Office of the Mayor

ROUTE SLIP

TO: Chas. Davis

FROM: R. EARL LANDERS

☑ For your information

☐ Please refer to the attached correspondence and make the necessary reply.

☐ Advise me the status of the attached.

Please Return for our Files.

Rel

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JAN 12 1967
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FORM 25-4-L

Office of the Mayor

ROUTE SLIP

TO: Earl

FROM: Ivan Allen, Jr.

- [x] For your information
- [ ] Please refer to the attached correspondence and make the necessary reply.
- [ ] Advise me the status of the attached.

File

FORM 25-4

Office of the Mayor

ROUTE SLIP

TO: Earl Landers

FROM: Ivan Allen, Jr.

- [x] For your information
- [ ] Please refer to the attached correspondence and make the necessary reply.
- [ ] Advise me the status of the attached.

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FORM 25-4

Office of the Mayor

ROUTE SLIP

TO: Earl Landers

FROM: Ivan Allen, Jr.

☐ For your information

☐ Please refer to the attached correspondence and make the necessary reply.

☐ Advise me the status of the attached.

File

FORM 25-4

Memo DATE

From CHARLES L. DAVIS

To Mr Earl Fender

Final Financial
Report from Marta

Earl.
Note County school
levies omitted from
page 29.
I wonder what is included
in capital needs of counties.
Page 131.

Please distribute the attached copies
to the aldermen.

File

RAPID TRANSIT PROGRESS

METROPOLITAN ATLANTA RAPID TRANSIT AUTHORITY

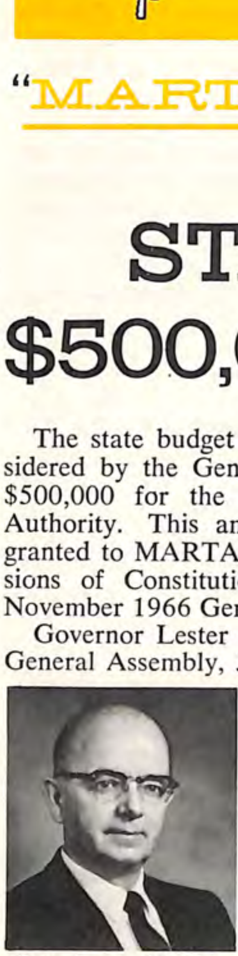
"MARTA REPORTS TO THE PEOPLE IT SERVES . . ."

JANUARY 1967
VOL. 2, NO. 1

STATE BUDGET PROPOSES $500,000 FOR MARTA IN 1968-69

The state budget for fiscal 1968-1969, now being considered by the General Assembly, includes a request for $500,000 for the Metropolitan Atlanta Rapid Transit Authority. This amount would be the first state funds granted to MARTA; the grant is possible under the provisions of Constitutional Amendment 14, passed in the November 1966 General Election.

Governor Lester Maddox, in his budget address to the General Assembly, January 13, included the request under a section on "Development Proposals." After outlining his major programs, the Governor stated, "Other major proposals included in the budget I am submitting today include (a proposal to) . . . provide $250,000 in each of the fiscal years of the biennium to match federal and local funds for Rapid Transit in Atlanta as soon as the Authority qualifies for the assistance."



Gov. Lester Maddox

The request was part of the proposed budget drawn by former Gov. Carl Sanders in conferences with then-Democratic Gubernatorial Candidate Lester Maddox and Republican Gubernatorial Candidate Howard "Bo" Callaway.

Sanders called a news conference Dec. 21 to announce the budget request for rapid transit. After announcing the request for the half-million dollars, Sanders stated, "I earnestly hope that this is just the first installment of State support for the rapid transit system here in Atlanta. The problem of moving people rapidly and effectively is one that faces all of our urban areas, but it is most acute here in our Capital City."

"We cannot stop improving our highways—and I might say that a fourth of Georgia's highway money has gone into the Atlanta area in the past four years—but we cannot depend upon highways alone to solve our problems."

"That is why this initial State grant is so important. We are backing up our legislative support with hard cash, and now the project can really get under way."

Henry L. Stuart, General Manager of MARTA, responded with words of appreciation for the request, and explained, "The appropriation announced today will allow the Authority to proceed with the detailed design of portions of the rapid transit system and with some right-of-way acquisition."

"We expect to apply for federal funds of four times this amount, using the State's appropriation as the local matching funds. This $500,000 thus will become $2,500,000 with the approval of federal funds on a four to one basis."

Stuart noted that "The total construction cost of the entire 66-mile system will be about $437 million. The basic system (North-South and East-West lines) will cost about $310 million to get into operation. It is our hope that in the next 20 to 30 years the State will be able to provide the maximum amount allowed under the law, which is 10 per cent of the total cost. If this amount is provided, and the maximum amount of federal funds are forthcoming, the amount required from the City of Atlanta and the counties of Fulton, DeKalb, Clayton, and Gwinnett will not be excessive."

Others present at the news conference included Roy A. Blount, MARTA Vice Chairman; Augustus H. Sterne, President of the Atlanta Chamber of Commerce; Alvin Ferst, Chairman of the Chamber's Rapid Transit Committee; Fulton Rep. Jack Etheridge; Curtis Driskell, Director of Metropolitan Affairs of the Chamber; and King Elliott, MARTA Public Information Director.

Gov. Carl Sanders, with MARTA Vice Chairman Roy A. Blount (left) and General Manager Henry L. Stuart (right).

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"DIRECTED BY THE GEORGIA STATE LEGISLATURE TO DEVELOP A RAPID TRANSIT SYSTEM FOR THE 5-COUNTY METROPOLITAN ATLANTA AREA."

Edited by KING ELLIOTT

EDUCATOR NOTES URGENT NEED FOR RAPID TRANSIT

"Hover over Atlanta in a helicopter at five o'clock in the afternoon. Look at the freeways and city streets jammed with thousands of cars inching their way home, and you know Atlanta needs a rapid transit system NOW," says MARTA Board member Dr. Sanford Atwood.

"From the air, downtown Atlanta seems like one vast parking lot, a sea of cars surrounding lines of shiny new office buildings," says Atwood, President of Emory University.

"A rapid transit system won't solve all our transportation problems, but a glance at the city from the air is a graphic lesson. There is a limit to how much land can be devoted to freeways and parking lots. There is a limit to the patience of the commuter and the amount of time and money he is wiling to spend to get to downtown Atlanta," Atwood continues.

Dr. Sanford Atwood

"A rapid transit system can save valuable land for more productive uses. It can save millions of wasted hours Atlantans now spend getting to and from work or recreation. In the long run, rapid transit can save the citizens of Metropolitan Atlanta and their visitors millions of dollars in time and expense, not to mention frayed nerves from rush hour traffic."

"We need a rapid transit system," Atwood concludes, " to keep Atlanta on the move."

HOUSE COMMITTEE ASKS FULL STATE SUPPORT FOR MARTA

The House State and Local Government Study Committee, in its final report, recommends that the state provide the full 10 percent of the total cost of the rapid transit system. The Committee, with Rep. Wayne Snow, Jr., of Chickamauga, as chairman, filed its final report in December.

Henry L. Stuart, MARTA General Manager, and Rep. Jack Etheridge, MARTA Counsel, appeared before the Committee at the State Capitol Dec. 9. The two discussed the impact the system will have on the Metropolitan area and the entire state, as well as the present programs and future plans.

The Committee report summarizes the testimony and makes its recommendation as follows:

Rep. Wayne Snow, Jr.

"The Metropolitan Atlanta Rapid Transit Authority appeared before the Committee and presented the proposed cost of the system for the Atlanta area. With the passage of Constitutional Amendment No. 14 at the General Election in 1966, the state is authorized to participate in the amount of 10% of the total cost of the system. The total cost of building the system over the next fifteen to twenty years will be an estimated $437 million. The Atlanta Authority is able to utilize the free information from the San Francisco Authority which is some three years advanced on the Atlanta program. Those of us who travel to Atlanta frequently and hold considerable pride for our capital city, its progress, and its contribution to the state and the Southeast are too frequently reminded of the inadequacy of the present system of freeways and the daily drudgery endured by those who must commute at a snail's pace back and forth thereon.

"We are advised that 55% of the real property in the City of Atlanta is now non-income-producing and that the city can ill afford to give up more income-producing property to costly freeways.

"We recommend that the state bear its 10% of the cost of this system as the participating counties and metropolitan Atlanta appropriate their funds."

Members of the House of Representatives serving on the Committee were Wayne Snow, Jr., of the 1st District, Chairman; Lionel E. Drew, Jr., 116th; Devereaux F. McClatchey, 138th; Roscoe Thompson, 111th; Reid W. Harris, 85th; William M. Fleming, Jr., 106th; Roger W. Wilson, 109th; W. M. Williams, 16th; William S. Lee. 79th; Jerry Lee Minge, 13th; Harry Mixon, 81st; and Dr. Albert Sidney Johnson, Sr., 25th.

ATLANTA TO HOST TWO TRANSIT CONVENTIONS IN 1967

May 24-26—The Annual Meeting of the INSTITUTE FOR RAPID TRANSIT will be held at the Marriott Motor Hotel. The IRT is composed of members from all aspects of rapid transit.

Oct. 22-26—The annual meeting of the AMERICAN TRANSIT ASSOCIATION will be held at the Regency-Hyatt House. The ATA has as members only those operating transit systems (railroads, bus lines, rapid transit, etc.)

HUD GRANTS MARTA $369,000

An application by the Metropolitan Atlanta Rapid Transit authority for $369,333 in federal funds was approved in late December. The announcement of the grant was made Dec. 21 in Washington jointly by Georgia Senators Richard B. Russell, and Herman Talmadge, and by Secretary Robert C. Weaver, U. S. Department of Housing and Urban Development.

The grant was the nation's first Technical Studies Program Grant, authorized by a 1966 amendment to the Urban Mass Transportation Act. The federal funds will be matched by $184,667 in local funds which are on hand or committed.

Assistant Secretary Charles M. Haar noted that HUD "does not regard a transportation system as something that can be superimposed on a city after all else is planned or built." Haar continued, "It is our firm conviction that transportation systems are a vital component of metropolitan development, and effective metropolitan planning must bring the people operating the system into the planning process at an early stage of deliberation."

Charles M. Haar

As Assistant Secretary for Metropolitan Development. Haar has an overall responsibility for HUD's programs of planning standards and coordination as well as the Urban Mass Transportation Program.

"The basic purpose of the new program", Haar said, "is to bridge the gap between federally-assisted transportation planning of an overall nature, and federally-assisted capital improvements in mass transportation facilities and equipment, by providing funds for preliminary functional studies of basic need, priority, and engineering and economic feasibility."

"The $554,000 program will finance the following work: completion of preliminary engineering on extensions to the North-South Line; most of the preliminary engineering on the East-West Line, and extensions to I-285 at each end of the Line; a Rapid Transit Corridor Impact Study; and an Impact study of the proposed system on the Atlanta Transit System.

IS YOUR ADDRESS CORRECT?

Please check the address on page 4; if it is incorrect please make corrections, and return to MARTA, 808 Glenn Building, Atlanta, Ga., 30303

Or if you would like to have RAPID TRANSIT PROGRESS sent to a friend, just fill out the form and return it to MARTA, 808 Glenn Building, Atlanta, Georgia, 30303

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BOARD MEMBERS MAKE FIELD SURVEY

Members of the MARTA Board of Directors were shown some of the various routes under consideration for the Central, Northeast, East, and West Lines on two field trips in January. The directors were escorted on the tours by members of the engineering consultant firm, Parsons-Brinckerhoff Tudor and Bechtel.

The directors plan to tour the routes being studied for the South Line as soon as preliminary engineering reaches the stage which would make a tour meaningful.

The present development schedule calls for completion of preliminary engineering by the end of 1967. At the proper time, tours will be arranged for city and county officials associated in MARTA, as well as for members of the news media. Also, as provided in the MARTA Act, public hearings will be conducted to acquaint citizens with the plans and route locations before final decisions are made.

In the pictures above and below, engineers are explaining how portions of the rapid transit system could follow existing railroad lines. The location is Southern Railway at Piedmont Road.

RAPID TRANSIT BRIEFS — 1966 ROUND-UP

MONTREAL The newest rapid transit system in the western hemisphere began operations October 14, 1966. The Montreal METRO, patterned after the Paris METRO, has 16 miles of underground railway, with 26 stations, each station designed by a different architect. The METRO was built by the city thru its Public Works Department, without financial help from superior governments, at a cost of $213,700,000. The trains travel on rubber tires, running on concrete tracks, and they are powered by electricity. There are 41 nine-car trains, the usual train used during rush hours; each car will seat 40 persons, with standing room for 120 more passengers. Another line, to be opened this Spring, will take passengers to "Expo 67", the international exhibition which begins April 28.

SAN FRANCISCO Contracts for more than $250 million in construction work had been awarded by the end of 1966, to build 34 miles of the 75 mile Bay Area Rapid Transit system. Contracts totalling $300 million will be let in 1967 for another 24 miles of the system. Construction under way includes subway, aerial, and ground level sections; the four-mile underwater Trans-Bay Tube, and a three-mile-long twin-bore transit tunnel through the Berkeley Hills east of Oakland. BART passenger service is scheduled to begin on some East Bay lines in mid-1969; San Francisco and Trans-Bay service will commence in early 1970.

BALTIMORE The Metropolitan Transit Authority has recommended an initial $225 million phase of rapid transit construction for Metropolitan Baltimore. The initial phase is for two radial lines plus portions of a downtown inner city rail transit loop; the full system under study calls for six radial rapid lines, an inner city downtown loop, plus express and feeder buses. The MTA recommendation went to the Metropolitan Area Council for approval in early January.

LOS ANGELES The Southern California Rapid Transit District has approved $2,625,000 in contracts for preliminary planning and engineering for the first phase of a rapid transit system.

MARTA ACTION

In its January meeting, the MARTA Board of Directors approved amendments to the contract with engineering consultants (Parsons-Brinckerhoff-Tudor-Bechtel) to cover work to be performed under the new HUD Section 9 grant of $369,333. The General Manager was authorized to execute appropriate contract with HUD for the funds, subject to review by the Board.

The Board changed the date of the February meeting because several members will be absent from the city. The next meeting will be Wednesday, February 15, at 3:30 p.m., in Room 619, the Glenn Building, instead of February 7.

NEW YORK The New York City Transit Authority has ordered 400 new subway cars, and is asking for $220 million in additional funds for improvements and extensions in the 1967-68 fiscal year. Plans are being made for a new subway tunnel under the East River between Queens and Manhattan.

BOSTON The Massachusetts Bay Transportation Authority's Advisory Board approved a $346 million "Master Plan" for improvements and expansion.

WASHINGTON, D.C. An interstate rapid transit compact was signed in November, creating the Washington Metropolitan Area Transit Authority. WMATA will replace the National Capital Transportation Agency in September. Congress has authorized construction of a 25-mile subway and rail rapid transit system to cost $431 million. Plans call for the system to be in operation by 1972.

EGYPT Experts are currently studying the city of Cairo, seeking routes for what will be Africa's first subway transportation system. The first line will run north to south along the east bank of the Nile River; a second line is planned to go under the Nile.

TORONTO 14.5 miles of route is being added to the Toronto subway system at a cost of $284 million. The new 8.5 mile Bloor-Danforth subway opened in February.

RAPID TRANSIT
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RAPID TRANSIT PROGRESS

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"MARTA REPORTS TO THE PEOPLE IT SERVES . . ."

DECEMBER 1966
VOL. 1, NO. 3

PBTB, MARTA DIRECTORS MEET IN ATLANTA

Eight members of the board of directors (Board of Control) of Parsons-Brinckerhoff Tudor-Bechtel, engineering consultants to the Metropolitan Atlanta Rapid Transit Authority, met in Atlanta with the MARTA board of directors December 5. Both boards of directors received a briefing on the status of development of the Atlanta rapid transit system.

Members of PBTB attending were W. S. Douglas, Senior Partner, Parsons Brinckerhoff, Quade and Douglas; M. Den Hartog, Partner, Parsons Brinckerhoff, Lord & Den Hartog; W. O. Salter, Vice President, PBQ&D, and director of the MARTA project; J. R. Kiely, Senior Vice President, Bechtel Corporation; John P. Buehler, Vice President, Bechtel Corporation; Louis Riggs, President, Tudor Engineering Corporation; Stan Froid, Vice President, Tudor Engineering Corporation; and W. A. Bugge, Project Director, PBTB.

