undertake a project to construct automated guideway people-mover systems in downtown urban areas, the Mayor of Jacksonville established a "People-Mover Task Force," which consisted of representatives from the Jacksonville Transportation Authority, the Jacksonville Transportation Development Authority and the private consultant firm of Daniel, Mann, Johnson and Mendenhall, who developed the original People-Mover Plan in 1973.
All of these criteria are met or exceeded in the Jacksonville proposal to the highest degree.	time required for right-of-way a d construction of a system.	13) Operational requirements of the people-mover system, and	<pre>12) Environmental concerns of air pollution, noise and aesthetic impact,</pre>	<pre>11) Capital cost limitations,</pre>	10) Maintenance and improvement of the economic viability of Downtown Central Business District,	9) Interface with peripheral parking lots for long-term parkers,	8) Integration with the Hogan Street Pedestrian Mall,	<li>7) Potential for increased mass transit system patronage,</li>		

-



# Financial Options

## Recommended Stage I People-Mover System

verses 9,900 feet and has seven People-Mover System stations.

The original 1973 People-Mover Plan recommended the same length of elevated guideway (10,000 feet). However, rather than serving the Hospital-Medical Center the route was recommended to serve the Gator Bowl Sports Complex because of the vast number of parking spaces (in excess of 3,000) which could be utilized for long-term parking for Downtown workers. The northern terminum of the 1973 Plan was the Downtown Florida Junior College.

The overall situation in 1976 is different than four years ago. Many of the major planning factors mentioned earlier changed. One of the most important is the automated guideway's potential to directly improve the overall operation and service level provided by the total mass transportation system. The AGT System can significantly increase mass transit patronage, revenue and also decrease future operating subsidy necessary to maintain and improve systemwide mass transit operation.

While the program of long-term peripheral parking lots is still important and, in fact, has already been implemented successfully by the JTA, the objective of reducing future operating costs for mass transportation while still improving the systemwide services has a higher priority. Largely due to this, the original 1973 Stage I People-Mover route was modified and the Gator Bowl link deleted in favor of the Hospital-Medical Center link.

#### STATIONS

Government Center Station - The Stage I eastern-most station is located between Newnan and Market Streets, and the City Hall and adjacent city parking lot. At present, there are about 6,000 workers within a five-minute walk from the station (See Figure 8). By the year 2000, about 14,000 are expected.

Plain all the way northwest to Eighth Street within the University-Methodist-St. Lukes Hospitals and Medical Center. The two-way guideway route tra-



5. 5.









In addition to servir pheral parking facili because of its direct bus routes (12, 15, 1	Approximately 5,300 workers walk from the station today. in the service area is expec	It is also anticipated that several new reta commercial developments related to the Downt Florida Junior College would be built in the vicinity, including motel and/or hotel units	pheral parking program. Initially, between 1,000 and 1,500 surface spaces would be available. Fig 9 shows the peripheral parking lots served by the people-mover system, as well as JTA shuttle buses Eventually, multi-level parking structures would be constructed with direct pedestrian access pro- vided to the station.	Northside Downtown Station - on Hogan Street between Beav	It should be emphasized that guideway and Hemming Park sta signed in such a manner as to complement the Hogan Street I aesthetically fit the urban o	The Universal Marion Building, the Elorida First. National Bank Building, the Barnett Bank Buildings and the Southern Bell Telephone Building are the major office complexes. In addition, the U. S. Post Office and Robert Meyer Hotel are within a block of the station. All of the bus routes comin from the east would serve this station.	About 12,000 people now work within a five-minute walk of the station. By the year 2000, it is ex- pected that over 16,000 workers could be served by this station.
serving persons parking at peri- facilities, this station was selec direct interface with all Westside , 15, 18, 19, 20 and 49).	are within a Future emp ted to remair	d that several new retail- ts related to the Downtown e would be built in the otel and/or hotel units.	m. Initially, between ces would be availab l parking lots serven as well as JTA shutt el parking structuren irect pedestrian accu	e Downtown Station - This station locate Street between Beaver and Union Streets	emphasized that the people-mover Hemming Park station would be de- ch a manner as to most effectively ne Hogan Street Pedestrian Mall and y fit the urban environment along the	ersal Marion Building, the Elorida Firs Bank Building, the Barnett Bank Buildi Southern Bell Telephone Building are th fice complexes. In addition, the U. S. ice and Robert Meyer Hotel are within a the station. All of the bus routes con east would serve this station.	people now work within a five-minute station. By the year 2000, it is ex- over 16,000 workers could be served b
ted	five-minute loyment 1 constant.	etail- wntown the its.	en 1,000 le. Figure d by the le buses. s would ess pro-	located	over e de- ively 11 and long the	a First Buildings are the U. S. thin a tes coming	five-minute ), it is ex- be served by
	م عليد الم						
HUGAN STREET DEVELOPMENT			Jones Bruss.				
		1		1			



Approximately 2,000 springreid residents rive within a five minute walk of the station site today. It is important to emphasize that the majority of these citizens are "captive" transit users or "transit dependent" (low income, elderly, young), and thus would utilize the People-Mover System to a large extent. This will be especially true because of the faster service to and from the	the present 1,000 to nearly 3,500 by the year 2000. <u>Hogan Creek-Springfield Station</u> - This station will serve one of the most densely populated residential areas in Jacksonville.	travel to and from the campus by mass transporta- tion. Hence, the People-Mover System will be utilized to a great degree by these students. In addition, the number of workers within easy access of the station is expected to arow from	The Downtown Campus enrollment (headcount) in 1976 is about 11,000. That figure is anticipated to grow to 14,604 and 16,300 students by 1981 and	The Downtown Florida Junior College Master Plan completed in February, 1974, incorporated the elevated People-Mover Guideway and station site (See Figure 10). It is expected that this station will handle a high volume of pedestrian traffic	Urange and State Streets. It will be constructed between the Administration Academic Building now under construction and its future extension to the east. This building complex will contain career education learning resources, student services and auxiliary services. Access to the station will be direct from inside the building.	Downtown Florida Junior College Station - The Junior College station will be located above the present right-of-way of Hogan Street between
In addition to directly serving the largest medical center in Jacksonville, the People-Mover station would serve as a major transfer point for all JTA bus routes serving the northwestern and northern areas of Jacksonville. Bus routes 14, 26, 27, 28, 29 and 36 A&B would all interface with the People-Mover station.	Today nearly 5,000 persons work within easy access to the station. It is anticipated that there will be at least 9,000 workers in the area by the year 2000. This medical center is one of the most heavily utilized activity centers in Jacksonville today with numerous transit dependent residents requiring access several times a month.	Luke's Hospital and their respective medical fa- cilities, as well as the Jacksonville Health Center Office (See Figure 11). Numerous other medical or related activities are also located within the Center.	Hospital-Medical Center Station - This station would be the northernmost extension of the Stage I People-Mover Route. It is located within the rapidly growing Hospital-Medical Center of Jackson- ville, equally accessible to the Methodist Hospital the University Hospital and the St		Adjacent to the Hogan Creek-Springfield Station is the City Housing and Urban Development office. This agency has been working diligently on a re- habilitation and redevelopment program (Hogan Creek) for several years. Hundreds of old, rundown housing units have been removed and will be re-	downtown retail centers and the more convenient transfers to other bus routes serving other areas of Jacksonville.



NEED	FOR PEOPLE-MOVER SYSTEM
City, S organiz would a system.	City, State, public and private agencies and organizations recognize that numerous benefits would accrue from the automated guideway transit system. Some of the primary benefits are:
۲)	An effective alternate means of travel within the downtown area,
2)	Expanded pedestrian areas,
3)	Interconnection of major activity centers within the downtown area,
4)	Expansion and improvement of the peripheral parking program,
5)	Reduction of the number of automobiles and buses in the downtown area,
6)	Integration of existing and planned commercial, office and other land developments with mass transit facilities,
7)	Improvement of the Interface with all forms of mass transit services within the down- town area for the collection and distribution and transfer of transit patrons,
8)	Upgrading the quality of air within the central business district,
(6	Improvement of the "liveability" of the central business district which would benefit retail, commercial and office businesses, and
10)	Improvement and upgrading of the entire mass transit system service and a reduced operating subsidy.

and orderly growth. which is so vital to a regional center's maintenance substantially improve the total movement of people live in the future. The people-mover system could

significantly: Revitalization, the people-mover system would As the major element of the Program for Downtown

- 1) contribute toward the implementation and Mall; viability of the Hogan Street Pedestrian
- interface with and extend the planned elevated pedestrianway or skywalk system;
- expand and improve the mass transit intercept program from peripheral parking lots; and
- 4) strengthen and maintain the vitality of important retail shopping activities downtown.

# PEOPLE-MOVER SYSTEM'S IMPACT UPON EUS SYSTEM

other vehicles is undoubtedly one of the major when or where he or she should do so. The highly inefficient operation of buses competing with that bus service is extremely slow and very costly to operate. Transfer from one bus route area. complicated bus routing within the central downtown area coverage in 1975. The insert illustrates the Figure 12 details Jacksonville Transit Routes and service reasons why most citizens will not utilize bus the average citizen cannot easily determine how, to another is usually difficult and most often It is within this densely traveled area

wide transit operation is one of the City's major short and long-range objectives. One of the most significantly contribute toward the achievement of promising transportation facilities which would Maintaining and aggressively improving the system-

downtown area in which to work, shop, visit and The net result would be a more viable and desirable





#### 1975

# AND AND

## AREA COVERAGE

#### LEGEND

Bus Routes Route Numbers Area Coverage Major Generators not Covered by System Description of Each Shown in Appendix "A"

A-V

9

Source: JACKSONVILLE AREA PLANNING BOARD JACKSONVILLE CITY COACH LINES

Prepared by: JACKSONVILLE AREA PLANNING BOARD

Consultants: KIMLEY-HORN & ASSOCIATES, INC. SIMPSON & CURTIN

NOVEMBER, 1975

Currently, buses operate at an average speed of between 3 and 5 miles per hour in the downtown area which is inconvenient to bus riders, as well as auto-drivers. With the People- Mover system functioning as the central collec- tion and distribution facility, most transit		and improve the mass transportation system during the 1980's and beyond. Once the automated system is operational, the bus system will be organized to interface with it. Figure 14 indicates which bus lines will serve the People-Mover stations and	ted to substantially iction of future subs	People-Mover system is	course, a national problem and not just a charac- teristic of Jacksonville.	to reach \$7,047,000 by 1980. This anticipated gap between revenue and operating costs is, of	items such as fuel, tires, and other parts, the yearly deficit or operating subsidy is estimated	fares totaled \$3,399,700, or 55% of the operating cost. Hence, there was a deficit of \$2,807,200. With the expected increase in labor costs and	For the year ending September 30, 1975, the main- tenance and operating cost of the JTA bus service was \$6,206,900. Revenue generated by passenger	cost subsidy that will be required for Jacksonville, according to the "Transit Development Program" com- pleted in 1976.	Figure 13 shows the estimated deficit or operating	errective mass transit service for Jacksonville citizens.	ng subsidies while at the same ibuting toward more convenient	this objective is the automated guideway transit people-mover system, which can significantly reduce	
destinations addition, pas save a signif Furthermore, convenient an As shown in F	patrons will.	(1) Source	1980	1979	1978	1977	1976	1975 \$ (actual)	Ending Sept. <u>30</u>	Year		þ	JACKSON		
ns in a shorter passengers who nificant amount e, transferring and easier to	be able	: Transit prepare Horn an Curtin	11,864,700	10,399,700	9,150,100	7,939,100	6,813,900	6,206,900	(excludes charter service)	A Operating Cost	1975-	PROJECTED OPER	VILLE	FIGURE	
As shown in Figure 15, 205 hours and 35 min.te	to reach downtown are	Development for JTA by Assoc. and 976.	4,817,700	4,338,400	3,983,800	3,715,700	3,504,300	3,399,700	Passenger Revenue	œ	1975-1981	OPERATING PERFORMANCE	TRANSPORTATION A	RE - 13	
me. In fer will vel time. more	area	Program, Kimley- Simpson and	7,047,000	6,061,300	5,166,300	4,223,400	3,309,600	2,807,200	Deficit	A - B		MANCE	AUTHORITY		

-



. .. .. ......

.