The PBTB board members attended the December board meeting of MARTA directors, then entertained MARTA directors at a dinner meeting where the system was discussed in further detail.

John Coil, PBTB Resident Manager in Atlanta, escorted the PBTB directors on tours of the various lines under consideration for the Atlanta system, including the railroad "gulch" area downtown, where Transit Center will be located.

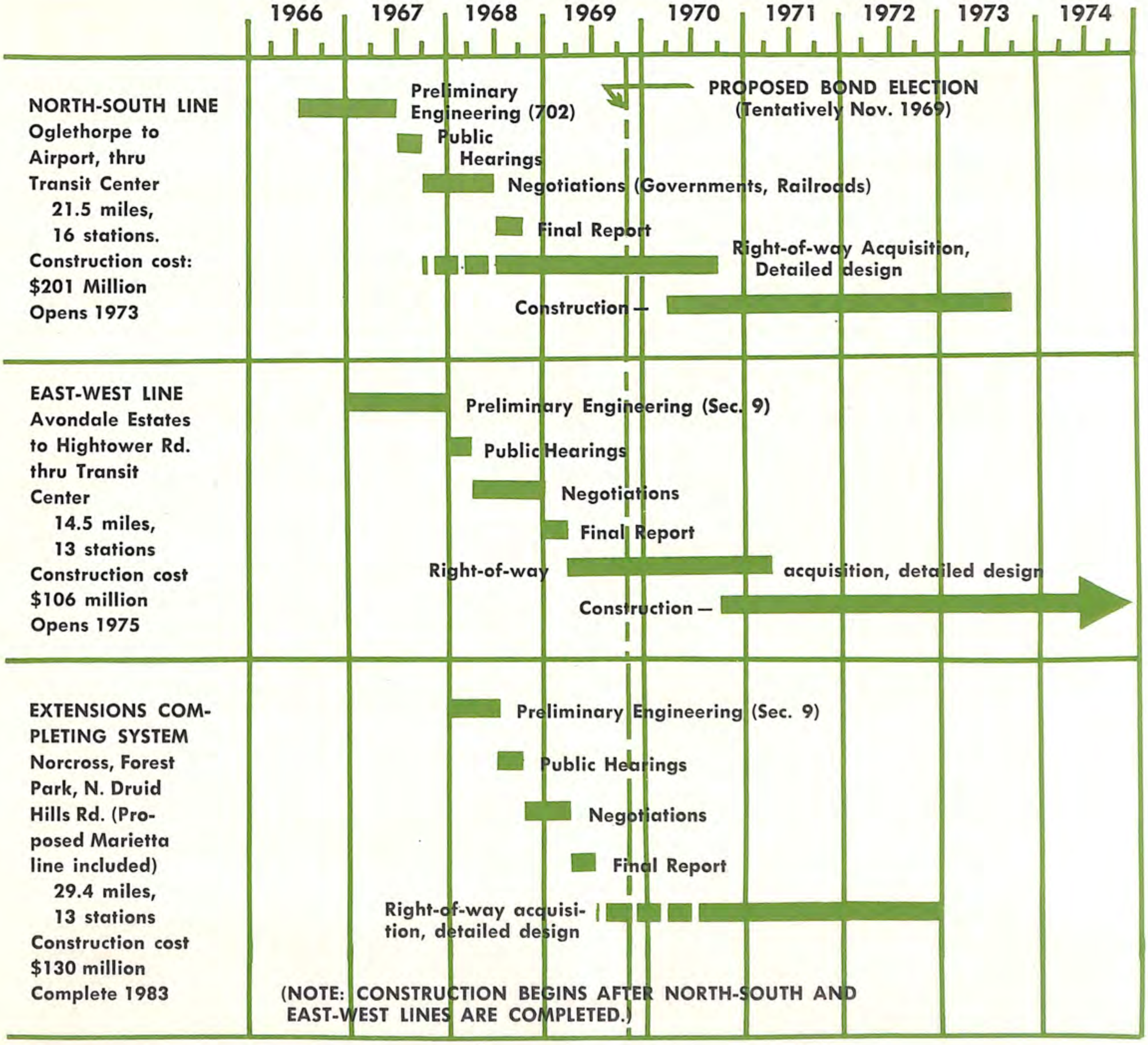
The Atlanta PBTB staff showed aerial photographs of the area, and discussed various alignments of the system lines. Several proposals for subway locations and levels were outlined.

Phil Hammer, of Hammer, Greene, Siler Associates, discussed several methods of financing the first two phases of the Atlanta System. Under the basic plan, predicated on maximum federal and state aid, local funds of approximately $100 million would be required for the two principal lines to be constructed for about $310 million. If the local part is received through 30-year revenue bonds, the maximum tax cost would be about two mills in Fulton County where assessments are lowest, and less in the other governments participating in MARTA.

Richard H. Rich (left), MARTA Chairman; Stan Froid, Tudor V-P; Martin Den Hartog, PBL&DH; Win O. Salter, PBQ&D V-P; Henry L. Stuart, MARTA General Manager; W. A. Bugge, PBTB; W. A. Pulver, MARTA Director.

Ray O'Neil, PBTB Deputy Resident Manager explains route alignments on aerial mosaic map.

RAPID TRANSIT SYSTEM DEVELOPMENT SCHEDULE

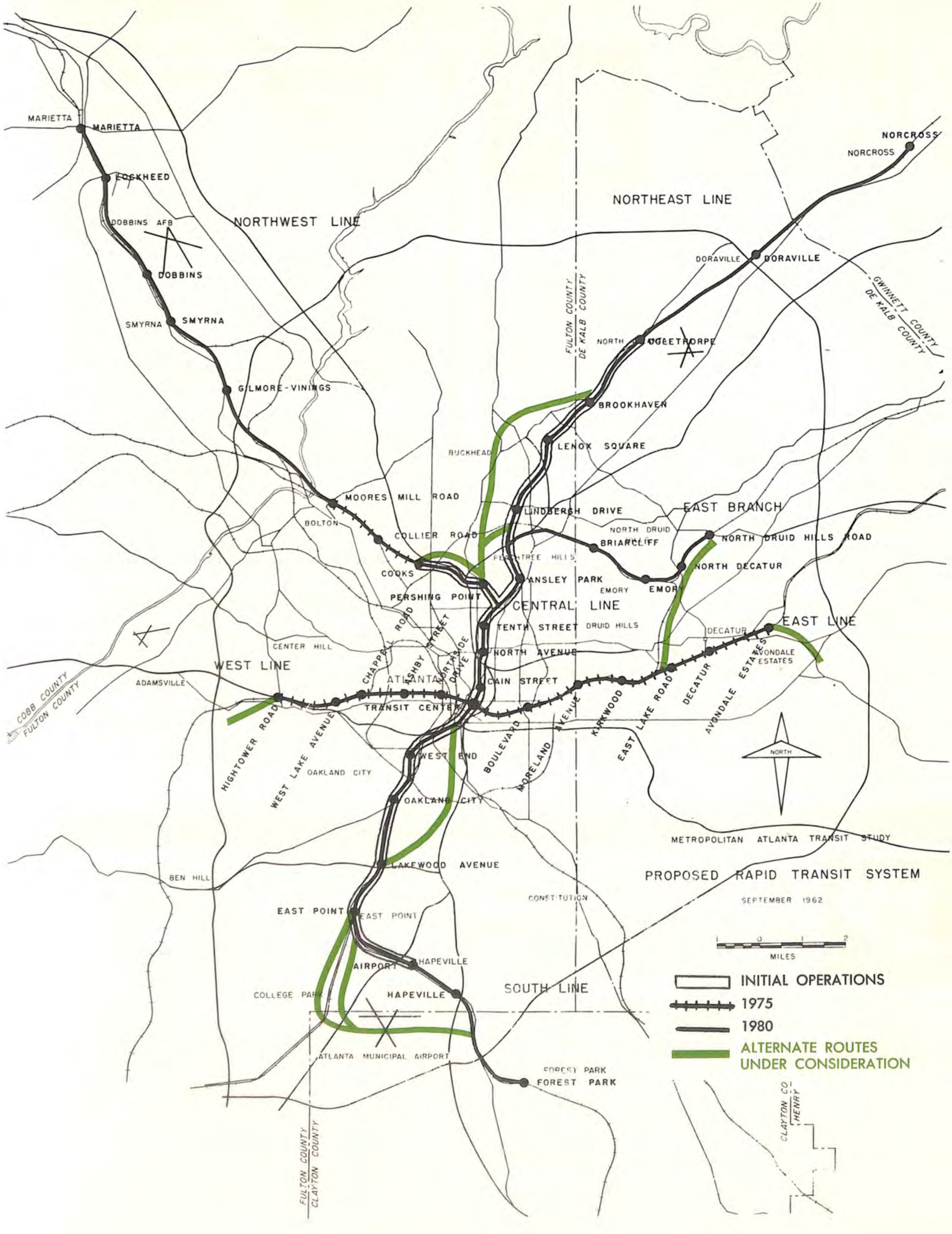


The above chart and the map on the opposite page outline some of the work being done and plans for the future development of the rapid transit system in Metropolitan Atlanta.

The chart shows a "working schedule" rather than a precise timetable, and is subject to change. On the North-South line, "Preliminary Engineering (702)" is financed with a loan under Section 702 of the U. S. Housing Act of 1954. "Preliminary Engineering (Sec. 9)" anticipates approval of an application under Section 9 of the Mass Transportation Act of 1966 for $369,333. These funds will also provide for planning to extend East-West line on each end to I-285 perimeter expressway.

The beginning of "Acquisition of Right-of-way and detailed design" of the North-South line is based on the prospect of state funds and additional federal funds. With the passage of Constitutional Amendment 14 in the November General Election, the state can now appropriate funds to assist in rapid transit development. If the new General Assembly approves such an appropriation, application will then be made for four times the amount in federal funds. If such funds become available, purchasing of right-of-way and drafting of detailed designs could begin after July 1, 1967. Initial work would likely begin on Transit Center in downtown Atlanta, where the North-South and East-West lines will cross.

On the map on the opposite page, the lines of the original 1962 plan are in black; the green lines show alternate lines being considered. Final lines will be determined in 1967.


METROPOLITAN ATLANTA TRANSIT STUDY
PROPOSED RAPID TRANSIT SYSTEM
SEPTEMBER 1962
MILES
INITIAL OPERATIONS
1975
1980
ALTERNATE ROUTES UNDER CONSIDERATION
NORTHWEST LINE
NORTHEAST LINE
EAST BRANCH
CENTRAL LINE
EAST LINE
WEST LINE
SOUTH LINE
MARIETTA
LOCKHEED
DOBBINS AFB
DOBBINS
SMYRNA
GILMORE-VININGS
MOORES MILL ROAD
BOLTON
COLLIER ROAD
COOKS
PERSHING POINT
BUCKHEAD
NORCROSS
DORAVILLE
NORTH OGLETHORPE
BROOKHAVEN
LENOX SQUARE
LINDBERGH DRIVE
NORTH DRUID HILLS
BRIARCLIFF
NORTH DRUID HILLS ROAD
NORTH DECATUR
EMORY
PEACHTREE HILLS
ANSLEY PARK
TENTH STREET
DRUID HILLS
NORTH AVENUE
CAIN STREET
ATLANTA
TRANSIT CENTER
CHAPPELL ROAD
ASHBY STREET
NORTHSIDE DRIVE
CENTER HILL
ADAMSVILLE
HIGHTOWER ROAD
WEST LAKE AVENUE
OAKLAND CITY
WEST END
BOULEVARD
MORELAND AVENUE
KIRKWOOD
EAST LAKE ROAD
DECATUR
AVONDALE ESTATES
LAKEWOOD AVENUE
BEN HILL
CONSTITUTION
EAST POINT
AIRPORT
HAPEVILLE
COLLEGE PARK
ATLANTA MUNICIPAL AIRPORT
FOREST PARK
NORTH
FULTON COUNTY
DE KALB COUNTY
GWINNETT COUNTY
COBB COUNTY
CLAYTON COUNTY
CLAYTON CO.
HENRY

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"DIRECTED BY THE GEORGIA STATE LEGISLATURE TO DEVELOP A RAPID TRANSIT SYSTEM FOR THE 5-COUNTY METROPOLITAN ATLANTA AREA."

Edited by KING ELLIOTT

MARTA ACTION

In the December meeting, the MARTA Board of Directors re-elected present officers to another one-year term. Richard H. Rich will continue to serve as MARTA Chairman, and Roy A. Blount as Vice Chairman.

The board also approved the budget for 1966. Total income and unappropriated surplus are expected to be $810,871.98; total expenses will be $764,448.00; a surplus of $46,423.98 is anticipated.

The income anticipates approval of a pending application for a federal grant under Section 9 of the Mass Transportation Act of 1966. The application is for $369,333, of which $276,000 would be spent in 1967, and $93,333 in 1968. The local support from Atlanta and Fulton, DeKalb, Clayton, and Gwinnett counties remains the same as 1966—$300,000 on a pro rata basis.

The 1967 budget will provide funds for completion of the preliminary engineering on the North-South line; for most of the preliminary engineering on the East-West line; additional work on the North-South line; Rapid Transit Corridor Impact Study; a study of the impact of the proposed system on the Atlanta Transit System; and other work.

RAPID TRANSIT BRIEFS

A study committee of the Georgia House of Representatives has been briefed on the status of rapid transit in Atlanta. On December 9, MARTA General Manager Henry L. Stuart and Rep. Jack Ethridge, legal counsel for the Authority, appeared before the State of Local Governments Study Committee.

Rep. Ethridge pointed out that rapid transit is going to benefit residents of many counties outside the area encompassed by the Authority itself. He stated that, in several nearby counties, more than half the people who have jobs are employed in Atlanta, and could be expected to drive to the nearest rapid transit station to "park and ride."

Stuart discussed the system itself, its cost, and methods of financing the work. He noted that through 1966, local governments had spent $790,000 from local funds on the project, and $730,000 in federal funds. He said that while the state has not been able to participate financially in the project, passage of Amendment 14 in November will now allow the state to take part. He stated that he is "encouraged" in his belief that the next budget will include an allocation for rapid transit.

RAPID TRANSIT PROGRESS

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DECEMBER 1966 • VOL. 1, NO. 3

RAPID TRANSIT PROGRESS

METROPOLITAN ATLANTA RAPID TRANSIT AUTHORITY

"MARTA REPORTS TO THE PEOPLE IT SERVES . . ."

NOVEMBER 1966
VOL. 1, NO. 2

"SPECIAL ELECTION ISSUE"

VOTERS APPROVE AMENDMENT 14

Georgia voters approved the proposed Constitutional Amendment 14 by a 55 per cent vote in the November 8 General Election. The final votes, tabulated on November 22, showed that 241,654 voted "YES," while 196,501 voted "NO," giving the Amendment a margin of 45,153 votes. The largest majorities were in Fulton and DeKalb Counties, which voted nearly 70 per cent for the amendment; Clayton County approved it with a 50.2 per cent vote. The amendment missed approval in Gwinnett County, receiving a 44.7 per cent vote, while Cobb County again rejected Rapid Transit with a 39.6 per cent vote.

The amendment, as approved by the majority of Georgia voters, will allow, but not require, the state to participate in building a rapid transit system in Metropolitan Atlanta. The wording of the amendment specifically limits the state's participation to "10 per cent of the total cost." The total cost of building the system will be $437 million over the next 15 to 20 years.

The successful vote on the amendment can be attributed in a large part to the efforts of former Governor Ernest Vandiver. On October 19, Vandiver announced the reactivation of the Metropolitan Atlanta Rapid Transit COMMITTEE OF 100, in an enlarged, statewide scope. The former governor, Chairman of the COMMITTEE OF 100 since its formation in 1963, stated, "I feel that the approval of Amendment 14 is essential, and that approval will depend on an intensive, statewide effort."

"It is my opinion," he continued, "that the COMMITTEE OF 100, enlarged to include members from 13 larger cities across the state, is the best means of informing Georgia voters of what this Amendment will do."

Vandiver further announced his selection of M. C. Bishop of College Park to serve as Executive Director of the COMMITTEE OF 100 during the informational effort. Bishop, member of the MARTA Board of Directors, has been engaged in business enterprises for a number of years, reaching into many Georgia cities.

Under the direction of Bishop, business, civic, and governmental leaders were invited to attend meetings at which the proposed amendment would be discussed. A total of 610 persons attended the 12 luncheon, dinner, or breakfast meetings across the state. Presentations were made in Augusta, Savannah, Brunswick, Waycross, Albany, and Valdosta by M. C. Bishop; in Gainesville and Athens by King Elliott, MARTA Public Information Director, and by Robert Coultas, Rapid Transit representative of the General Electric Company; in Columbus by Elliott and Tom Watson Brown, Atlanta attorney; in Carrollton and Rome by Curtis Driskell, Director of Metropolitan Affairs for the Atlanta Chamber of Commerce and by Coultas; and in Macon by William P. Corley, Vice President of Infoplan. All meetings were well-reported by local news media.

"By approving this amendment, Georgians have shown their awareness of the problems facing urban areas in the field of transportation, and their willingness to allow the state to provide financial assistance where possible," Vandiver noted. "I am optimistic," he concluded, "that the next General Assembly will include an allocation for the Rapid Transit system now being developed in Atlanta."

Former Governor Ernest Vandiver, Chairman of COMMITTEE OF 100, explains Amendment 14 at Athens luncheon meeting; King Elliott, MARTA Public Information Director, is seated at his left.

ELECTION ISSUE

METROPOLITAN ATLANTA RAPID TRANSIT AUTHORITY

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"DIRECTED BY THE GEORGIA STATE LEGISLATURE TO DEVELOP A RAPID TRANSIT SYSTEM FOR THE 5-COUNTY METROPOLITAN ATLANTA AREA."

Edited by KING ELLIOTT

"RAPID TRANSIT IS A 'MUST'"

"The great additions to Atlanta, such as major league baseball and football, new auditorium, cultural centers, and other metropolitan improvements will soon lose their glamour if something isn't done to make more pleasant the trips to and from," says Roy A. Blount, MARTA Vice Chairman. Blount, President of the Decatur Federal Savings and Loan Association adds, "The excitement of a game or opera or play soon gives way to the exasperation of getting home."

Roy A. Blount

"Rapid Transit for Metropolitan Atlanta will not answer all our traffic problems, but will go a long way toward the solution of moving local traffic, allowing expressways to indeed be *express* ways," he continues.

The erection and completion of the system will benefit every Georgian. New industry and distribution facilities will be attracted, when it is found that their employees can get back and forth to work with greater ease and less expense."

Experiences in other areas reveal improvement in property values, upgrading of "business slums," and general improvement of appearance of areas not only adjacent to the lines, but in wide sections of outlying metropolitan areas."

Blount concludes, "Rapid Transit is a MUST for Atlanta, now!"

Gov. Vandiver named the following to the expanded COMMITTEE OF 100: Griffin R. Smith, Cartersville; Julian H. Cox, Athens; Robert C. Norman, Augusta; Anton F. Solms, Jr., Savannah; Judge Harold Ward, Dublin; John Langdale, Valdosta; Howell Hollis, Columbus; Thomas E. Greene, Jr., Macon; James C. Owen, Jr., Griffin; James Dunlap, Gainesville; William Huffman, Rome; J. Ebb Duncan, Carrollton; and Asa D. Kelley, Albany.

350,000 SEE

An estimated 350,000 persons visited the Rapid Transit display in the Metro Atlanta area during October and early November. The New "SCOT"—Steel Car of Tomorrow—drew its biggest crowds while on exhibit at the Southeastern Fair Oct. 1-8. An estimated 250,000 of the total Fair attendance of over 387,000 visited the prototype of the Rapid Transit car.

The exhibit was officially opened by Atlanta Vice Mayor Sam Massell, Jr., with Richard H. Rich, Chairman of the MARTA Board of Directors, cutting the ribbon. R. C. Rhodes, Manager of Sales, represented United States Steel Corporation, developer of the New SCOT.

Among the visitors to the exhibit was Mrs. Muriel Humphrey, wife of Vice President Hubert H. Humphrey. Mrs. Humphrey expressed great interest in the display, remarking that similar vehicles may be in service in Washington in a few years. A $431 million subway program has been approved for the nation's capital.

Vice Mayor Sam Massell, Jr., (L); R. C. Rhodes, United States Steel Corporation, and Richard H. Rich, MARTA Chairman

"SCOT" CAR

Atlanta Mayor Emeritus William B. Hartsfield escorted Mrs. Humphrey to the SCOT car exhibit, where J. J. Lyons, representative of the United States Steel Corporation, explained the concept of the vehicle.

After the Fair closed, the New SCOT was on display for one week each at Rich's downtown, North DeKalb Center, and Cobb Center. The final showing of the prototype of the rapid transit car was at the Georgia Exposition of Commerce and Industry November 1-6 at the Marriott Motor Hotel.

Those viewing the exhibit had many favorable comments and sincere questions; the one recurring question was "When will I be able to ride a car like this in Atlanta?" When the answer of "1972 or 1973" was given, the uniform comment was "I sure wish we had this running in Atlanta NOW!"

The display was a joint project of United States Steel Corporation and the Metropolitan Atlanta Rapid Transit Authority.

Mayor Emeritus William B. Hartsfield (L); Mrs. Muriel Humphrey; and J. J. Lyons, U. S. Steel Corp., Atlanta

STUART REPORTS ON TRANSIT CONVENTION

Henry L. Stuart, MARTA General Manager, attended the Annual Convention of the American Transit Association, which met in San Francisco in October. In addition to attending the sessions of the convention, Stuart also surveyed the progress being made in the billion-dollar San Francisco Bay Area Rapid Transit System, now under construction. He was accompanied by John Coil, resident manager in Atlanta for Parsons-Brinckerhoff Tudor-Bechtel, engineering consultants for MARTA; and by Robert L. Sommerville, President of the Atlanta Transit System.

Stuart reports, "The construction in Oakland is moving in an orderly manner. Subway openings are being constructed, but stations for the subways have not yet begun. The surface and aerial lines in East Bay are also progressing. All of this construction is bigger in sheer size and impact than anything seen in Atlanta, with the possible exception of the downtown connectors."

Robert L. Sommerville (L), John Coil, and Henry Stuart look over subway construction work in San Francisco. Overhead is a gas pipeline which has been re-routed during subway construction.

"The more difficult projects are started first," he notes, "because they take so much longer to complete. The easier projects begin later, so that the several projects are completed at approximately the same time. We expect to follow a similar pattern in Atlanta, beginning construction of the very complex North-South line first, then the shorter and more simple East-West line, and completing both at about the same time.

"San Francisco is working on two major projects which will not have counterparts in Atlanta. These are the twin tubes underneath the Bay, and the tunnel through Mt. Diablo. The Trans-Bay Tubes will be the major engineering marvel of our time when the project is completed. The other projects will be quite similar to the planned system here in Atlanta," Stuart concluded, "and we intend to observe closely the San Francisco system, to benefit from their experience in building a modern Rapid Transit System."

ENGINEERS REPORT PROGRESS

Revision of the 1962 plan for a Rapid Transit System in Metropolitan Atlanta continues to make satisfactory progress, according to John Coil, Resident Manager for Parsons-Brinckerhoff Tudor-Bechtel. Engineers have completed the location of the lines running to the east and to the west from Transit Center, and have completed a detailed study for the line running north from Transit Center to the Pershing Point area.

Alternate routes from Pershing Point to the northeast are being studied. These routes include direct service to the Buckhead area as well as the route shown in the 1962 report along the Southern Railway to Lenox Square and on to the northeast.

Walter S. Douglas, Senior Partner of Parsons-Brinckerhoff-Quade-Douglas (L) and Henry L. Stuart, General Manager MARTA, are brought up to date on engineering changes by Ray O'Neil, deputy Resident Manager, and by John Coil, Resident Manager.

Preliminary engineering on the section between Transit Center and Pershing Point, including studies of the rock formations, utilities, and detailed alignment of the subway north from Transit Center is being prepared.

Development of several alternate routes to provide service to the south of the city represents the major current effort by the engineers. This should be completed in about six weeks.

MARTA ACTION

In the October meeting, the MARTA Board of Directors approved an application for federal funds from the U. S. Department of Housing and Urban Development. The request was for $369,333 under Section 9 of the Urban Mass Transit Act of 1966. The funds would be spent largely for preliminary engineering on the East-West line.

The Board also unanimously passed a resolution endorsing Amendment 14 and urging its approval.

In the November meeting, the Board approved the appointment of a financial advisory group to the Authority. The group is composed of Robinson-Humphrey Company, Inc., and Courts and Company, both of Atlanta; and White, Weld and Company of New York City.

RAPID TRANSIT BRIEFS

FULTON SUPERIOR COURT JUDGE Stonewall Dyer Nov. 2 dismissed a suit seeking to declare Amendment 14 unconstitutional. The suit was brought by Wayne Gossett, a Republican candidate for Cobb County District 33 post in the State Senate. Judge Dyer ruled that there was no legal basis for the suit.

"RAPID TRANSIT PROGRESS" is reaching its readers late in the month this issue. This "Election Issue" was planner to center on the voting on Amendment 14; in this year's election, the Amendments were not completely tabulated until November 23, which delayed publication.

A COLOR SLIDE presentation of Atlanta Rapid Transit is being developed, and is almost completed. In addition to slides on Atlanta's plans, the pictures include work being done in Toronto, Cleveland, and scene from the San Francisco System now under construction. For further information, call MARTA, 524-5711.

SOME VERY PROMINENT Georgians endorsed the passage of Amendment 14; Gov. Carl Sanders, former Gov. Ernest Vandiver, Lt. Gov.-elect George T. Smith, and Highway Director James L. Gillis, Sr., and Congressman James A. Mackay all strongly urged its approval.

RAPID TRANSIT PROGRESS

METROPOLITAN ATLANTA RAPID TRANSIT AUTHORITY

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NOVEMBER 1966 • VOL. 1, NO. 2

RAPID TRANSIT PROGRESS

METROPOLITAN ATLANTA RAPID TRANSIT AUTHORITY

"MARTA REPORTS TO THE PEOPLE IT SERVES . . ."

OCTOBER 1966
VOL. 1, NO. 1

RAPID TRANSIT CAR COMES TO METRO ATLANTA

A scale "walk-in" model of a rapid transit car of the future will be on display in Atlanta during October and early November. The "New SCOT"—"Steel Car of Tomorrow"—developed by U. S. Steel Corporation, will be one of the attractions at the 1966 Southeastern Fair, opening in Atlanta September 29. The "New SCOT" is being scheduled for exhibit in several shopping centers in the Metro Area during the succeeding weeks.

The "New SCOT" is only one of many rapid transit cars and prototypes which will be carefully evaluated by MARTA and its engineers before a specific design is chosen for the local system. The MARTA-sponsored exhibit will provide the first opportunity most Georgians will have to see an example of the equipment which could be used in the system now being developed for the 5-county Metropolitan Atlanta area.

The model car to be seen in Atlanta is a 37-foot shortened version of a proposed 75-foot rapid transit car. The full-length car would seat 300 passengers in air-conditioned comfort, and, if used in the Atlanta system, would transport them at speeds up to 75 miles per hour, with schedule speeds, including stops, of 45 MPH.

The car is built of light-weight "sandwich" panels of steel and stainless steel, developed by U. S. Steel Corporation engineers. Each panel is made up of a steel core, resembling the structure inside an egg crate, sandwiched between sheets of steel bonded to the core with an epoxy adhesive. In the car design, panels are used both for structural side framing and floor support.

The "New SCOT" will be on exhibit in Baltimore, Md., Sept. 28, and will be shipped directly to Atlanta. It is expected to be on display at the Southeastern Fair Oct. 1-8. The display, to be located just inside Gate 2 at the Fair, will be open at all regular Fair Hours. *Admission is free.*

The exhibit is tentatively scheduled for the following locations after the Fair closes: Oct. 10-15, Rich's Downtown; Oct. 17-22, North DeKalb Center; and Oct. 24-29, Greenbriar.

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"DIRECTED BY THE GEORGIA STATE LEGISLATURE TO DEVELOP A RAPID TRANSIT SYSTEM FOR THE 5-COUNTY METROPOLITAN ATLANTA AREA."

Edited by KING ELLIOTT

ATLANTA NEEDS RAPID TRANSIT ... NOW!

"Early completion of the Rapid Transit System is the only hope for relieving the traffic problems which plague Atlanta," according to Richard H. Rich, Chairman of MARTA. Rich pointed out that one of the most important things in the economic development of any area is the ability to move people and things effectively and quickly; and, therefore, the primary purpose of a rapid transit system is to get people to and from their jobs quickly, easily, and comfortably. "Rapid Transit will not solve all of the traffic congestion," Rich emphasized. "but it will go a long way toward the solution."

Richard H. Rich

Rich noted that State Highway Department figures show that, on a 24-hour-a-day basis, the North Freeway between 14th Street and downtown is already operating at 35% above its rated capacity. By 1975, the Highway Department estimates that this same section will have 70% to 88% more people wanting to use it than it is designed for. By 1975 all Atlanta expressways will have more people wanting to use them than the expressways are designed to handle.

"By completing our planned Rapid Transit System, we can remove tens of thousands of commuter cars from the expressways, and make it easier for those who have to drive to reach their destinations; by doing this, not only will Atlanta continue 'on the move', but traffic itself will be able to 'move'," Rich concluded.

MEET THE MARTA STAFF

HENRY L. STUART became General Manager, MARTA, on June 1, 1966. His responsibility is the overall development of the Rapid Transit System, from engineering, to design, through construction, to operation. Stuart, operating under policies established by the 10-member Board of Directors of MARTA, acts as co-ordinator between the Board and the consulting engineering firm planning the system; various federal, state, and local governmental agencies; manufacturers and suppliers of equipment, and citizens interested in rapid transit. Stuart is the chief administrative officer.

Henry L. Stuart

Prior to assuming his post with MARTA, Stuart was Director of Service Control, Southern Railway System, Atlanta.

He is a licensed Interstate Commerce Commission Practitioner, a Certified Member of the American Society of Traffic and Transportation. He is married, with three children, and resides at 3282 David Road in DeKalb County.

KING ELLIOTT assumed his post as Public Information Director, MARTA, on August 22, 1966. He is responsible for the development and implementation of a complete public information and education program. He edits MARTA's "Rapid Transit PROGRESS," and works closely with news and other media. He will also be responsible for developing other means of telling the Rapid Transit story, thru displays, public meetings, speeches, trade shows, etc.

King Elliott

Elliott was News Director, WSB Radio, before assuming his present position. While at WSB, he received numerous station and individual awards for excellence in news programming. He is a member of Sigma Delta Chi, national professional journalism society.

He resides with his wife and four children at 811 Brookridge Dr. N. E., Atlanta.

H. N. "JOHNNY" JOHNSON, secretary to the General Manager, came to MARTA June 13, 1966, from the Lockheed-Georgia Company, where he held a position in the employment office. Johnson handles much of the administrative work of the office, in addition to his other duties.

H. N. Johnson

He was for three years Administrative Assistant to James V. Carmichael, Chairman of the Board, Scripto, Inc.; and for seventeen years was Executive Secretary to the Vice President of the Central of Georgia Railway.

Johnson, who resides at 1004 Williams Mill Rd. N. E., has a son and daughter who attend Decatur High School.

METROPOLITAN ATLANTA RAPID TRANSIT HIGHLIGHTS

"Where We've Been..."

1954—Metropolitan Planning Commission notes need for rapid transit "within a few years"

1959—MPC begins series of transportation policy studies

1960—MPC develops exploratory investigation of rapid transit as possible supplement to freeway network

1961—Expanded 5-county Atlanta Region Metropolitan Planning Commission proposes comprehensive 5-county R-T plan

—Atlanta Transit System (privately-owned bus company) endorses idea of publicly-owned rapid transit system in own preliminary proposal, "Rapid Atlanta"

—Atlanta Chamber of Commerce studies and endorses R-T

1962—General Assembly creates "Metropolitan Atlanta Transit Study Commission"; MATSC lets contract to Parsons, Brinckerhoff, Quade and Douglas to develop final plan; PBQD work, completed December 1962, is approved as "official" plan

—Constitutional amendment to make rapid transit a legitimate public function passes in Fulton and DeKalb counties, but fails statewide

1963—"Committee of 100" is formed, with former Governor Ernest Vandiver as Chairman

—General Assembly creates "Georgia State Study Commission" to study problems from state's viewpoint

1964—Rapid Transit Amendment (affecting only 5 counties in Metro Atlanta area) passes

1965—General Assembly passes "Metropolitan Atlanta Rapid Transit Authority Act of 1965," providing for an Interim Study Commission; six eligible governments hold special election on whether to participate; only Cobb County votes not to take part

"...and Where We Are..."