# FIGURE 15 BUS TRAVEL TIME SAVINGS WITH PEOPLE-MOVER SYSTEM

BUS ROUTE NO. North-Northwest	Travel Time Saved to and from CBD(1)	One-Way Weekday Trips to CBD	Total Time Savings (min.) Per Weekday
36 A & B 14, 18 17, 26 27, 28	28 min. 24 min. 14 min. 20 min.	119 78 66 <u>79</u>	3,332 1,872 1,580
Sub-total West		342	7,708
12 15 19, 49 20	5 min. 8 min. 11 min. 3 min.	47 38 74	235 304 814
Sub-total <u>Southwest</u>		207	1,497
3 4 A & B,5 7, 22 25 30, 32	4 min. 6 min. 5 min. 6 min.	34 55 37	136 306 330 20
Sub-total <u>Southside</u>		181	1,014
13, 47 21, 31 35	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	25 46 22	300 552 264
37 41, 46 45	14 min. 12 min. 10 min.	30 45 4	5 4 0 5 4 0 4 0
Sub-total		172	2,116
Tot		902	12,335 minut 205 hrs. 35
<ul><li>(1) This is average bus t would stop and transf</li></ul>	e bus travel time that would be transfer passengers at a peopl€	eliminated if bus e-mover station	

5 ב. ל rather than continue its current run.

of additional bus service will be available within the urban area as a result of the People-Mover system and bus system interface. For example, buses operating on routes 36A and B would save an average of 16 minutes inbound and 12 minutes outbound by ending at the Hospital-Medical Center People-Mover station near Jefferson and Eighth Streets rather than their current terminus within the Central Business District at Hemming Park.

Hence, one of the following or a combination could occur:

- the frequency of bus service on Routes 36 A&B could be improved by about one-third (from ll minutes during peak hours to about 7.5 minutes), or
- the frequency of service could remain the same and about one-third or five Route 36 A&B buses could be relocated to new bus service or existing routes to improve their frequency of service, or
- the terminus of Routes 36 A&B could be extended into presently unserved areas and/or future growth areas.

All of the present Jacksonville Transportation Authority bus lines were analyzed in terms of bus travel time savings as a result of the People-Mover System and resulting improvements in service

The number of buses that could be taken off certain routes while maintaining the same service headway was also investigated. Figure 16 shows one set of potential systemwide improvements during peak hours that could occur due to the Stage I People-Mover System. Twenty-five bus lines could provide more frequent service. Generally, bus headways would be improved between 15 to 20%.

Six bus lines could have one or more buses re-

assigned while still maintaining present headways. These lines currently serve the northwestern or western areas and already have comparatively frequent bus service. An estimated 13 buses could be reassigned to new mass transit service areas and/or to improve the frequency of service for present routes. The 13 buses represent about 9% of the total number of buses now operating during peak hours.

As a result of the AGT system the systemwide bus transit ridership in 1981 is estimated to be between 8 to 12% greater due to the following:

- more frequent bus service or extension of route coverage on the above mentioned 25 bus routes,
- additional service provided by the reassigned
   buses and,
- 3) more convenient and faster transit access to, within and through downtown provided by the automated guideway transit People-Mover System. This estimated 1981 transit patronage gain doesn't include additional trips (excluding bus passenger transfers) which would be made on the People-Mover.

This increased patronage will add to the annual bus system revenue. This coupled with the projected people-mover system surplus of revenue over operating costs is estimated to amount to \$1.2 million in 1981, \$2.0 million in 1985 and \$3.2 million in 1990. (See Figure 17). The 1981-2000 cumulative total of increased bus system revenues plus AGT system operating surplus is estimated to be \$53,600,000.

## PEOPLE-MOVER PATRONAGE

Selection of the original People-Mover System Plan

	37A St. Augustine 37B St. Augustine 37C St. Augustine	6A Moncrief 6B Moncrief	6 Phillips Hwy. Pl	i Lakewood 5 Spring Par	] Colonia]	Riverview	<pre>&gt;</pre>	each Blvd	9 Tyler	9 Grand	6 Northshor	7 Panama	5 Phoen	8 Myrtl	4 Davis	Regenc	7 South	3 Glynle	0 Beaver	2 Flori	oodstoc	Edison	0 Park Cedar	McDuff-Cedar Hil	Murra	A Murray Hil	2 Lake Shor	3 Ortega	oute No. & Name		
No. of Bu service f	51 48 70							ω ω									s 55	57	12	12	36	3	N.	s 45	32	32	20	18	resent	Mwee	
s Routes requency	589 58							27									48	50		10	ယ r ယ (	20	22	42	29	29	18	17	With PM	eadwa	THO D
with improved 25	80 80					86	65	65	60	60	60	60 60	л. V (	48	50	-	92	9.9 20	43	30	72	) ה - כ	84	90.	64	64	76	88		ound Trip Run	J IRANSPURIALIU
Buses av. improved	6 5 5 5 6 1 7 7					66	45	5 J 3	49	49	46	4 H		2 C	ט . תי		800	200		У С Л С	ט ת 4 ת	C	8 L 2 L	20	л c D C	л · c	70	84	With	0 T:	NUTUEM
ailable fo service	თ ო	ç 7	4	•	4	თ	4	20	Ø		c	ט ת	ა c	-			ن د	ა	c	ת	4	•	0	Ð	t	2	ı	٥	Present	AM Peak V	
r new or 13	رر، تی	- CJ	4	• -	4	4		~ ~ ~	ת		σ		ם. נו	\$			Ĺ	د	Ċ	n	4	,	α	D	4	2	ų	D	p]e	es Require	

FIGURE 16 STAGE I PEOPLE-MOVER SYSTEM IMPACT ON JTA MASS TRANSPORTATION SYSTEM

•


		and an				
to another mode if it were available and convenient to do so.	was left that some of the projected JUATS ve- hicle trips originating within the Downtown Area and destined to locations within the Downtown Area would have potential to divert	to and from the Downtown Area and persons traveling transferring from one bus route to another on an improved bus transit system. <u>Intra Downtown Area Vehicular Diversions</u> - It	Peripheral Parkers - Persons arriving at the peripheral parking locations on the fringe of the CBD whose ultimate distination is in the CBD.	<u>Walk Trips</u> - Trips made throughout the course of the day by people who had arrived in the CBD for some other basic trip purpose. For example, a downtown office worker who leaves his office building for lunch or to shop.	Socio-economic, demographic and travel data were compiled, from which trip makers who would be potential users of a People-Mover System in down- town Jacksonville were structured. These potential users were grouped into four basic categories for further analysis and model formulation. They in- clude:	in 1973 was largely based on results of a detailed simulation and testing of alternative people-mover routes and configurations. Testing procedures were applied through the use of a series of computer-oriented mathematical models which were formulated to project potential patronage under varying conditions.
<sup>1</sup> CBD Alternative, Volume I, Travel Demand Analysis Technical Report - Jacksonville Down- town People-Mover Study, Daniel, Mann, Johnson and Mendenhall, February 1973, 151 pages.	Since 1973, two major transportation studies have been undertaken which evaluated and investi-	that all of the buses would continue to travel to the CBD and utilize Monroe Street as an exclu- sive transitway. Therefore, most bus routes would deliver passengers to the Hemming Park Station and hence, less transfers would be made to the people-mover system.	The Mayor's People-Mover Task Force utilized the original 1973 study effort to a great extent in updating the patronage estimates on the people- mover system. The only major difference was the number of riders transferring from the bus	Alternatives, Travel Demand Analysis Report."1 1981 and 1990 PATRONAGE	hensive urban study effort. The trip data required for an analysis of a people-mover system, since it deals in large part with the walk mode, were not collected in the JUATS Study. It was therefore necessary that the trip generation and distribu- tion model efforts be manually developed. The development of the series of trip generation and distribution models is decomined in the upper	These basic category distinctions were maintained throughout modeling phases because of their differences in distributional attributes and peak- ing characteristics. In the conventional transportation planning process, trip generation and distribution models are develop- ed. calibrated and collected as much of a commu-

Based upon the data and information gathered since 1973 and due to the major concern over rising mass transportation operating subsidy, the Mayor's Task Force strongly considered the peoplemover system's potential interface with the existing and planned bus system. The final result is "hat a significant amount of bus patron travel

> time would be eliminated by transferring to the people-mover system at strategic people-mover stations and letting this latter system serve as the major distributor and collector of transit riders within the core area as well as major transfer facility from one bus route to another.

Figure 18 illustrates the estimated travel time savings for bus passengers transferring from one route to another with the Stage I people-mover system. Figure 19 shows the estimated bus travel time savings for transit passengers traveling from any section of Jacksonville to each of the seven people-mover stations. For example,

people traveling during peak hours by bus from Southside bus lines to the Hospital-Medical Center would save between 18 and 20 minutes per trip with the people-mover system.

#### FIGURE 18 PEAK HOUR TRAVEL TIME SAVINGS (Minutes) FOR BUS PATRONS TRANSFERRING TO ANOTHER ROUTE WITH STAGE I PEOPLE-MOVER SYSTEM

Eastern Areas	Southside Areas	Southernwestern Areas	Western Areas	Northwestern Areas		FROM BUS ROUTES SERVING
13-15	18-20	16-18	ı	I	<u>Northwest</u>	TO BUS ROUTES SERVING
7-9	11-13	12-14	ı	ı	West	res serv
6-8	11-13	·	12-14	16-18	West Southwest	ING
8-10	ı	11-13	11-13	18-20	South	
ı	8-10	6 - 8	7-9	13-15	East	

PATRONS TRAVELING TO	PEAK HOUR TRAVEL TIME	FIGURE
N ARE	SAVINGS FOR BUS	9

**BUS PATRON** 

$ \frac{People-Mover Station}{Service Area} \qquad Northwest \qquad West \qquad Southwest \qquad Southwest \qquad South \qquad East \qquad Southwest \qquad South \qquad East \qquad 16-18 \qquad 18-20 \qquad 13-15 \qquad 16-18 \qquad 18-20 \qquad 13-15 \qquad 16-18 \qquad 11-13 \qquad Downtown Florida \qquad 14-5 \qquad - \qquad 13-15 \qquad 15-17 \qquad 6-8 \qquad Beaver-Union Street \qquad 5-6 \qquad - \qquad 12-14 \qquad 14-16 \qquad 4-5 \qquad Hemming Park \qquad 6-7 \qquad (-2) \qquad - \qquad 2-3 \qquad - \qquad 2-3 \qquad -$
--

The total estimated number of average weekday riders on the Stage I people-mover system in 1981 is 49,000 (See Figures 20 and 21), based upon a fare of \$0.15 and the assumption that 20% of the riders would use passes. Estimated annual ridership for 1981 is 14,700,000 passengers. There is expected to be a wide variety of trip makers, including students, senior citizens, young, tourists, workers, shoppers, and others. About 12,500 persons, or 44% of the ridership, would be transferring bus riders. Today, about 35,000 person

> trips are made to, from and through the downtown area via the JTA bus system. By 1981, this volume of transit riders is expected to grow to at least 55,000. About 3,900, or 8% of the AGT system ridership in 1981, is estimated to be persons diverted from buses to the people-mover due to deletion of some bus route coverage, as well as faster people-mover service.

The next greatest demand on the people-mover will be diverted walk trips, mostly within the CBD.

## 1981 and 1990 PATRONAGE ESTIMATES

#### FOR STAGE I

## DOWNTOWN PEOPLE-MOVER SYSTEM

	TOTAL	Other	G. Private Vehicle	Diversions from Bus System	Transfer from Bus (Non-Work)	Transfer from Bus (Work)	Peripheral Parking Lots (Non-Work)	Peripheral Parking Lots (Work)	Walk		Type of Person Trip Directed to People-Mover
	49,000	3,000	4,700	3,900	11,500	10,000	2,600	3,800	9,500	<u>1981</u>	Average Weekday Trips on People-Mover
.*	89,200	4,200	7,700	5,500	23,000	17,800	8,600	7,500	14,900	<u>1990</u>	day Trips Mover

system would also be handling around 3,000 or more person trips per hour for about 11 hours each	1:00 p.m., 4:00 p.m. to 5:00 p.m. and 12:00 to	As shown on Figure 22, the people-mover will serve a significant number of peak hour (7:00 a.m. to	yoing snopping and to lunch, a variety of other trips would be made to the Hospital-Medical Center, Junior College and peripheral parking lots.	makers will be shoppers and downtown area employees	mover system ridership or 7,250 passenger trips are anticipated to occur during the 12:00 noon to	the people-mover system in 1981 by type of trip- maker. Nearly 15% of the average weekday people-	Figure 22 indicates the estimated hourly demand on	using passes, hence, no direct fare would be collected.	2/,۵۵۵,۵۵۵ passengers. This estimate was made under the assumption that 38% of riders would be	The annual ridership in 1990 would be approaching	until the average weekday patronage reaches about	ride the system just for recreation and pleasure.	riders will be persons diverted from their private vehicle as well as tourists and residents, who will	6,400 person trips will be made to and from these locations using the people-mover system for access. The remaining 7,700 average weekday people-mover	There is also expected to be a significant demand	to the people-mover system.	An estimated 120,000 two-way CBD walk trips will be made on an average weekday in 1981 and about	
The JTA will Management Cc	SYSTEM OPERAT	person trips. The not be idle during	weekday. The mover intercom many of which	0661	6861	1988	1987	1986	1985	1984	1983	1982	1981	Year				
<u> </u>	ERATIONS	ips. The Jack le during regu	The principal prconnects a wi lich generate a ps. The Jacks	3	26,760,000	25,420,000	24,080,000	22,740,000	21,400,000	20,060,000	18,720,000	17,380,000	16,040,000	14,700,000	Annual Patronage	REVENUE	STAGE I P	
retain an AGT system supplier nsultant for one to two years		The Jacksonville people-mover would ing regular off-peak hours.	ason is variety	38%	36%	34%	32%	30%	28%	26%	24%	22%	20%	% No Fare Or Passes	UE PASSENGERS	I PEOPLE-MOVER	FIGURE 21	
plier as a years to		i-day long e-mover would ours.	that the people-	16,591,200	16,268,800	15,892,800	15,463,200	14,980,000	14,443,200	13,852,800	13,208,800	12,511,200	11,760,000	Annua 1 Revenue Passengers	RS	SYSTEM		