January 3, 1966—Interim Study Commission becomes "Metropolitan Atlanta Rapid Transit Authority"

—Budget of \$300,000 for 1966 is approved (\$175,000 local funds, \$125,000 federal funds); also, Atlanta Region Metropolitan Planning Commission has \$122,000 federal grant for rapid transit planning

June 1—Henry L. Stuart becomes MARTA General Manager

June 13—H. N. Johnson becomes Secretary to General Manager

June 28—Contract is let to Parsons, Brinckerhoff, Tudor and Bechtel to up-date 1962 plan, and for preliminary planning on North-South line (Oglethorpe to Hapeville)

July—Cobb County Chamber of Commerce appoints special committee to study question of another referendum

August 22—King Elliott becomes Public Information Director

Sept. 13—Otis Brumby, Jr. of Marietta is appointed official "observer" for Cobb County at MARTA meetings

Sept.—Work begins on application for \$500,000 in federal funds for preliminary engineering on East-West line

"...and Where We're Going..."

Nov. 8—Constitutional Amendment to allow state to participate in cost of mass transit to be voted on

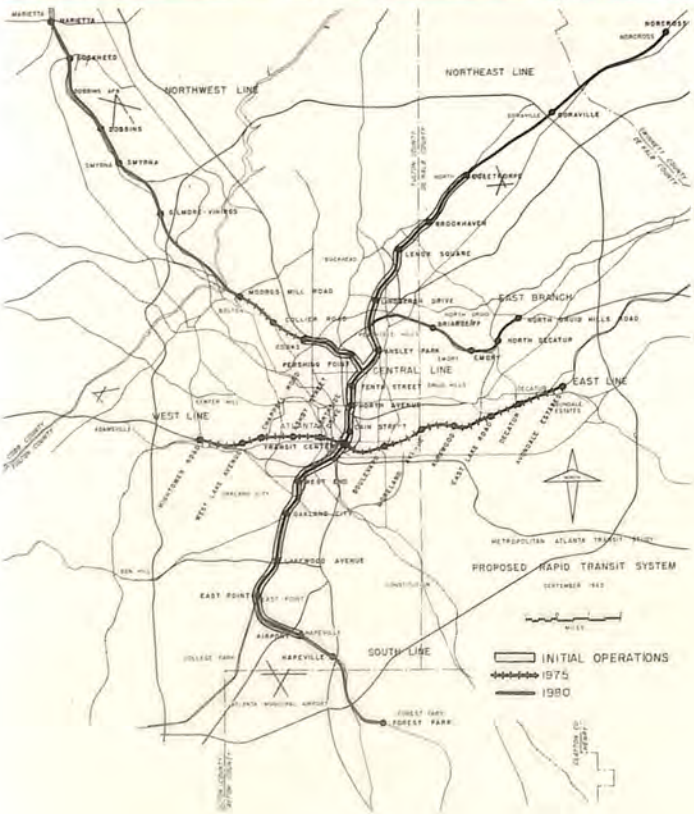
1967—up-dating of 1962 study to be complete

1968—Referendum to finance system to go to voters

1972—North-South Line complete, begins operation

1975—East-West line (Avondale Estates-Adamsville) opens

1980—Entire System complete



HOW FAR HOW FAST?

The map at left shows the proposed routes for the Metropolitan Atlanta Rapid Transit System. The following table shows typical distances and travel times from Stations to Transit Center, which will be located downtown south of Marietta St., between Broad and Peachtree Streets.

Station	*Distance*	*Time*
Norcross	18.2 miles	23 minutes
Doraville	13.6	19
Oglethorpe	10.4	15
Lenox Square	7.1	11
Ansley Park	3.4	6
Tenth Street	2.0	4
Forest Park	12.9	16
Hapeville	9.9	13
East Point	6.4	9
West End	2.2	2
Avondale Estates	7.4	11
Decatur	6.1	9
Moreland Avenue	2.8	4
Hightower Road	4.5	8
Ashby Street	1.6	3
Marietta	18.3	25
Smyrna	12.9	18
Moores Mill Road	7.2	12
Cooks	4.7	8
North Druid Hills Rd.	10.3	15

ENGINEERS REVISE 1962 PLAN

Engineers for Parsons Brinckerhoff-Tudor-Bechtel, MARTA engineering consultants, are in their new offices in Atlanta, revising the 1962 Rapid Transit Plan. The staff of seven is headed by John Coil, Resident Manager; Raymond K. O'Neil, Deputy Resident Manager; and Raymond W. Gustafson, Supervising Engineer. Coil says major emphasis is being given to the railroad "gulch" area, where the Transit Center is to be located. Engineers are also working on confirmation of route locations downtown and in outlying areas. Patronage studies are continuing, along with studies of downtown distribution of passengers. This part of the work is about 20 percent completed.

A library study of soils factors is also underway, and is estimated to be 50 percent completed.

The revision of plans for the North-South line is expected to be completed in June, 1967; and the target date for revision of the East-West line is December, 1967.

Engineer Dave McBrayer (left) discusses changes with John Coil, Ray O'Neil, and Assistant Draftsman Leverne Parks

RAPID TRANSIT BRIEFS

CONSTITUTIONAL AMENDMENT on transportation of passengers goes to Georgia Voters in Nov. 8 General Election. The proposed amendment would declare public transportation of passengers to be "an essential governmental function," and would allow the state to allocate funds to public transportation authorities. The state is limited to "not more than 10 per cent" of the total cost, either directly or indirectly. A simple majority of those voting on the amendment will be required for passage.

COBB COUNTY COMMISSION appointed an official "observer" to attend MARTA meetings and report on its actions. The Commission September 13 named Otis A. Brumby, Jr., Assistant to the Publisher of the Marietta Daily Journal, to the post.

HENRY L. STUART, General Manager of MARTA, has been telling the Rapid Transit story; recent appearances include those to Atlanta Chapter of the Public Relations Society of America; Atlanta Chapter American Right of Way Association; Atlanta Chamber of Commerce Rapid Transit Committee, and Dunwoody Lions' Club. Coming up are speeches to the Atlanta Chapter, Georgia Society of Professional Engineers, and to the Druid Hills Kiwanis Club.

STATE PROPERTIES CONTROL COMMISSION heard from MARTA representatives on August 23 relating to new lease for state-owned Western and Atlantic Railroad properties. SPCC, L. & N. and Southern Railways agreed to work out details in lease which would allow subway, aerial, and station construction in downtown railroad "gulch" area.

"RAPID TRANSIT PROGRESS" is name given to MARTA's newsletter, with this issue being the first one. "RTP" is expected to be published monthly, with King Elliott as editor, and will be sent free to those requesting it.

MARTA ACTION

In the September 6 meeting, the Board of Directors approved the selection of "Arthur Andersen and Company" as auditor for the Authority. Action on appointment of fiscal agent was postponed until the October meeting.

RAPID TRANSIT
PROGRESS
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RAPID TRANSIT PROGRESS

METROPOLITAN ATLANTA RAPID TRANSIT AUTHORITY

"MARTA REPORTS TO THE PEOPLE IT SERVES . . ."

FEBRUARY, 1967
VOL. 2, NO. 2

HOUSE APPROVES FIRST STATE MONEY FOR MARTA

The first state financial aid for rapid transit was approved by the House of Representatives Monday, Feb. 20, as the House passed and sent to the Senate the Appropriations bill for 1968-69. The Appropriations Bill allocates to MARTA $250,000 during each year of the biennium (Fiscal 1968, 69), or a total of $500,000. The state grant, when finally approved, will be used as "matching funds" for $2 million in federal funds. The two grants will enable MARTA to begin some detail design and acquisition of some right-of-way necessary to preserve the route alignments.

The state funds were included in the budget prepared by then-Governor Carl Sanders, and in the official budget submitted by Gov. Lester Maddox. A Constitutional amendment approved in the 1968 General Election allows the state to pay up to "10 percent of the total cost" of the rapid transit system.

The House Appropriations Committee, with Rep. James H. "Sloppy" Floyd as chairman, conducted hearings for three weeks on the budget requests, with MARTA representatives appearing Feb. 8. Representing the Metropolitan Atlanta Rapid Transit Authority were Henry L. Stuart, General Manager; John Coil, Resident Manager, Parsons Brinckerhoff-Tudor-Bechtel; Stell Huie, MARTA Counsel; Glenn Bennett, Secretary of the MARTA Board and Executive Director, Atlanta Region Metropolitan Planning Commission; and King Elliott, MARTA Public Information Director.

Stuart discussed the creation of MARTA, the early and current work done on rapid transit, and the revision of the 1962 plan which is now under way. Stuart noted that local financial support has been excellent, and that all requests made for federal funds thus far have been approved. "Through 1967 we will have spent or committed $1.5 million to the project," he added, "and with federal funds committed, state aid for the first time, and the federal funds we anticipate getting, the total funded project will be about $5 million." "This will bring us right up to the detail design stage, and to a time of decision on the proper methods of financing the construction of the system," Stuart said.

John Coil, PBTB, outlined current work under way in preliminary engineering, soil-tests, revision of the 1962 plan, and in other areas of work.

Following the presentations of Stuart and Coil, members of the committee asked a number of questions; the more pertinent questions and the MARTA answers are found on page 2 and 3.

Rep. James H. "Sloppy" Floyd, Chairman, presides over meeting of House Appropriations Committee (center back), with Vice Chairman Colquitt H. Odom at his left, and Secretary William J. Wiggins; man in foreground is Rep. Jones Lane, a member of the committee. Legislators listen carefully as answers are given to questions put to those appearing before the House Appropriations Committee.

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"DIRECTED BY THE GEORGIA STATE LEGISLATURE TO DEVELOP A RAPID TRANSIT SYSTEM FOR THE 5-COUNTY METROPOLITAN ATLANTA AREA."

Edited by KING ELLIOTT

"RAPID TRANSIT MUST HAVE TOP PRIORITY!"

"The development of a rapid transit system is an absolute 'must,' and it must have a top priority if we are to solve, effectively and permanently, our transportation problems," said Mitchell C. Bishop, College Park businessman and Fulton County member of the MARTA Board. Bishop, a former Director of the Division of Traffic and Safety of the State Highway Department, stated that "while we have made valiant efforts to solve our traffic problems, so far we have only been nibbling at the edges and making piecemeal attacks on our dilemma!"

Mitchell C. Bishop

"Looking at the situation from an engineering standpoint," he continued, "a completed and operating rapid transit system is the framework around which we can build all other solutions to the problem of efficient and safe transportation inside this great Metropolitan Atlanta area. With rapid transit transporting 250,000 to 300,000 persons, mostly commuters, every working day, our streets, highways, and expressways will be able to accommodate vehicular traffic and to move that traffic more efficiently."

"Another interesting effect rapid transit will have and indeed is already having," said Bishop, "is a unifying effect on all the people of the state. All across the state people now refer to Atlanta as the home of '*our* Braves' and '*our* Falcons'; and they take great pride in the fact that these teams belong to all Georgians. In a similar way, rapid transit will serve not only the people in its immediate area, but will benefit all Georgia because of the improvement in ease of transportation and speed and economy of travel into and out of our capital city."

"I believe rapid transit will have a tremendous effect on all of Georgia as well as this area," Bishop concluded.

IRT CONVENTION PLANS

Plans for the upcoming Atlanta Convention of the Institute for Rapid Transit are beginning to take shape. The convention, to be held at the Atlanta Marriott Motor Hotel May 24-26, will feature full audience participation in special study sessions, according to George L. DeMent, President of IRT.

"We are planning another stimulating program that should be of great interest not only to IRT members, but also to many other persons concerned with metropolitan transportation and planning problems of our growing cities and urban areas," said DeMent, who is Chairman of Chicago Transit Board.

George L. DeMent

David Q. Gaul

"In addition to our IRT members, we wish to extend an early invitation to all persons working in the related fields of metropolitan planning, transportation, and government to join us in Atlanta for three days of challenging workshop-study sessions," said DeMent.

"Nationally prominent experts in the urban transportation field will present case studies which workshop participants will analyze. The findings by the participants then will be reviewed in critiques."

David Q. Gaul, Executive Secretary of the IRT, says that "plans for the system proposed for Metropolitan Atlanta will also be discussed at the convention, which will highlight the tremendous resurgence of interest in and development of rapid transit in this country and Canada."

LEGISLATORS'

(Members of the House Appropriations Committee had a number of questions for MARTA representatives on how State aid would be used; the following are typical questions and answers from the meeting.)

JAMES H. "SLOPPY" FLOYD, Chairman, House Appropriations Committee: *What do you estimate the total cost of the rapid transit system?*

HENRY L. STUART, MARTA General Manager: The rapid transit system that we envision to be operational in the middle of the 1980's will cost in the neighborhood of 450 million dollars. By the middle of 1970's we will have an operational system incomplete, and it will have cost approximately 350 million dollars. As Mr. Coil mentioned, these estimates are now in preparation in this order of magnitude.

FLOYD: *Let me ask you this. Do the citizens in this area have to vote on some bonds?*

STUART: If a tax levy is required that will raise the property taxes, referenda must be held.

FLOYD: *What if the citizens of this area defeat the bond? How will the State get their money back?*

STUART: Such of the money as has been spent for design purposes will not be recoverable; such of it as is in real estate will be recoverable depending upon the value of the property.

FLOYD: *What rate of interest do you think you will have to pay on 450 million?*

STUART: Our financial advisors are basing their plans on 4 and

SNOW JAMS TRAFFIC—RAPID TRANSIT RUNS

On January 26 and 27, more than 23 inches of snow fell in Chicago, clogging the streets and freeways with stalled vehicles. Estimates vary, but the consensus is that more than 15,000 cars and trucks and 600 busses were stuck. While the street traffic was stalled, the rapid transit lines and commuter railroads kept running. "From all reports, the only reliable way of getting around the city was the elevated-subway system," Associated Press reported.

An editorial in "RAILWAY AGE" noted, "When nothing else could move in Chicago, the railroads and the Chicago Transit Authority rapid-transit lines moved. If ever there was evidence of rail-transit's ability to combat overwhelming obstacles, if ever there was proof of the railroads' ability to do the job and damn the odds, Chicago was it. . . . All the CTA rapid-transit lines did was to provide in-city residents with dependable transportation while the freeways froze and hundreds of busses and thousands of cars wallowed around and foundered. . . . To thousands upon thousands of grateful people, it was enough."

Snowfalls in the Metropolitan Atlanta area are usually no more than two or three inches, but street traffic usually becomes virtually impossible. The advent of rapid transit will make travel possible even in ice and snow conditions.

QUESTIONS AND MARTA'S ANSWERS...

a quarter percent.

FLOYD: *Over a period of how many years?*

STUART: 30 Years tax free municipals.

FLOYD: *So after paying principal and interest you would pay about 900 million dollars?*

STUART: Yes sir, based on a $450 million bond issue.

FLOYD: *Now who is going to actually own this rapid transit system?*

STUART: The MARTA Act of 1965 provides that the title to the real estate and the rolling stock is vested in the Transit Authority which is an arm of the State.

FLOYD: *There's a rumor going around that when this thing is built the bus line might end up owning all this. Is that true?*

STUART: I cannot see that at all. There is no provision in the Act for that and there is no plan for it.

WILSON B. WILKES, State Budget Officer: *I just wanted to ask Mr. Stuart about $250,000 each year that you requested or that's been recommended for mass rapid transit. Do you plan to use this and go ahead and start buying right of way?*

STUART: Certain necessary right of way that is necessary to protect our alignments.

WILKES: *The building of a transit system itself is going to require additional tax levy, and that additional tax levy is going to require a bond election?*

STUART: Yes sir.

WILKES: *So actually you will acquire property before you do the other.*

STUART: Yes sir.