•

## ESTIMATED HOURLY PATRONAGE

### STAGE I DOWNTOWN AREA

## PEOPLE-MOVER SYSTEM: 1981

A - Walk Trip B - Peripheral C - Peripheral D - Transfer fr	Total	_					4 5				-						ł	Weekday Time
Parker (work Parker (non- rom Bus (work	9,500	50	100	125	сп	UT	300	Ο	0	• 85	Ο	J	7	0	0	75	50	А
k) -work) k)	3,800	1	ı		ப	Ò	700	0	ഗ		сı		σ	0		σ	S	ß
	2,600						100	2	Ο	ъ	0		0	СI		0		ဂ
E - Tra F - Div G - Pri	10,000	100	S	Ο	S	0	1,600	Ο	Ο	Ο	0	Ο	0	Ο	Ο	0	0	0
nsfer from B ersions from vate Vehicle	11,500	<u> </u> ဟ	S	σ	Ó	S	600	0	0	0	0	0	0	0	0	0	0	ļm
us (non- Bus Sys Diversi	3,900	50	100	ப	0	1	400	S	0	σ	0	0	Ο	Ο	Ο	0	N.	<b> </b> -1
work) tem ons and Other	7,700	100	7	СП	7	0	550	7	S	0	0	0	СЛ	S	7	S	200	a
Ϋ́Υ.	49,000	<b>၂</b> ပာ	Ó	4	,77	85	20 25	• 85	,10	,75	• 25	ς - 	, 57	<b>,</b> 30	,27	, o	1,025	Total

To supplement the People-Mover System service, shuttle-bus service similar to the existing JTA "Spirit Special" routes will be established. These routes would extend from peripheral parking areas into the CBD, and should also circulate with- in the entire Downtown Areas to cover those areas not directly served by the People-Mover or regular us service. These minibus routes may be prototypes is eventual fixed-guideways if the Diverside and nutro the areas develop sufficient trip depands.	mediate stations. Station dwell times would vary between 10 or 15 seconds off-peak hours up to 20 to 25 seconds during peak hours. The trains will be fully automatically controlled; some form of com- munication or even television monitoring would be provided between the vehicles and the central con- trol console. Automatic fare collections should also be incorporated, although it is recommended that each station have an attendant.	<pre>administer and operate the system. During this period JTA technicians and other staff will be trained so that JTA will resume sole management and operation of the system. Operations for the recommended Stage I System include two-way, automated guideway, people-mover service at 3.1 minute headways from 7 to 9 am; 11:30 am to 1:30 pm and the 4 to 6 pm peak travel periods; 5.2 minute headways during day-time off- peak hours; and 7.8 minute headways during the 6 to 7 am morning period and 6 to 10 pm evening period (See Figure 23). Since the longest trip on the people-mover from the Hospital-Medical Center to the Government Center requires only 7.8 minutes travel time including all station stops, off-line stations are not required; each train will stop at all inter-</pre>	
The Confederate Park-Government Center Shuttle would serve the planned 208-unit high-rise residen- tial tower for senior citizens. Confederate Park, several peripheral parking lots in the vicinity of State and Union Streets, the Cathedral Towers senior citizen neighborhood and the Government Conter. Five minute service would be provided during peak travel periods and ten minute service other times. These shuttle buses would also provide direct access to the People-Mover station.	Figure 24 displays the five proposed shuttle-bus routes serving the Downtown Area and their inter- face with the AGT system. The Springfield area shuttle service would serve the residential neighborhoods to the east and west of the Hogan Creek Flood Plain including the Hogan Creek urban renewal, and interface with the two northernmost People-Mover stations. Shuttle-buses would provide 10-minute service each weekday.		

#### STAGE I

#### DOWNTOWN PEOPLE-MOVER SYSTEM HEADWAYS & CAPACITY

## STAGE I (North Side) - Hospital/Medical Center to City Hall (9900 ft)

## PERIODS OF OPERATION -- 6AM to 10PM

	6 pm to 10 pm	4 pm to 6 pm	2 pm to 4 pm	ll am to 2 pm	9 am to 11 am	7 am to 9 am	6 am to 7 am	Time Period
	7.8	3.1	5.2	3.1	5.2	3.1	7.8	Headways
221	3]	39	23	58	23	39	œ	<pre># of Trains(Period)</pre>
442	62	78	<b>46</b>	116	46	78	16	<pre># of Vehicles(Period)</pre>
	1600	3600	2400	3600	2400	3600	1600	Capacity(hr)*
	6200	7800	4600	11600	4600	7800	1600	Capacity(hr)* Capacity(peric

\* Note: Capacity stated is for one track - one direction of operation, and is based on standing to seating ratio of 1.5.



UUWNIUWN AKEA PEUPLE-MUVER SYSTEM CAPITAL COST ESTIMATE (1976 DOLLARS)

# STAGE I (North Side) -- Hospital/Medical Center to City Hall (9900 ft.)

#### CONSTRUCTION COST

Sub Total10,720,800Total Construction33,515,800PARKING FACILITIES(Union at Beaver St., 8th at Jefferson)2,000,000RIGHT-OF-WAY (Portions of Guideway) (Air rights)1,500,000PEDESTRIAN SKYWALK STATION ACCESS1,000,000
--

IAL SYSTEM CAPITAL COST

\$ 41,015,800

ever, there is any deficit in any year, the liacksonville Transportation Authority through City financial support will previde the necessary funds traintain and operate the system.		rigure Z/ illustrates the estimated annual opera- ting and maintenance cost and revenue for the Stage I People-Mover System for 1981-1990. For the ten year period, the total operating cost and pas- senger revenue are estimated to be \$10,026,588 and	come would be \$450,604 to the credit. These estimates mates are based on the 1981 patronage estimates and a base fare of 15¢.	annual operating expense in 1981 would be \$1,313,396 and the 1981 annual revenue would be \$1,764,000 (See Figure 26) The optimized and the \$1,764,000	The City of Jacksonville is requesting that UMTA finance 80% of the \$33,515,800 figure or \$26,812,640. This amount is actually only a little over 65% of the total cpaital cost estimate. The estimated	skywalk station access facilities which total an estimated 7,500,000. This would be financed through City, State and private sources.	Figure 25 shows the estimated capital outlay for the Stage I People-Mover System at \$33,515,800 (in 1976 dollars). This excludes peripheral park-	CAPITAL AND OPERATING COST ESTIMATES	west-Riverside, the Southside-northside and the East-West Downtown services, each providing five minute and ten minute service during peak and off- peak hours for 15t a wide
Before the location of the people-mover system plan was established in 1973, a comprehensive investi- gation was made of how a people-mover system would "fit" into the downtown environment. The environ- mental orban design investigation and analyses were	(Surplus) URBAN DESIGN AND ENVIRONMENTAL IMPACT	OPERATING REVENUES(1981 Dollars) \$1,764,000 NET OPERATING INCOME(1981 Dollars)\$450,604	OPERATING COST(1981 Dollars) 1976 O & M increase 8% per year to 1981 \$1,313,396	TOTAL \$ 893,875	Equipment 49,700 Power 49,700 Provision of Services 298,650 Injuries & Damages 73,500 General & Administration 224,325	<del>T (1976 Dollars</del> ) Way & Structures) \$	<u>STAGE I (North Side</u> )Hospital/Medical Center to City Hall (9900 ft.)	DOWNTOWN PEOPLE-MOVER SYSTEM OPERATING COST (1976-1981 Dollars)	FIGURE 26

### DOWNTOWN PEOPLE-MOVER

REVENUES/VERSUS OPERATING & MAINTENANCE COST

Year	Cost	Revenues	Net Income
1981(1)	1,3]3,396	1,764,000	450,604
1982(1)	1,418,467	1,876,680	458,213
1983(1)	1,531,945	1,981,320	449,375
1984(1)	1,654,500	2,077,920	423,420
1985(1)	1,786,860	2,166,480	379,620
1986(2)	1,929,809	3,745,000	1,815,191
1987(2)	2,084,194	3,865,800	1,781,606
1988(2)	2,250,929	3,973,200	1,722,271
198 <del>9(2)</del> -	2,431,004	4,067,200	1,636,196
1990(2)	2,625,484	4,147,800	1,522,316
TOTALS	19,026,588	29,665,400	10,638,812
(1) .15¢	¢ Fare	(2) .25¢ Fare	re

presented in the Technical Report "CBD Alternatives Volume II, Urban Design Analysis" as part of the 1973 People-Mover Plan. Consideration was given to the type vehicle needed and its supporting\_\_\_\_ guideway. Criteria were established to minimize

> impact and maximize the harmonious interface of a system with its surrounding environment.

Impact of a people-mover system on the surrounding environment of some of the test routes was cause for rejection of that route even when other considerations favored its selection.

It should be emphasized that the study efforts, transportation planning and urban design analysis were carried out simultaneously, with continual feedback between the specialists working on each task.

The results of the Urban Design Analysis were combined with patronage estimates from the various test networks in the Travel Demand analysis to derive a recommended People-Mover System. Thus, the conclusions and the recommended system reflect the combined results of both analyses.

It is interesting to note that these analyses tended to reinforce, rather than cancel, the major elements of the proposed system. The urban design analysis performed yielded the following primary conclusion:

A) Major development goals of downtown Jacksonville, as presented in the various planning studies, can be efficiently and effectively served by a People-Mover System. Such a system can be closely integrated into planned activity centers to provide a new dimension of mobility to the CBD. The routes selected for recommendation fit into the surrounding urban activities with minimal disruption. In some cases, the people-mover could serve as a catalyst for early implementation cf planned development.

During 1977 and the early part of 1978, detailed engineering and planning of the Stage I People- Mover System will be undertaken. The estimated time required for this planning, acquisition of funding, selection of a People-Mover System manu- facturer and hardware, construction of the People- Mover System and actual opening for passenger operation is shown in Figure 28. Probable minimal time is about four years. Since all of the Stage I route alignment and sta- tions are within existing public rights-of-way, time required for land acquisition will be held to a minimum. Furthermore, the use of the St. Johns River and Jacksonville Port facilities in the down- town area should facilitate the construction of the pre-cast guideway. Thus, the total length of time for construction should be comparatively short.	C) An automated fixed-guideway system with vehicles seating between 20-40 passengers was found to best meet the environmental needs of the downtown area. The physical impact of the vehicles and guideway structures was evaluated and found to be acceptable in the recommended system configuration. IMPLEMENTATION OF FIXED-GUIDEWAY SYSTEM	B) The magnitude of future travel demands in the central area severly taxes the ability of downtown to handle expected volumes. Space requirements of the private automobile deter growth when saturation limits are reached. A People-Mover System could greatly alleviate anticipated congestion and do much to allow CBD growth in the manner envisioned for Jacksonville.
--	--	---

Initial revenue passenger service is anticipated

in 1980, with 1981 being the first full year of operation.

#### FINANCE

Jacksonville has a long history of financial commitment to a coordinated land use and transportation program in the downtown area. This section outlines some of the financial techniques to be considered by the City of Jacksonville in funding its share of the People-Mover costs.

## The AGT System and Current Development

During the mid-1950's, over \$50 million was spent in creating riverfront parking facilities, a city hall, courthouse, a civic auditorium, Coast Line Drive, a new private high rise office building, a federal building, a major Sears and Roebuck Department Store and parking area, and a coliseum. These were just a few of the projects which are defined as the "Jacksonville Story" in the middle 1950's and the early 1960's.

With the creation of the consolidated government in 1968, there was a re-evaluation of Jacksonville's commitment to its downtown area. As a part of this re-evaluation the Jacksonville Area Planning Board and the Chamber of Commerce Downtown Council initiated the Downtown Plan. The Plan's recommendations, completed in 1971, were used as a basis to create the Downtown Development Authority which was assigned to implement the Downtown Plan.

Adopted in 1971, the Plan has been the basis for reinvestment in the central area. <u>Private</u> commitments since 1971 total \$450 million, of which \$200 million is on the boards or completed in the form of new office buildings and related uses. <u>Public</u>

ч
<b>—</b>
G
R
m
N
$\mathbf{m}$

## STAGE I PEOPLE-MOVER SYSTEM IMPLEMENTATION SCHEDULE

10. Soci	9. Cons	8. Purc	7. Hearings	6. Desi	5. Secu	4. Envi	3. Prel	2. Prepare Appli	l. Revi
Socio-Economic Studies	Construction	Purchase Vehicles and Testing	ings	Design Vehicle and Guideway	Secure Funding	Environmental Impact Statement	Preliminary Engineering and Design	epare and File UMTA Capital Grant Application	Revise and Update People-Mover Plan
			+1111111		101101101	1411		H	76 77 78
		-		19119			<b>.</b>		
		100101							79 80
			SN	017/	6E <i>B</i>	0	EGIN	8	81

building and utility investments during the same period totaled \$46 million.