RODNEY M. COOK, Member, House Appropriations Committee: *Will you explain to the Committee why you feel it is necessary to purchase some of these parcels of land now?*

STUART: Yes, for example in Sunday's paper there was an announcement that the International Brotherhood of Electrical Workers have put together a parcel of land near the stadium for a new office building. This office building is squarely astride a piece of property we were studying as a possible route to the South and is going to cause us untold expense to re-engineer that South route. We must have a way to stop this, and the best way is to put up or shut up.

COOK: *Is not also one of the reasons you had to re-engineer because of the Life of Georgia was built on one of your routes?*

STUART: Yes, the Life of Georgia Building at North Avenue and West Peachtree is an example of the same thing again.

(In answer to a question from a reporter later, Stuart amplified his comments on the total cost figure of "$900 million including principal and interest" as used during the committee hearing.)

STUART: One possibility on financing breaks down this way: if we get the maximum federal funds of 60%, and the maximum state funds of 10%, this is 70% of the total construction cost. This would leave 30%, or only about $110 million on which interest might be paid. These proportions are possible under existing state and federal legislation.

Members of the legislative delegations from MARTA counties breakfast with members of the MARTA Board of Directors and staff at Marriott Jan. 24. Some 17 members of the House and 7 members of the Senate heard MARTA officials discuss plans and progress in the development of the rapid transit system proposed for Metropolitan Atlanta. In the picture, Henry L. Stuart, MARTA General Manager, is responding to a question from a legislator. Board Chairman Richard H. Rich presided at the breakfast meeting.

Henry L. Stuart, MARTA General Manager (left), and Congressman Fletcher Thompson, U. S. Representative from Georgia's Fifth District, discuss some of the proposed rapid transit lines currently under study by engineering consultants. Rep. Thompson, visiting in MARTA offices Feb. 10, said that the U. S. agencies in Washington he has talked to appear to have a high regard for the work being done by the Metropolitan Atlanta Rapid Transit Authority.

MARTA ACTION: At the February meeting, the Board of Directors ratified the contracts signed by Henry L. Stuart Feb. 2; one contract defined the scope of the work to be done with the $369,333 grant from the U.S. Department of Housing and Urban Development; the other contract authorized PBTB engineers to start the work immediately.

Jeff Wingfield, Planning Director, Atlanta Region Metropolitan Planning Commission, outlined the need for strong overall plans for downtown Atlanta, and the part rapid transit could play in implementing such a plan.

Collier B. Gladin, City of Atlanta Planning Director, discussed progress in the Community Improvement Plan project and work being done to set up a Model Cities Program. Referring to the impact rapid transit will have, he urged continued close coordination of plans and efforts to achieve orderly development of the great potential of Atlanta.

The next meeting of the MARTA Board of Directors will be Tuesday, March 7, 3:30 p.m., in Conference Room 619, the Glenn Building, 120 Marietta St., N. W.

RAPID TRANSIT PROGRESS

METROPOLITAN ATLANTA RAPID TRANSIT AUTHORITY

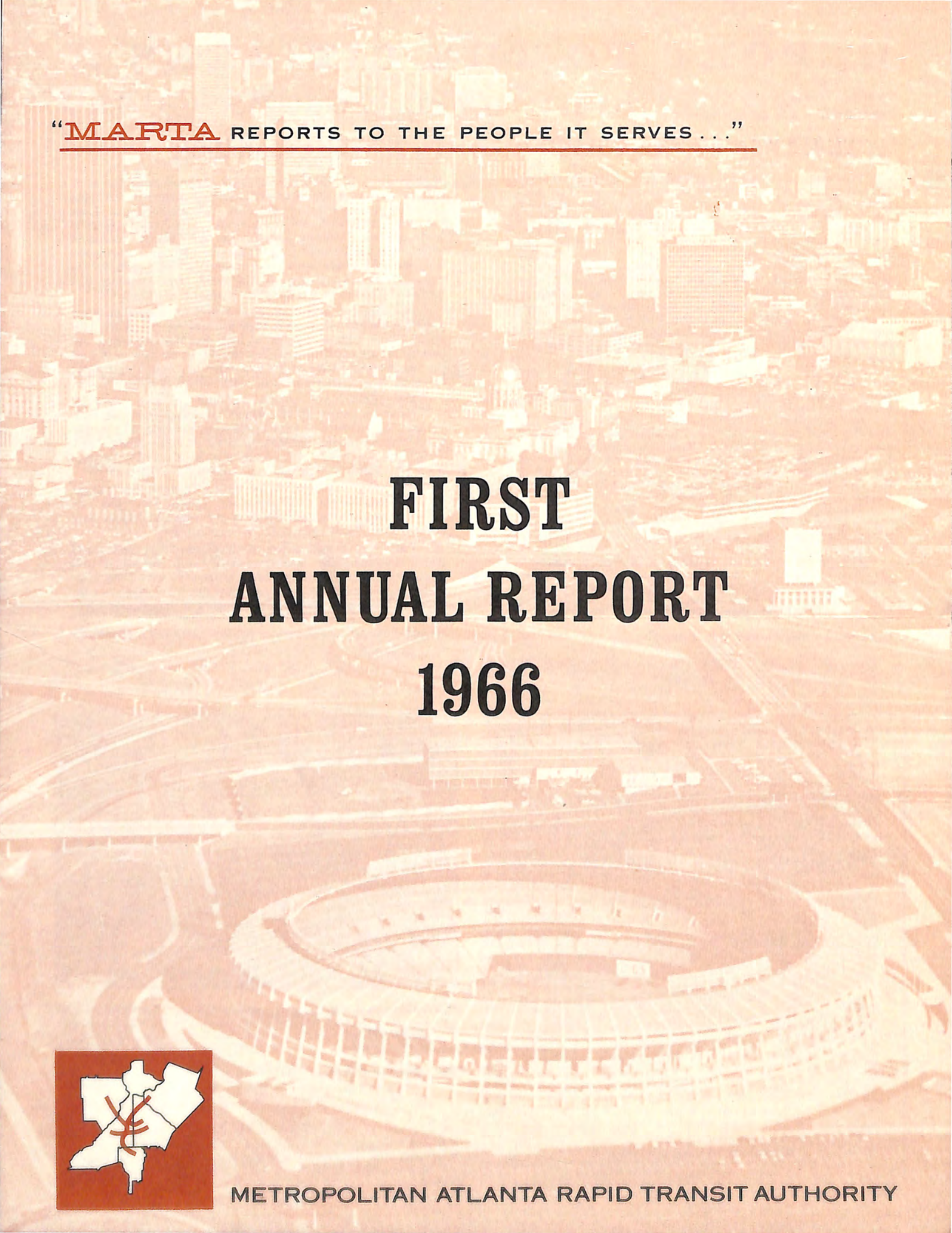
808 GLENN BLDG. · 120 MARIETTA ST., N.W. · ATLANTA, GEORGIA 30303
PHONE 524-5711 (AREA CODE 404)

FEBRUARY, 1967—VOL. 2, NO. 2

ATLANTA, GA FEDERAL ANNEX
MAR OPM

UNITED STATES WASHINGTON 5c

Hon. Ivan Allen, Jr., Mayor
City of Atlanta
City Hall
Atlanta, Ga. 30303



"MARTA REPORTS TO THE PEOPLE IT SERVES . . ."

FIRST ANNUAL REPORT 1966

METROPOLITAN ATLANTA RAPID TRANSIT AUTHORITY

REPORT TO THE CITIZENS...

From The...
CHAIRMAN OF THE BOARD

The progress made in the first year of our Authority has exceeded our most optimistic expectations. The successes achieved and the public and private acceptance of the rapid transit project have been most encouraging.

One of the first tasks facing the Authority when it officially came into being January 3, 1966 was that of obtaining funds to begin the revision of the 1962 plan for rapid transit and the preliminary engineering on the system itself. The $300,000 financial support pledged by the participating governments provided funds to set up offices and matching funds for application for federal funds. Applications were made to and granted by the U. S. Department of Housing and Urban Development for funds to finance two programs. These funds were immediately put to work, and the work is under way.

Later in the year another application was made under the "Section 9" provision of the Mass Transportation Act, and this also was approved, providing us with $369,000 to expand and continue the work being done.

In December, then-Governor Carl Sanders announced that the State budget would contain a request for $500,000 over two years for MARTA. This was made possible by a constitutional amendment which was approved by 55 per cent of the voters in the State in November, and is the first financial support from the State in the rapid transit project.

The nucleus of the MARTA staff was formed with the appointment of Henry L. Stuart as General Manager. Mr. Stuart has begun the work of securing qualified persons to fill key positions.

The acceptance of the project by Federal, State, and Local Governments, and by the people of the State At Large, and in the Metropolitan Atlanta Area, has been most gratifying and inspires us to increase our efforts in 1967 for even greater strides toward our ultimate goal of providing our citizens the most modern, efficient, and economical rapid transit system possible.

RICHARD H. RICH,
Chairman

From The...
GENERAL MANAGER

On June 28, 1966 we signed a contract with the consulting engineers, Parsons Brinckerhoff-Tudor-Bechtel for preliminary engineering work on the North-South Line between Oglethorpe and the airport. The Atlanta Region Metropolitan Planning Commission also signed contracts with Parsons Brinckerhoff-Tudor-Bechtel and Hammer, Greene, Siler Associates to update the 1962 plan in its entirety. This committed to the work approximately 310 thousand dollars of which $62,500 was local funds.

The financial report on page 3 and the charts on page 4 indicate the income and expenditures of the Authority during 1966. These figures include the non-recurring expenditures required to establish the offices for the staff, and the funds committed but not expended as "matching funds" for programs financed in part with federal funds.

The preliminary engineering and updated planning will result in definition of routes, operating expenses, fare structures, and service requirements in the light of changes that have occurred in Metropolitan Atlanta since 1962. This work will place your Authority in a position to proceed with detail design and right of way acquisition.

In the closing days of the 89th Congress the passage of the Urban Mass Transportation Act of 1966 was one of the most encouraging events of the year. It means that our work will continue without interruption.

This very complex job of developing the best rapid transit system in the world requires careful planning and engineering, which, in the early stages, is very time consuming. Work is moving ahead as rapidly as possible, considering the requirements for attention to detail and high-quality planning and engineering, and the year 1967 should see some major achievements in the engineering efforts.

HENRY L. STUART,
General Manager

METROPOLITAN ATLANTA RAPID TRANSIT AUTHORITY

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"DIRECTED BY THE GEORGIA STATE LEGISLATURE TO DEVELOP A RAPID TRANSIT SYSTEM FOR THE 5-COUNTY METROPOLITAN ATLANTA AREA."

Edited by KING ELLIOTT

Richard H. Rich, Chairman (right-center, with pipe) presides over meetings of the MARTA Board of Directors. The Board meetings are held the first Tuesday of each month, and are open to the public.

The Second International Conference on Urban Transportation will be held in Pittsburgh, Pa., April 17-19, 1967. Theme for the Conference will be "The Urban Push: Cities in Motion."

"If an urban rapid transit system never earned an operating profit, it would still pay for itself a thousand times over through its beneficial impact on real estate values and increased assessment." *G. Warren Heenan, Past President of the Toronto (Ontario) Real Estate Board.*

STATEMENT OF

CASH RECEIPTS AND DISBURSEMENTS

FOR THE YEAR ENDED DECEMBER 31, 1966

Cash Receipts From:	
Local Governments	$290,895.00
Other	429.48
TOTAL	$291,324.48
Cash Disbursements For:	
Planning and Engineering (Note 1)	72,848.09
Administrative & General	96,072.07
Unexpended Funds	$122,404.32
TOTAL	$291,324.48

ARTHUR ANDERSEN & CO.
ATLANTA, GEORGIA

To the Board of Directors of
Metropolitan Atlanta Rapid
Transit Authority:

We have examined the statement of cash receipts and disbursements of the Metropolitan Atlanta Rapid Transit Authority (a Georgia municipal corporation) for the year ended December 31, 1966. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying statement presents fairly the cash receipts and disbursements of the Metropolitan Atlanta Rapid Transit Authority for the year ended December 31, 1966.

Arthur Andersen & Co.

Atlanta, Georgia,
January 12, 1967.

1. The Authority has a contract with the Atlanta Region Metropolitan Planning Commission to update the 1962 plan and program of rapid transit for the Atlanta metropolitan region. The Authority is committed to pay $61,188 for this work of which $31,250 has been paid as of December 31, 1966. The remainder of the funds required by the Planning Commission for this project (approximately $122,000) will be provided by the United States Government under Section 701 of the Housing Act of 1954. The Commission also has (1) a contract with Parsons Brinckerhoff-Tudor-Bechtel to provide the engineering services required to update the 1962 plan, and (2) a contract with Hammer, Greene, Siler Associates, Inc. to update the financial and organization considerations of the 1962 plan.

   The Authority has a contract with the same engineers to provide extended work and engineering support in addition to that provided under the Commission contract. The engineers are to be paid cost plus a fee for each project under the contract (total cost not to exceed $100,000).

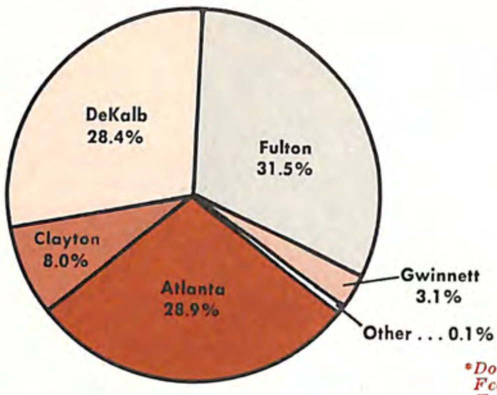
2. The Authority has a commitment from the Department of Housing and Urban Development of the United States Government to advance $125,000 to it to be used for preliminary planning and engineering for the construction of the initial operations of the rapid transit system. The advance is noninterest bearing and repayable only upon the start of construction of the system. The Authority has entered into a contract with Parsons Brinckerhoff-Tudor-Bechtel to perform this work.

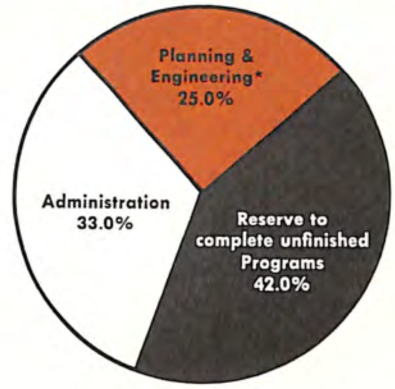
Drawings of rapid transit cars now in use or on order by existing rapid transit systems. MARTA engineers will examine all types of rapid transit cars before final design is determined.

WHERE THE MONEY

CAME FROM — AND WENT

IN 1966

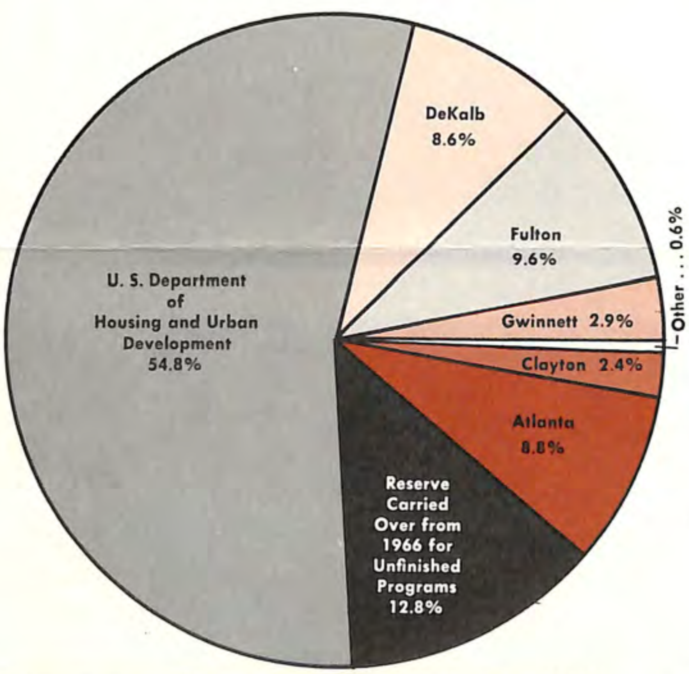




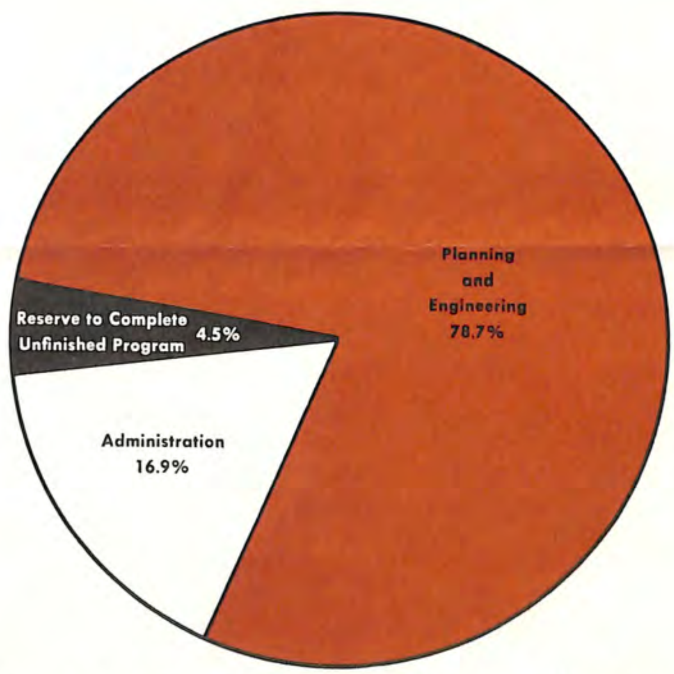
**Does not include Federal Funds for ARMPC's Transit Project*

And in 1967 We Should See . . .

INCOME



EXPENDITURES



BAY AREA RAPID TRANSIT

as seen by:

Sprague Thresher, Staff Architect,
Parsons Brinckerhoff-Tudor-Bechtel.

"The reason for building the system itself gives rise to a comprehensive set of environmental design requirements that need most serious consideration. Though the system is a utility, in the sense that it is a useful necessity, it isn't like water, or light or heat, or even telephones, in that everybody needs some for his own use. It's equally a necessity to those who don't use it. Those, for instance, who drive on less crowded roads and find parking spots easier as a result of it. So that there is no one who is not affected by the existence of the system, whether he rides on it or just looks at it, or never even heard of it—if that's possible . . . If there can be more to it than just fast, safe transportation and if it can contribute to the life and the growth of the community and if it can enrich the rider a little bit, then truly it will be a design for people and this is really what is happening."

7/10

RAPID TRANSIT PROGRESS

METROPOLITAN ATLANTA RAPID TRANSIT AUTHORITY

"MARTA REPORTS TO THE PEOPLE IT SERVES . . ." APRIL 1967 VOL. II, NO. 4

A TALE OF TWO CITIES:

MONTREAL

MARTA General Manager Henry L. Stuart recently visited Montreal; the following story summarizes his comments and observations.

The happy citizens of Canada's largest city boast a brand new subway that they describe as a work of art. After a close inspection one is inclined to agree. Lines began to open last October, and April, 1967, saw the end of the first phase, although extensions are already actively discussed. Are they happy with it? 350,000 riders a day stick their 25¢ magnetic ticket in an automatic turnstile at one of 26 stations to go for a ride on some part of the sixteen mile system. Considering Montreal's 2.3 million population they are heavy users. They are proud of their new subway, too.

Sleek, blue, 9-car trains, set off with a white stripe and picture windows, run swiftly and quietly (up to 50 miles per hour) between bright, airy and colorful stations. They are rubber tired trains, propelled by electricity, running on concrete ribbons. The result is a quiet, smooth ride, with a high rate of acceleration that gets the train up to cruising speed very quickly.

The fourteen station architects went all out to get away from dungeon-like atmosphere of conventional subways. Plenty of indirect lighting, mezzanines overlooking the tracks, and the artful use of color and ceramics did the trick!

Montreal got its subway by simple determination. They made up their minds that rapid transit in subway was the answer to their problem, and then the Montrealers proceeded to act on their convictions. In this way rapid transit came to reality in Montreal in the incredibly short span of less than five years. There had been talk for 50 years, but Jean Drapeau, in his mayoralty campaign of 1960 offered to put a stop to the talk. He told the voters that if they

(Continued on Page 2)

Montrealers make heavy use of their new subway. This picture, taken at JEAN TALON shows passengers crossing the platform from train to exit. Bi-lingual signs are universal in Montreal.

SAN FRANCISCO

MARTA Public Information Director King Elliott visited San Francisco recently, and reports on progress being made by the Bay Area Rapid Transit District.

"In two-and-a-half years, we will be riding on the world's most modern rapid transit system, right here in the Bay Area." This prediction is made confidently by B. R. Stokes, General Manager of the Bay Area Rapid Transit District (San Francisco, Alameda (Oakland), and Contra Costa Counties).

Stokes says that nearly half of the 75-mile, $1 billion, system is already under construction. Construction Contracts totalling $330 million have been awarded, and work is under way on 38-route-miles of the system. Included in these figures are 5 miles of subway, twin tunnels thru the Berkeley Hills, and the Trans-Bay Tube, "the engineering marvel of the century."

An additional $150-200 million in contracts is expected to be let by the end of this year.

Two construction projects are complete: the 4¼ mile Diablo Test Track and a 1-mile aerial section in Albany.

In many parts of the Bay Area, construction projects are under way, and the beginnings of rapid transit are being observed daily by local residents and commuters.

In several sections of downtown San Francisco, crews are at work relocating the underground utility lines and equipment. In most of these areas, one lane of the street is closed to traffic, but other lanes are still in use. Work continues on the building of the 57 tube sections which will be required for the 4½ mile tube underneath the Bay between San Francisco and Oakland. The steel shells are built at the Bethlehem Ship Yard, and are floated to a nearby pier for outfitting. The first of the sections are in place in the mud at the bottom of the Bay, and the schedule calls for another section to be completed every two weeks.

(Continued on Page 3)

Temporary decking over subway construction.

MONTREAL...

(Continued from Page 1, Column 1)

would vote for him he would build them a fine new subway. They did, and he did.

Mayor Drapeau junked 50-year-old plans and turned to the Paris Metro for the basic engineering and design criteria. Indeed, officials from the Paris Metro came to Montreal to guide the work. In 1961 the City Council authorized the first of $213 million of general revenue bonds, and Mayor Drapeau told his Montreal Public Works Department to get busy.

Digging began in 1962 and the Montrealers rode to town in 1966! They blasted 70 percent of the tunnels out of solid rock, and after being lined with concrete it was 23 feet wide and 16 feet high. Their tunnels range from 20 feet deep to 90 feet deep in the earth. Hundreds of speedy escalators solve the problems of getting out of the stations. MARTA General Manager, Hank Stuart, who attended a Rail Committee Meeting of the American Transit Association in Montreal recently reported, "The speed of the engineering and construction of this system is more than remarkable, but it fades into the background when you open your eyes and take in the beauty of a system that was clearly designed to give its customers a treat. I am impressed. It looks good, it runs smoothly, and it's there."

An up-to-date signal and power distribution system provide a safe, dependable operation which is a must for modern, high speed and safe transportation. Two men operate each train riding on opposite ends, taking turns running the equipment.

A total of 369 of the rubber-tired rapid transit cars have been purchased at an average cost of $123,000. The Metro operates 9-car trains at all times, with 2½ minute headways during rush hours, and 5 minute headways at other times. The maximum capacity of each line in each direction past a given point is estimated at 57,600 passengers per hour. This is based on 160 passengers per car and nine-car trains at the rate of 40 trains per hour.

Line No. 1, running 4.3 miles east and west, and Line No. 2, running 8.6 miles north and south, were opened for passengers October 14, 1966. On the first week-end of service, over one and one-half million passengers rode the system. Line No. 4 connects with Expo 67, the 1967 World Exhibition commemorating Canada's centennial as an independent nation. Plans for the missing Line No. 3 have been suspended indefinitely.

Did the Montrealers appreciate what was done for them? They re-elected Mayor Drapeau by a whopping majority, and gave his party 45 of the 48 seats on the city governing body.

The example of Metro Station architecture at Sherbrooke illustrates the beautiful use of light and ceramics to provide a feeling of spacious cheerfulness. (This picture was taken before passengers were being accepted).

The Mezzanine concourse at JARRY is another example of how light and spaciousness get one away from the old-fashioned "gopher-hole" subway station.

This view of CREMAZIE looking down from an open mezzanine conveys the feeling of free and uncramped movement.

Tunnels on the Metro are lighted all the way for safety and comfort. Note the signal (upper right) that provides the train operator with indications about the track ahead.

SAN FRANCISCO...

Subway construction in Oakland; steel form for subway shell in place on right.

Almost-completed construction on transition section of subway; construction goes from cut-and-cover subway to ground level track.

Completed section of aerial structure, with landscaped "linear park" beneath.

(Continued from Page 1, Column 2)

The major part of the construction work actually underway now is across the Bay in the Oakland Area. In addition to the Test Track and the completed aerial section in Albany, other projects are in varying stages of completion in downtown Oakland. One section of the cut-and-cover subway is virtually completed, with only the rails and other equipment to be installed. Excavation work is in progress in several of the streets, including Broadway, one of the principal downtown thoroughfares. In order to maintain as efficient a flow of traffic as possible, the tunnels are "boarded over" and traffic is permitted above while work continues below. All stages of this type of construction are visible now. The utilities are first dug up and relocated; the ditching is accomplished and the vertical beams and retaining walls are installed. Horizontal beams are then put into place; wooden decking (boards about 12 by 6 inches bolted together and laid edgewise) is installed; and traffic is restored.

Farther out, construction has begun on sections of the Grove-Shafter Freeway, with the BART lines running down the median. Much of the area has been cleared, and bridges have been started. BART officials point out that considerable savings will be made by both the Highway Department and BART because of the economic advantages of joint planning and development of the freeway-rapid transit complex. Some 15 miles of the BART lines will occupy joint right of way with the freeway.

In other areas, crews "holed thru" the second of the Berkeley Hills Tunnels; various test procedures are in progress at the test track; and landscaping of aerial structure continues.

The 75 mile system is being financed with proceeds from a $792 million bond issue and $180 million in state funds from Bridge tolls. BART is now seeking ways of meeting a $200 million "over-run", which resulted from excessive inflation, construction delays because of litigation, and changes in original proposals. BART officials are confident that the necessary funds will be secured, and that trains will run as scheduled in late 1969.

INSTITUTE FOR RAPID TRANSIT CONVENTION
May 24-26, 1967—Atlanta Marriott Motor Hotel
AMERICAN TRANSIT ASSOCIATION CONVENTION
Oct. 22-26, 1967, Atlanta Regency-Hyatt House

Full-scale mock-up of car to be used in BART system.

COUNTIES HONOR MARTA

The Metropolitan Atlanta Rapid Transit Authority has received the "Meritorious Award" of the Association County Commissioners of Georgia for its multiple county service to Clayton, DeKalb, Fulton, and Gwinnett Counties and to the City of Atlanta.

Richard H. Rich, MARTA Chairman, accepted the award at the Annual meeting of the ACCG at Jekyll Island April 4.

ACCG President Dr. Bruce Schaefer presents award to MARTA Chairman Richard H. Rich.

In accepting the award, Rich outlined the progress which has been made through the cooperative efforts of the five governments in establishing the Authority, securing a basic staff, and beginning preliminary engineering on the system. He described the rapid transit project as one in which "four counties and a city, each with varying and extensive needs and problems of its own, have united their efforts and resources to solve a problem common to them all ... that of providing rapid and comfortable transportation for their citizens."

Rich noted that the State of Georgia has now joined into partnership with the four counties and the city by appropriating $500,000 for MARTA, and concluded, "With the continued support of our counties, I am thoroughly convinced that we not only CAN, but WILL, complete this absolutely and vitally needed rapid transit system."

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Edited by KING ELLIOTT

MARTA ACTION

At the April 4 meeting, the Board of Directors of the Metropolitan Atlanta Rapid Transit Authority instructed the General Manager to explore the possibility of extending the West Line to serve the new "Six Flags Over Georgia" amusement park, and to report his findings at the May Board meeting.

The observation was made that similar study should be given to possible future service to the Stone Mountain Memorial Park.

Chairman Richard H. Rich reported on the presentation of The Meritorious Award of the Association County Commissioners of Georgia; the ACCG presented the award to MARTA for its multiple county service to the four counties and city composing the Authority.

The next meeting of the Board of Directors is to be held Tuesday, May 2, 1967, at 3:30 p.m. in Room 619, the Glenn Building, 120 Marietta, St. N. W.

RAPID TRANSIT PROGRESS

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APRIL 1967, VOL. II, NO. 4

Mr. R. Earl Landers
Admin. Asst. to the Mayor
206 City Hall
Atlanta, Ga. 30303

RAPID TRANSIT PROGRESS

METROPOLITAN ATLANTA RAPID TRANSIT AUTHORITY

"MARTA REPORTS TO THE PEOPLE IT SERVES . . ."

AUGUST 1967
VOL. 2, No. 8

MARTA DIGS FIRST "HOLE-IN-THE-GROUND"

Rapid Transit's first "hole in the ground" was dug in a parking lot at Broad Street-Trinity Avenue in downtown Atlanta Friday morning, August 4, 1967. The hole was the first of a series of 35 test holes drilled to secure rock and soil samples.

The borings are part of the preliminary engineering now being conducted by the Metropolitan Atlanta Rapid Transit Authority through its consulting engineers.

Henry L. Stuart, MARTA General Manager, explained, "This hole drilled today marks the first time MARTA has initiated its own research into the basic characteristics of the ground in which we will put our subway. Soil tests are a very basic part of the preliminary engineering required before any detailed design is possible. After all, you can't design the foundation 'til you know what's down there to put it on."

"Another very important decision to be made," Stuart continued, "is how deep to put the subway under Peachtree Street: that is, very deep in a tunnel, or shallow in a trench, which would involve relocation of utilities and digging up Peachtree Street. These soil tests will provide much of the information we will need to make this decision."

"Of course, the hole we are really looking forward to drilling is the one that marks the start of construction," Stuart concluded.

Some 16 of these test borings have since been made on the Central Line of Rapid Transit along Broad, Peachtree, and West Peachtree Streets; this 5½ mile section of rapid transit will be subway the entire distance. The holes ranged in depth from 35 to 105 feet.

The soil tests were made by Law Engineering Testing Company of Atlanta, under contract with Parsons Brinckerhoff-Tudor-Bechtel, engineering consultants for MARTA. Analysis of the soil and rock samples is underway at this time.

MARTA General Manager Henry L. Stuart (with glasses) watches closely as drill brings up soil from first test hole.

Samples of soil are carefully put into glass jars which are then labeled and taken to laboratory for study.

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Edited by King Elliott

RICH URGES CUTS RESTORED

MARTA Chairman, Richard H. Rich, has formally urged the restoration of cuts made in the U.S. House of Representatives in the budget request of the Department of Housing and Urban Development. Rich made his request in a statement to Senator Warren G. Magnuson, Chairman, Senate Appropriations Subcommittee on Independent Offices, July 27, 1967.

Rich referred to the Metropolitan Development Incentive Grants under Section 205 of Title II of the Demonstration Cities and Metropolitan Development Act of 1966, and to appropriations for the urban transportation programs, and continued, "I am urging you to approve the full HUD requests and to restore cuts made in the House of Representatives. We support strongly the $30 million requested by HUD for the Metropolitan Development Incentive Grants and the $230 million advance funding requested by HUD for the transportation program."

We are certainly ready to take advantage of Section 205 of the Metropolitan Development Act of 1966," he said. "Funding of the Metropolitan Development Act incentive program can do much to encourage our local governments when it comes to implementing area-wide comprehensive planning for transportation, water pollution control, open space land for recreation, and the other public programs having regional significance."

Rich outlined progress made in the development of rapid transit plans here with the use of local, state and federal funds. "It is therefore clear that the availability of federal funds for transit in the last three years has made it financially feasible for public officials in urban areas to consider and develop the much needed balanced systems of transportation. Without sufficient assurance that the required level of aid will be made available at the correct time, it will be extremely difficult for us to implement our plans in the time we have," he said.

"I therefore strongly request that your Subcommittee recommend the restoration of the full $230 million sought in the HUD budget request," Rich concluded.

MARTA REVIEWS "BUSWAYS IDEA"--

COSTS, TIME EXCEED ESTIMATES.