Through 1981 an additional \$12 million is budgeted for public capital outlay projects in downtown. In addition to the capital investments already committed by public and private interests, another \$250 million of private investment has been announced.

Transit Commitments to the Central Area

Through the cooperation of the FDOT, which supplied \$100,000 to obtain five 16-passenger coaches and \$56,000 of operational subsidy, JTA began the operation of the first phase of the People-Mover System. Utilizing property owned by the JTA's highway section, peripheral parking lots were located adjacent to main corridors in the city.

new public and private investments in appropriate en committed and proposed projects and to generate particularly at people-mover stations to strengthcontribute to the operational cost to the extent of \$200,000 annually. Ridership has increased, operational cost. After the first year, the project was so successful that JTA has continued to JTA had to make a major contribution to the With lot coach fare and a lo-minute frequency, financial techniques that might be employed, The following are the key developmental and Development Financial Techniques and Sources however, from 126 people the first day of service to the current level of over 1,700 daily patrons. land uses. tions. around stations and lease or rent such facilstations, then later, when development of Develop/Hold - Build transit related facilities these parcels meets appropriate public Hold/Sell - Hold land parcels acquired for then sell surplus land as facilities. Develop/Sell - Acquire land in fee simple, Lease - Make long-term ground, air or sub-surface rights leases for specific developpurposes, sell, subject to specific condiities. ment enterprises with others, public or priacquire equity participation in joint developments vate Participation - Make participation lease or



Tax Techniques - Use the newly enacted State of Florida tax incentive legislation when provision is made (to be voted on in November 1976). After amendment, the legislature must create the necessary legislation to serve Jacksonville. The legislation will allow tax abatement or the use of tax increment (marginal value) taxation to apply incremental taxes resulting from new development to retirement of improvement bonds issued against these incremental tax revenues.

Development District - Although there is no provision for a Florida city to create special development districts, the Jacksonville City Council may create a special district upon vote by the freeholders in the subject district. The Downtown Development Authority Act provides major implementation power upon City Council approval. This is potentially (as implemented through the City Council) a strong vehicle with bonding and development legal provisions.

NET 10 YEAR INCOME OF \$5,076,903.	Stage I		OPE	Stage I			Sta <del>ge-I</del>		G	<u>Sales Tax</u> - A local option sales available for funding mass transp projects after approval by public dum.	ting runds. The yth¢ gas tax is availan for transit use in Florida, but it must enacted through a local referendum.	based on gross revenues from the People- Mover system, and general operating funds could be pledged for any operating deficits. The currently received State of Florida 8th¢ gas tax is also a source of capital or opera-	Revenue Bonds - The City of Jacksonville's share of the capital cost can be provided through the use of non ad valorem revenue bonds. The City would sell revenue bonds
ME MEETS 10 YEAR	19,026,588	0 & M Cost	OPERATING COST/VERSUS	3,326,580	Local Share	LOCAL SHARE AMORTIZED PERIOD AT 7% BOND	33,2 <del>65,80</del> 0	Total System Cost	FIGURE 29 DOWNTOWN CAPITAL COST ANALYSIS (	sales tax is transportation public referen-	s available it must be dum.	₂ People- ting funds ing deficits. Florida 8th¢ Ital or opera-	(sonville's provided m revenue pnue bonds
AMORTIZED LOCAL	29,665,400	Revenue	JS REVENUES (1981	556,191	Annualized Cos	RTIZED OVER 10 YE BOND FINANCING	26,612,640	t 80% UMTA	ITOWN PEOPLE-MOVER 'SIS (80% UMTA FUNDED)	year cost mated 1981 operating 10 year ir cost with	Figure 29 i financing tl capital cos over a 10 y	Florida has share of a	State of Florida Florida's DOT wi local share of co mover system. In
. COST WITH SURPLUS	10,638,812	Net Income	( 1990 )	5,561,909	<u>ist 10 Year Cost</u>	'E AR	3,326,580 3,326,580	10% State 10% Local	UNDED)	year cost would amount to \$5,561,909. The esti- mated 1981-1990 AGT system revenues less the operating costs is \$10,638,812. Thus, the net 10 year income meets the 10 year amortized local cost with a surplus of \$5,076,903.	illustrates one possible method of the local 10% share of the \$33,265,800 ost for the Stage I AGT system financed year period with a 7% bond. The 10	s ne cap	f will In

-

#### RECENT DOWNTOWN PUBLIC AND PRIVATE DEVELOPMENT PROJECTS

The following is a list of the major development projects called for in the Downtown Revitalization Program and others announced since 1971.

## Downtown Street Improvements

- Main-Ocean Streets Ramp -- construction begun July, 1975.
- Independent Drive (Water Street) between Laura and the Main Street Bridge -- Construction completed May, 1975.
- 3) Main Street from Bay to State Street -- three lanes one-way south with new sidewalks, street lights and traffic signals. Construction began January, 1975.
- Study design of the second level walkway system commenced May, 1975.
- 5) Design of Main Street furnishings and landscaping commenced May, 1975.
- 6) Laura Street between Bay and Water -- minor change in elevation and modifications to provide entry to adjacent property. Construction completed in January, 1975.
- 7) Survey and preliminary engineering on Downtown Loop -- Ocean, Beaver, Ashley, Julia, Pearl and Bay. Survey work and engineering near completion. This work necessary to initiate engineering and construction.

 Coast Line Drive Extension -- engineering survey work complete. Extension appears to be physically feasible. (From Seaboard Coast

Line Building to I-95).

- Acosta-Riverside Interchange -- design for improvement in connection with Downtown street improvement program. Recommendations made in early 1976.
- 10) Hogan Street between Riverfront and Ashley Street -- design concepts for the improvement of Hogan Street underway.
- 11) Shuttle Bus System -- Jacksonville Transportation Authority and the Downtown Authority are cooperating with State DOT on the establishment of peripheral parking and a shuttle bus system.
- 12) Riverfront Parking Feasibility Study -- Voorhees/Conrad joint venture consultants. Draft of feasibility complete. This parking facility will provide the base for the Riverfront activity center. The financial feasibility study recommends location for other parking structures and a ten-year parking investment plan in connection with the people-mover program.