The Board of Directors of the Metropolitan Atlanta Rapid Transit Authority recommended that no attempt be made to implement the "Rapid Busways" proposal made recently by the Atlanta Transit System.

Richard H. Rich, MARTA Chairman, stated, "The proposal has been given serious and objective consideration and study over a period of approximately five weeks. Contact was made with Atlanta Transit System personnel and additional material was obtained from them."

"Based on MARTA's study and review of the "Rapid Busways" proposal, MARTA concludes that implementation of the busways proposal as it now stands is not practicable," Rich said.

The report contains three basic conclusions:

1. The costs to develop the busways were seriously underestimated. MARTA estimates that the costs would be about $150 million, rather than the $52 million estimated in the Busways report.

2. Time schedules for construction were also seriously underestimated. No busway could be made operational in less than 3½ years, the same time required for the East Line of Rapid Transit. Preparation of the rights of way for either rails or paving is essentially the same. The interim between completion of busways and completion of rail rapid transit would range from a minimum of one year to a maximum of three years.

3. The amount of busways coinciding with MARTA routes is no more than 50 per cent, and quite likely as little as one third, and would require considerable expenditures which would never be recovered by MARTA.

MARTA made two récommendations in the report which was sent to Mayor Allen:

1. Because of the high cost for very short term relief, implementation of the "Rapid Busways" proposal should not be attempted; and

2. If the public interest demands an experimental development of busways, any experimental busway should be built along MARTA's East-West Line.

Rich commented, "The MARTA Board instructed the staff and consulting engineers to take the "Rapid Busways" proposal and to find out if it would work, and how to implement it if at all possible. Their findings as to cost and construction time required indicate that developing the "Rapid Busways" system is simply not feasible. While $150 million is indeed much less than the cost of Rapid Transit, busways would not do the job of relieving traffic as will be required for a permanent, long-range solution for a city of 2 million people."

"Although there is a great differential in costs," Rich concluded, "it would be much more wasteful to spend $150 million for an inadequate interim system than to spend $350 million for permanent and efficient relief."

Robert L. Sommerville, President of the Atlanta Transit System, described the MARTA review as a "perfunctory brush-off" and indicated that he would continue to urge acceptance of the idea.

The MARTA review notes that the "Rapid Busways" proposal does not take into proper account the costs involved in right of way acquisition and relocation of railroad tracks, utilities, and households. Whereas the Atlanta Transit System figures are by admission estimates, MARTA engineering consultants (Parsons Brinckerhoff-Tudor-Bechtel) have been working some 14 months developing accurate statistics on which to base cost projections. Thus much of the information required in the review of the busways proposal was already on hand when the proposal was first made. PBTB has been checking and testing these figures against other information and informs MARTA that the figures given to and used by MARTA reflect the most accurate

(Continued on Page 3, Col. 1)

Southern Railway line looking south toward Ponce de Leon Avenue bridge at Sears. The many side tracks and spurs must be kept in service; this creates a problem for either busways or rapid transit, the solution of which is complex, costly, and time-consuming.

(Continued from Page 2)

information available. These figures, while available, were not sought or used by the ATS in development of the busways proposal.

The acquisition of right of way and its preparation for either rails or paving of busways is an expensive process, accounting for about 70 per cent of the expenditures. The West Line has perhaps 400 individual households and small businesses which must be purchased, and the occupants relocated to new and suitable quarters. This is a matter of lengthy negotiation, and would be true for busways as well as for rapid transit.

The railroads usually occupy the center of their right of way; this means some tracks will have to be moved to one side to make room on the other for transit right of way.

Buried public utilities are virtually everywhere. They must be relocated (and kept in service while being moved), so that they can be maintained later without disrupting the transitway. These costs for right of way, track and utility relocation have been inadequately evaluated in the busways proposal, and account for much of the spread between the $8½ million ATS estimate and the $40 million MARTA estimate for the proposed 12 mile west to northeast test leg.

Since the width of a busway is about the same as for rail rapid transit, the same amount of money and time is required to survey, appraise, acquire, clear or relocate, drain, bring to grade, and provide structures for installation of either rails or paving.

Other questions which would have to be resolved relate to the legality of MARTA entering into such a development. The MARTA Act establishes the Authority to develop a "rapid transit system." The "system" is later defined as using vehicles "traveling on rights of way fully protected from other vehicular and pedestrian traffic." Under the "Rapid Busways" proposal, buses would travel at times on regular city streets with other vehicular and pedestrian traffic. Also, the vehicles would be owned and the system operated by a private company rather than by MARTA.

A further question is raised as to whether the building of roads for exclusive use of privately owned buses would comply with the law. "Busways" proposes the building of roads with public funds for the exclusive use of a private enterprise corporation. No reference is made in the "Rapid Busways" proposal to indicate intent on the part of the Atlanta Transit System to lease or to operate under franchise the roadways to be constructed, or in any way to share in the costs of development of the busways.

(Continued in Col. 2)

LANDSCAPING AND RAPID TRANSIT

The recently created five-man Advisory Committee will provide professional advice to the MARTA Board of Directors in a number of fields involved in the development of rapid transit. H. Boyer Marx, who represents landscape architects on the Advisory Committee, explains the function of his profession in the overall evolvement of rapid transit.

The interest of the Landscape Architectural profession and responsibility to MARTA rests in the harmonious use of space, the impact, and aesthetics in a proposed rapid transit system.

The impact of clearing the necessary wide right-of-way may be positive or negative, depending upon the degree of coordination of the technical people involved. The profession is interested in seeing that the grading within and along the entire planned system is carried out with restraint, and with as much freedom from bulldozer destruction as possible, consistent with sound engineering requirements. Nature is the best architect, and as much of the native growth should be retained as possible. Areas free from natural growth should be supplemented.

H. Boyer Marx

To the Landscape Architect the riders' view from the trains, even though rapid in movement, becomes extremely important. A restful setting, stimulating yet relaxing landscape vistas, with disciplined hedges, tree groupings and grass lined avenues, bringing incomparable naturalistic landscape within the sight of the trackage and the traveler, is our prime concern. From without we want to see the severity of the concrete structures softened by groupings of flowering trees and low maintenance plant material.

The Landscape Architect is vitally concerned with variations in design and plantings of the pedestrian plazas at the various stations to provide smooth traffic flow yet produce a pleasing setting for Architectural structures. We desire to see entrance plantings dignified but inviting with achievement of symmetry by the correct use of plant material that will not outgrow its allotted space.

It is the unique contribution of the profession in advancing the techniques of accommodating the MARTA structures to the sites and the development of the site to its maximum benefits and usefulness to all groups.

H. Boyer Marx, owner of H. Boyer Marx & Associates, Atlanta, is a graduate of Michigan State University with a B.S. Degree in Landscape Architecture. His experience includes Directorship of City Planning and Landscape Design, U.S. Housing Authority; Directorship of Landscape and Site Planning, Region 4, Southeast U.S., Federal Public Housing Authority. He is a member of American Society of Landscape Architects, American Horticultural Society, American Planning and Civic Association, and Southeastern Chapter, ASLA.

(Continued from Col. 1)

MARTA attorneys advise that the above and other questions would have to be resolved legislatively or judicially before MARTA could participate in the activities proposed in "Rapid Busways."

There is another serious question: whether Federal Aid could be used to build such private roads, even if it should be determined that MARTA's legislation would allow the Authority to participate.

Copies of MARTA's review of the "Rapid Busways" proposal are available at the MARTA offices.

MARTAnswers

MARTA is called on to answer many and varied questions about rapid transit and the plans for this area. The more pertinent questions will appear from time to time in RAPID TRANSIT PROGRESS under this heading, answered by MARTA General Manager Henry L. Stuart.

QUESTION: THERE ARE MANY UNUSED OR LITTLE-USED TRACKS INTO AND OUT OF ATLANTA IN ALL DIRECTIONS – WHY DOESN'T MARTA JUST RUN RAPID TRANSIT TRAINS ON EXISTING RAILROAD TRACKS?

ANSWER: Very early in the study of rapid transit for the Atlanta region the possibility of using diesel electric commuter cars on existing tracks was very carefully considered. The proposal was not accepted for a number of reasons.

Rapid transit, to be successful, must move large numbers of people rapidly and comfortably at frequent intervals. The Atlanta system will use trains traveling at maximum speeds of 70 miles per hour, with an average speed of 40 m.p.h., including station stops, operating at intervals as often as every 90 seconds. Railroad operation conditions in the city require speeds as low as 15 miles per hour in many places. This would slow rapid transit trains to the point where they would be no more rapid than the expressway.

Also, it would be necessary to operate rapid transit vehicles on the same tracks with freight trains, passenger trains, and switch engines. This would invariably cause delays to the railroad operation and to the rapid transit operation, neither of which would be tolerable. In the same connection, the problem of maintaining a safe operation would be exceedingly difficult.

Another very difficult problem in using existing railroad tracks is that there would be no way to provide any service to Peachtree Street between Brookwood Station and the Five Points area. A similar gap exists on the West Line from Chappell Road to downtown.

MARTA's position is that such a service using old cars on old tracks to inconvenient or inaccessible stations would not be practical.

EDITOR'S NOTE: Henry L. Stuart, MARTA General Manager, was, prior to assuming his present position, Director of Service Control, Southern Railway System, Atlanta, and was responsible for developing and implementing effective operational control plans for the entire Southern system, and is very familiar with the operational procedures and problems.

If you have a question about MARTA or rapid transit, address it to MARTAnswers, 808 Glenn Building, Atlanta, Ga. 30303.

RAPID TRANSIT BRIEFS

SEATTLE officials expect a final report from transit consultants (De Leuw, Cather & Co.) by October, outlining just what the city's rapid transit plan should be. Indications are that it will be a network of 50 or 60 miles in length, costing about $750 million. If it is approved by civic officials, a referendum on a bond issue will probably be set for January or February, 1968.

SAN FRANCISCO Bay Area Rapid Transit construction is booming the economy. During June, 2,245 construction workers received $3,000,000 in wages from the 28 general contractors and the 71 sub-contractors who are building individual segments of the 75-mile rail rapid transit system and its facilities.

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT officials report that over $133 million in matching federal funds for 73 mass transit programs were distributed during fiscal year 1967. A similar amount is available during the current fiscal year. The House of Representatives has approved $175 million for fiscal year 1969.

OHIO Governor James A. Rhodes has established a statewide transportation committee to study mass transportation problems in his state. One of the main jobs of the committee will be to meet with regional counterparts to coordinate local programs. There are 15 comprehensive transportation studies underway at the present in Ohio.

MARTA ACTION

At the regular meeting of the Board of Directors on August 1, General Manager Henry L. Stuart reported that Cousins Properties would have additional expenses because of rapid transit requirements in the "City Center" project under development in the railroad gulch at Spring and Hunter Streets, and that these additional costs should eventually be borne by MARTA. The Board instructed Stuart to continue negotiations with Cousins Properties to reach agreement on exact costs which would be eventually chargeable to MARTA when funds were available.

The Board approved a sub-contract between consultants Parsons Brinckerhoff-Tudor-Bechtel and Law Engineering Testing Company for a series of test borings for soil samples. (See separate story, page 1.)

The Board approved the MARTA review of the "Rapid Busways" proposal, and instructed that copies be sent to the Mayor and other officials. (See separate story, page2.)

The next meeting of the MARTA Board of Directors will be Tuesday, September 5, 1967, 3:30 p.m., Room 619, Glenn Building, 120 Marietta St., N.W.

RAPID TRANSIT PROGRESS

METROPOLITAN ATLANTA RAPID TRANSIT AUTHORITY

808 GLENN BLDG. · 120 MARIETTA ST., N.W. · ATLANTA, GEORGIA 30303
PHONE 524-5711 (AREA CODE 404)

AUGUST 1967, VOL. 2, No. 8

Mr. R. Earl Landers
Admin. Asst. to the Mayor
206 City Hall
Atlanta, Ga. 30303

I gather from discussions that people like Senator Ben Johnson, Mr. Harold Sheats, and Mr. George Dillard have a great fear that we will end up paying extremely large attorneys' fees for condemnations in the future.

If you should have copies of their legislation, I would appreciate receiving copies so that I could review it to see exactly what changes they are proposing.

C.L.D.

CLD:dhf
Enclosures

Work Document: NOT FOR RELEASE · 7/19/67

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FINANCING ATLANTA'S RAPID

TRANSIT SYSTEM

This memorandum will summarize the most important figures on the financial implications for the local governments of the projected Metropolitan Atlanta rapid transit system. It is concerned with the potential impact on the governments of financing the capital costs of the system, no part of which will be amortized from the fare box.

It is assumed that the method to be used in channeling local funds into the system will be contracts between the local governments and the Metropolitan Atlanta Rapid Transit Authority (MARTA). Under this method, each participating government would contract to assume its share of the annual costs of amortizing bonds issued by MARTA, including both principal and interest payments and extending over the entire life of the outstanding bonds so issued.

The Georgia law establishing MARTA and the transit system also provided another method of which the participating local governments might handle their respective shares of the costs -- namely, issuance of their own general obligation bonds in behalf of MARTA. However, it is generally assumed that this method would not be used because of the pressing need for this bonding capacity for other capital needs of the local governments.

On the basis of detailed considerations of the potential impact of the system on economy, land use patterns and circulation systems of the local jurisdictions, a proposed formula has been devised for allocating the local share of MARTA's capital costs among the five participating governments. This formula uses weighted indexes of population, property tax digests (adjusted to a true basis) and employment for both 1965 and 1985. Following is the allocation of costs that the formula produces:

City of Atlanta	56.6%
Fulton County	12.0
DeKalb County	22.1
Clayton County	5.9
Gwinnett County	3.4
	100.0%

The allocations for Fulton and DeKalb counties, of course, are for only those areas of the counties outside the City of Atlanta.

As noted later, it is not proposed that Clayton and Gwinnett counties would be brought into participation in any system that would not reach out into and serve their geographical area. The allocation of costs among the three central jurisdictions in this eventuality would be as follows:

City of Atlanta	62.4%
Fulton County	13.2
DeKalb County	24.4
	100.0%

Present timing calls for submittal of the proposed financial plan for approval of the participating areas in 1968, with capital expenditures to get underway as soon after approval as possible. In these calculations, calendar years are used and 1969 is shown as the first year for drawing down capital funds for land purchase and construction. Federal funds estimated to be available in a fiscal year are shown on a calendar year basis -- for example, funds to be made available on or after July 1, 1968 for fiscal year 1969 are shown for calendar year 1969.

Federal and State Funds

The most critical variable in these estimates is the potential availability of Federal funds. It is not possible to predict with any accuracy how much Federal money might be made available. Not only is there the practical difficulty of looking beyond a current two-year Congressional appropriation, but there are also the serious uncertainties resulting from the Viet Nam and other international situations. Theoretically the Federal government could over time assume as much as two-thirds of the capital cost of the rapid transit system over and above what the system can produce from its own revenues for this purpose. However, it would not be realistic to take this as the basic assumption. In this memorandum, conservative and reasonable premises are taken with respect to Federal fund availability.

Another variable is the availability of funds from the State of Georgia. The recent constitutional amendment enables the state government to assume not to exceed 10 percent of the system's cost. The actual availability of this money for this purpose, however, will depend upon legislative appropriations. In this memorandum, it is assumed that the state's 10 percent share would be forthcoming. For purposes of these estimates the state money is distributed uniformly on an annual basis over the length of the construction period.

The Basic 30-Mile System

The basic assumption to start off with is that a 30-mile system would be built extending between Brookhaven on the north, Decatur on the east, the Tri-Cities on the south, and Lynhurst Drive on the west, with possible additional spurs to the northeast into DeKalb County and to the northwest to Northside Drive. This system would cost $332,000,000 to build ($326,000,000 for construction and right-of-way, plus $6,000,000 pre-operating expenses) and construction would take nine years (1969-1977).

It is regarded as fairly certain that MARTA in 1968 could get an immediate commitment for $50,000,000 for this basic system from the Federal government. This would represent $25,000,000 a year for each of two fiscal years (1968-1969 and 1969-1970). Prospects are good that Congress will make available for rapid transit at least $200,000,000 for each of those years and under the 12 1/2 percent-per-state formula Georgia's share would produce these local amounts.