This feasibility study is designed to assist the Authority in preparing a financial program for construction of future parking facilities in Downtown Jacksonville. The consultants' work takes into account Jacksonville's transit plans and existing and proposed private parking facilities to be constructed in downtown. This study stresses the importance of the riverfront hotel in providing the off-peak parking activity and necessary revenues which make the parking facility and activity center financially feasible.

13) Trunk Sewer Intercept line along the riverfront -- completed in 1975.

- 14) Riverside sanitary force main started Spring 1975.
- 15) Rehabilitation of Downtown domestic and fire water lines -- completed Spring 1975.
- 16) Design for improvements to approximately 15 downtown intersections underway by DOT.

Building Activity Completed, Announced or Underway -Public and Private

- 1) First Baptist Church Sanctuary (seating capacity 3,300) and Elevated Pedestrian Way -completed 1976 \$6,000,000.
- 2) Police Administration Building -- Under construction \$11,000,000.
- Riverfront Parking Structure and Upper Level Activity Center -- Revenue Bond Feasibility.
- 4) Riverfront Convention Hotel -- 450 Rooms.
- 5) Seaboard Coast Line River Center Project --\$60,000,000.
- 6) Charter Office Building -- 200,000 square feet.

- 7) St. John's Place; hotel, office, retail and residential complex -- \$250,000,000.
- 8) Florida Junior College Downtown Campus --15,000 students -- \$15,000,000.
- 9) State Regional Service Office Building -\$11,000,000.

#### Recently Completed

- 37-story Independent Life Office Tower --Completed 1975.
- 2) 18-story Atlantic Bank Office Building --Completed 1975.
- 20-story Blue Cross-Blue Shield Center --Completed 1973.
- 9-story Barnett-Winston Building -- Completed 1974.
- 5) Cathedral Manor Residential Towers (1200 senior citizens) -- Completed 1975.
- 6) Jacksonville Dry Docks Office and Facilities.



LINEAR PARK

Baptist Hospital Complex and Parking Structure.
 12-story Blackstone Building.
 6-story renovation of Hemming Park Building.
 Renovation, William Morgan Building.

There are a number of other projects in discussion stages which require more study before announcement. Such projects include possible new parking facilities

## BENEFITS ACCRUED FROM AGT SYSTEM

and renovation of older structures.

The decision to develop and implement an automated guideway transit system serving the downtown area will directly or indirectly affect the daily lifestyle of most Jacksonville citizens. What type and annual value of benefits could the average citizen expect to receive from this capital investment? Does the proposed Stage I AGT system have the capability to generate a positive economic return on the total capital investment required? How well does the total cumulative benefits compare to the total capital costs of the system? What is in the future for Jacksonville if a "do nothing approach" is followed?

Answers to these questions as well as others are critical. At present, a detailed analysis of the potential induced regional and community benefits of the AGT system has not been completed. However, benefit-cost evaluation will be part of the preliminary engineering and design program, as well as the socio-economic studies during the initial years of system operation.

Because of the value of a benefit-cost analysis, a preliminary analysis was undertaken by the Mayor's

People-Mover Task Force. Figure 30 illustrates a portion of the quantifiable benefits accruing from the Stage I people-mover system. Only 5 parameters were used to estimate the cumulative benefits over the 1981-2000 period. Hence, the \$6.81 of benefits for each \$1.00 of capital investment is conservative. Other benefits could reasonably supplement this report and will be shown in later studies.

The quantifiable benefits estimated for 1981, 1990 and the 1981-2000 period were:

- long-term and short-term parking cost savings for persons using peripheral parking lots served by the AGT system,
- Automobile operating cost savings for persons who park at the peripheral lots rather than park within the core area,
- Parking and auto operating cost savings for persons who divert from their auto to mass transit due to the AGT system,
- reduced annual bus transportation operating subsidy due to the AGT system, and
- time savings benefits for bus patrons who utilize the AGT system.

Other benefits not quantified for this analysis include:

- time savings benefits for auto and truck drivers within the CBD,
- 2) reduced pedestrian and vehicular accidents,
- 3) reduced cost of auto insurance,

## QUANTIFIABLE BENEFITS ACCRUING FROM STAGE I (only 5 parameters used) PEOPLE-MOVER SYSTEM

	\$ 41,015,800	40	Stage I capital costs (1976 dollars)	
279,436,750	16,208,833	\$ 7,739,625	TOTAL QUANTIFIABLE BENEFITS	
157,723,000	9,010,333	4,609,375	Time savings benefits for bus riders who utilize people-mover system	თ •
53,600,000	3,200,000	1,200,000	Reduced bus operating subsidy	4.
49,813,000	2,862,000	1,531,000	Parking and auto operating cost savings for persons who divert to transit	ω •
1,998,250	121,500	46,750	Auto operating cost savings for persons who use peripheral lots	2.
16,302,500	1,015,000	\$ 352,500	rarking cost savings for persons who use peripheral parking lots	-
1981-2000 Cumulative Benefits Accruing from People-Mover System	Benefits Accruing from People-Mover System 1981 1990	Bene Accrui People-Mc 1981		-

3 Other benefits not quantified above include time savings to auto and truck drivers within downtown CBD; reduced pedestrian and vehicular accidents; reduced cost of auto insurance; improved vitality of CBD; improved life style; improved mobility of transit-dependent residents; decreased air and noise pollution; reduced energy consumption; others.

> \$ 6.81 of benefits for each dollar of capital cost

Benefit/cost ratio



- improved vitality and "liveability" of the downtown area,
- improved mobility of transit-dependent residents,
- 6) decreased air and noise pollution,
- reduced energy consumption; and
- 8) increased mobility of handicapped persons.

lso, not included is the additional tax base enerated by the AGT system which will signiloantly contribute toward the revitalization of owntown Jacksonville, as well as enhance the htime community.

onville allows for a "do nothing" approach, simproved highway, freeway and bridge be required. This will be more costly

employment. Other per capita cost for future pop-ulation growth will influence the outlay required growth and aid in reducing the amount of "leap frog development." It will further intensify the transportation system is a dominant shaping force of the urban development. Jacksonville needs the water, and sewer mains, and electric and telephone lines) to serve the region's future population and alone will not contribute to the orderly suburban mands of the Jacksonville people. accommodate the present and future travel de-AGT system to provide a balanced or multimodal, transportation system that will maintain and vitality of regional activity centers. A total ped, nor does it assist in the improvement of the additional utility distribution systems (i.e. gas, potential additional need and cost to construct than the incurring benefits of an AGT system. improve its vitality, as well as effectively to assist transportation dependents and handicapvices. The "do nothing" approach does nothing for public works, public safety and general ser-This