It is also not unreasonable, on a most conservative basis, that another $50,000,000 would subsequently be made available from the same sourse, regardless of assumptions regarding Viet Nam. No one knows for sure but two observations might be valid: 1) if Viet Nam clears up, this assumption will undoubtedly be conservative; and 2) if things get worse and no additional Federal money is made available after 1970, then the MARTA system can be cut back but still be operational within the same local appropriation (as described later).

The $100,000,000 assumption of Federal funds is therefore taken at the outset, with the following distribution of MARTA capital fund sources:

	Amount (000,000)	Percent
Local	$199	59.9%
State	33	10.0
Federal	100	30.1
	$332	100.0%

The schedule at the top of the next page shows how this basic 30-mile system might be financed over the nine-year period.

Table 1. POTENTIAL SOURCES OF CAPITAL FUNDS FOR THE 30-MILE RAPID TRANSIT SYSTEM (000,000)

	Drawdown (cumul.)	Availability of Funds				
		Federal	State	Local 1/	Total	Cumulative
1969	$ 25	$ 25	$ 4	$ 25	$ 54	$ 54
1970	54	25	4		29	83
1971	[illegible]	25	4	35	64	147
1972	158	25	4		29	176
1973	207		4	50	54	230
1974	258		4		4	234
1975	298		4	50	54	288
1976	320		4	30	34	322
1977	332		1	9	10	332
		$100	$33	$199	$332	

1/ MARTA revenue bonds supported by local government contracts

As noted in Table 1, this financing schedule calls for six revenue bond issues by MARTA. This is only a tentative listing of the dates and amounts of issues, but it indicates the timing of needs in general accordance with the drawdown schedule (governing fund availability for land purchase and construction) established by the engineers. Actually, it calls for the availability of funds somewhat in advance of needs as shown by the engineers. This is to level out and space out the MARTA bond issued for marketing purposes. The drawdown schedule itself is tentative, of course, and can be revised to accommodate advance purchases of land.

It is preliminarily assumed that each of the MARTA bond issues (guaranteed by pledges from the local governments) would run for 30 years at 4 1/2 percent interest. The annual cost of servicing these bonds (principal and interest) is shown in Table 2 on the following page.

Table 2. ANNUAL CARRYING CHARGES OF MARTA REVENUE BONDS, 30-MILE SYSTEM (000)

	MARTA Bond Issues			Annual
	Principal	Interest	Total	Cost 1/
1969	$ 25,000	$ 20,605	$ 45,605	$ 1,825
1970				1,825
1971	35,000	28,847	63,847	4,380
1972				4,380
1973	50,000	41,210	91,210	8,030
1974				7,725
1975	50,000	41,210	91,210	11,375
1976	30,000	24,726	54,726	13,138
1977	9,000	7,418	16,418	13,795
1978				13,185
1979				13,185
1980				12,575
1981				12,209
1982				12,099
1983 et seq				12,099
	$199,000	$164,016	$363,016	

1/ Amortization (principal and interest) charges of all outstanding MARTA revenue bonds to be assumed by local governments under contract with MARTA.

It is noted in Table 2 that the annual cost of servicing these bonds drops off after 1977 (the date of the last issue) and declines to a level amount in 1982. This is because a 20 percent sinking fund reserve is provided for over the first five years of each issue, and at the end of five years each issue then carries a level payment to maturity. In effect, six years of payments are made in the first five years of each issue, and the amortization period is actually 20 instead of 30 years. The level cost of $12,099,000 would continue through 1997 at which time it would drop as the 1969 issue would have been paid off, and so on until all issues are amortized.

Why

Why

Impact on Governments. It is assumed that all of the local cost of this basic 30-mile system would initially be assumed by the three central governments -- Atlanta, Fulton and DeKalb -- inasmuch as the system would not reach out into Clayton or Gwinnett. Later, however, if and when the system is extended, the outlying counties would pick up their pro rata shares of this basic cost. For purposes of this calculation -- and the approach to the governments and the people of the three counties -- the full impact of this basic system upon only the three governments is assumed, however.

Using the formula set forth earlier, the respective governmental shares of the annual costs of this basic 30-mile system are shown in Table 3, below. This is not the recommended funding schedule, however. Later it is recommended that substantially higher payments be made by the governments to MARTA in the early years in order to reduce the peak loads in later years.

Table 3. LOCAL GOVERNMENT "SHARES" OF MARTA BOND CARRYING CHARGES, 30-MILE SYSTEM (000)

	Atlanta	Fulton	DeKalb	Total
1969	$1,139	$ 241	$ 445	$ 1,825
1970	1,139	241	445	1,825
1971	2,733	578	1,069	4,380
1972	2,733	578	1,069	4,380
1973	5,011	1,060	1,959	8,030
1974	4,820	1,020	1,885	7,725
1975	7,098	1,502	2,776	11,375
1976	8,198	1,734	3,206	13,138
1977	8,608	1,821	3,366	13,295
1978	8,227	1,740	3,217	13,185
1979	8,227	1,740	3,217	13,185
1980	7,847	1,653	3,068	12,575
1981	7,618	1,612	2,979	12,209
1982	7,550	1,597	2,952	12,099
1983 et seq	7,550	1,597	2,952	12,099

It is recommended that the flow of funds to MARTA be increased ahead of actual need in the early years to put in effect some ceiling in the later years when the annual requirements are so much higher. This would involve, of course, a provision in the agreements between MARTA and the local governments making it possible for the governments to make such advance payments to be subsequently applied against MARTA's revenue bonds as they are issued. It is assumed that appropriate legal steps could be taken to make this possible (including the establishment of special trust accounts in which the advance payments could be placed).

A realistic procedure might be to schedule payments so that the tax burden in no local government would ever exceed the equivalent of 3 mills against the net property tax digest for the 30-mile system. Inasmuch as Atlanta would carry the main burden, this in effect would mean a schedule in which the Atlanta impact would be held within a 3-mill ceiling with the other two governments carrying lower proportional ceilings.

The schedule of recommended payments that would operate with these ceilings is shown below in Table 4. The millage rate equivalents are shown and discussed later.

Table 4. RECOMMENDED PAYMENT SCHEDULE TO MARTA, 30-MILE SYSTEM (000)

	Atlanta	Fulton	DeKalb	Total
1969	$2,828	$ 598	$1,106	$ 4,532
1970	2,962	626	1,158	4,746
1971	4,659	986	1,822	7,467
1972	4,884	1,033	1,910	7,827
1973	5,121	1,083	2,004	8,208
1974	5,373	1,137	2,101	8,611
1975	5,643	1,194	2,206	9,043
1976	5,922	1,253	2,314	9,489
1977	6,222	1,316	2,434	9,972
1978	6,537	1,383	2,556	10,476
1979	6,873	1,454	2,686	11,013
1980	7,221	1,527	2,823	11,571
1981	7,596	1,607	2,979	12,174
1982	7,983	1,689	3,122	12,792
1983	8,400	1,777	3,284	13,461
1984	7,825	1,655	3,060	12,540
1985	7,550	1,597	2,952	12,099
et seq				

As noted, the required payments drop off substantially after 1983 and from 1985 on they run at a steady rate of $12,099,000 until bond retirement dates. In the earlier years, the governments pay in more than MARTA currently needs (through 1974). Between 1975 and 1983, they pay in less but the advance payment reserve covers the carrying charges above the current flow.

The full payment schedule to the year 2005 is given in Appendix Table B.

A great deal of research has been done (with the cooperation of the local finance officers) to set these MARTA requirements within the framework of overall future financial needs and resources of the local governments. This research documented what was already known -- that each of the local governments faces financial difficulties in the future. Both capital and operating needs are steadily mounting in the face of limitations of funds from existing sources. The seriousness of the situation was highlighted by careful forecasts that were made of future expenditure levels in each jurisdiction (tied into official forecasts of population and employment) and of future revenues from existing sources (also tied into official forecasts and additional estimates of factors such as the tax digest affecting fund availability).

Detailed research was also undertaken to anticipate the potential revenues that might be obtained from new sources. Many new sources were studied and the research effort was tied into similar explorations undertaken by other groups (such as the Georgia Municipal Association). Two sources were singled out for particular study -- a local option income tax and a local option payroll tax -- both of which are being currently employed in cities and urban areas throughout the country.

Three tables -- 5-A, 5-B and 5-C -- summarize key figures from this analysis for the City of Atlanta, Fulton County and DeKalb County, respectively. These tables are presented in sequence following this page.

City-Co or marta

In these tables, estimates are presented of the current operating funds required by each government for the future years of 1970, 1976 and 1983. These estimates do not include self-supporting services but do include debt service charges on general obligation bonds. The tables also present estimates of projected operating revenues of these governments for the same years from existing sources, including revenue from debt service taxes. In every case, substantial "deficits" are indicated -- potential deficits, that is, unless additional revenue sources are made available. The tables also show estimates of the potential yields of a sales tax in each of the years. The MARTA requirements (taken from Table 4, earlier) are then shown for comparison.

Lots

It is important to note that only one-half of the projected yield of the 1 percent sales tax is shown for general government operations in these tables. It is assumed that the other one-half would be made available to the schools under existing proposals.

The property tax situation should be particularly noted. If the recent court decisions hold up that would require all property to be assessed at 40 percent of tru value, some changes in tax rates will be necessary simply to produce the same yields as would be produced under existing ratios and rates.

County only

Table 5-A. FORECASTS OF CURRENT FUND REQUIREMENTS AND POTENTIAL FUND AVAILABILITY, ATLANTA
(000)

Needs further definition

	1970	1976	1983
Fund requirements (excluding MARTA)	$48,905	$71,056	$100,896
Available funds, existing sourses:			
Property tax (40% valuation and adjusted millage) 1/	19,267	26,097	37,557
Non-property taxes	23,390	31,682	45,594
	$42,657	$57,779	$ 83,151
Projected operating "deficits"	$ 6,248	$13,277	$ 17,745
Plus MARTA 2/	2,962	5,922	8,400
Total "deficits"	$ 9,210	$19,199	$ 26,145
Additional fund sources:			
Sales tax 3/	$ 9,377	$11,544	$ 14,001
Property tax	-	7,655	12,144
	$ 9,377	$19,199	$ 26,145
Millage rate needs:			
To offset change in assessment ratio 4/	-.4	-.1	+.2
For MARTA	(2.0) 5/	3.0	3.0
For other purposes 6/		1.0	1.1
Total		3.9	4.3

1/ Assuming millage rates that would produce the same yield at 40% assessment ratio as present rates produce at present assessment ratio (see 5 below)
2/ Recommended level for 30-mile system (see Table , earlier)
3/ One-half of projected yield of one percent tax
4/ Change required in existing millage to get some yield at new 40% assessment ratio
5/ A pledge for bond purposes only
6/ To produce property tax additions shown above (in addition to MARTA)

Table 5-B. FORECASTS OF CURRENT FUND REQUIREMENTS AND POTENTIAL FUND AVAILABILITY, FULTON COUNTY
(000)

	1970	1976	1983
Fund requirements (excluding MARTA)	$45,044	$68,333	$100,883
Availabile funds, existing sources:			
Property tax (40% valuation and adjusted millage) 1/	$29,730	$41,682	$ 62,727
Non-property taxes	8,592	12,046	18,128
	$38,322	$53,728	$ 80,855
Projected operating "deficits"	$ 6,722	$14,605	$ 20,028
Additional fund sources:			
Sales tax 2/	$ 3,074	$ 4,321	$ 5,834
Property tax	3,648	10,284	14,194
	$ 6,722	$14,605	$ 20,028
Millage rate needs:			
To offset change in assessment ratio 3/	-4.8	-4.5	-4.3
For other purposes 4/	+2.0	+4.1	+3.8
Net change	-2.8	- .4	- .5
MARTA requirements	$ 626	$ 1,253	$ 1,777
Millage rate needed 5/	1.3	1.7	1.5

1/ In effect, the same as a projection based on existing valuation ratios and existing millages
2/ One-half of projected yield of one percent tax
3/ The change from the existing millage rate to produce the funds shown in the second line, above, at the adjusted 40 percent assessment ratios
4/ To produce the additional property tax funds shown above as needed
5/ Outside the City of Atlanta only

Table 5-C. FORECASTS OF CURRENT FUND REQUIREMENTS AND POTENTIAL FUND AVAILABILITY, DEKALB COUNTY
(000)

	1970	1976	1983
Fund requirements (excluding MARTA)	$26,252	$41,275	$62,941
Available funds, existing sources:			
Property tax (40% valuation and adjusted millage) 1/	$16,427	$25,266	$42,121
Non-property taxes	6,177	9,500	15,837
	$22,604	$34,766	$57,958
Projected operating "deficits"	$ 3,648	$ 6,509	$ 4,983
Additional fund sources:			
Sales tax 2/	$ 2,610	$ 3,704	$ 4,991
Property tax	1,038	2,805	-
	$ 3,648	$ 6,509	$ 4,991
Millage rate needs:			
To offset change in assessment ratio 3/	+4.7	+4.4	+4.2
For other purposes 4/	+1.3	+2.3	
Net change	+6.0	+6.7	+4.2
MARTA requirements	$ 1,158	$ 2,314	$ 3,284
Millage rate needed 5/	1.9	2.3	1.8

1/ In effect, the same as a projection based on existing valuation ratios and existing millages
2/ One-half of projected yield of one percent tax
3/ The change from the existing millage rate to produce the funds shown in the second line, above, at the adjusted 40 percent assessment ratios
4/ To produce the additional property tax funds shown above as needed
5/ Outside the City of Atlanta only

Property Tax Support

The question arises as to whether or not the entire local government commitment to MARTA might not be handled by new millage levies on property. The bond people say that pledges of millage backing will be necessary anyway in order to make the MARTA bonds saleable, even if the actual funds to MARTA came from other sources or out of each local government's general fund. Moreover, studies indicate that Metropolitan Atlanta's property tax burden is not high compared with other areas. In 1964-65, Metropolitan Atlanta's per capita property tax burden was one of the lowest in the nation. In that year Atlanta ranked 33rd out of the 38 largest metropolitan areas in per capita revenue to local governments from property sources. The median per capita load of all the areas was 36 percent greater than Atlanta's. (A comparison of the importance of the property tax in the 38 metropolitan areas is shown in Appendix Table A.)

In any event, the basic 30-mile rapid transit system in Metropolitan Atlanta could be financed locally entirely by property taxes at a tax rate that would not exceed 3.0 mills ($3 per thousand of assessed value) in Atlanta, 2.8 mills in DeKalb and 1.9 mills in Fulton. These millage ceilings could be stayed within if some advance payments are made to MARTA from the governments, as mentioned earlier. It is assumed here that the local cost would be $199,000,000 plus interest, as set forth earlier, with what might be conservatively regarded as a minimum assumption with respect to the availability of Federal funds.

The millage rates that would be required to produce the necessary MARTA support for the 30-mile system is shown for each government in Table 6 at the top of the following page. These rates are based on the recommended schedule of governmental payments to MARTA given earlier in Table 4, which calls for some advance payments at a beginning 2-mill rate in Atlanta and DeKalb and a beginning 1.3-mill rate in Fulton.

Table 6. MILLAGE RATES AND RESIDENTIAL CHARGES FOR FINANCING 30-MILE SYSTEM BY PROPERTY TAX

	Millage Rate			Cost on $20,000 Residence		
	Atlanta	Fulton	DeKalb	Atlanta	Fulton	DeKalb
1969	2.0	1.3	2.0	$12.00	$ 7.80	$12.00
1970	2.0	1.2	1.9	12.00	7.20	11.40
1971	3.0	1.9	2.8	15.00	9.00	13.80
1972	3.0	1.8	2.7	15.00	9.00	13.20
1973	3.0	1.8	2.6	18.00	10.80	15.60
1974	3.0	1.8	2.5	18.00	10.80	15.00
1975	3.0	1.8	2.4	18.00	10.80	14.40
1976	3.0	1.7	2.3	18.00	10.20	13.80
1977	3.0	1.7	2.2	18.00	10.20	13.20
1978	3.0	1.7	2.2	18.00	10.20	13.20
1979	3.0	1.6	2.1	18.00	9.60	12.60
1980	3.0	1.6	2.0	18.00	9.60	12.00
1981	3.0	1.5	2.0	18.00	9.00	12.00
1982	3.0	1.5	1.9	18.00	9.00	11.40
1983 et seq	3.0	1.5	1.8	18.00	9.00	10.80

As noted in Table 4 earlier, the actual requirements drop off after 1983 to follow a level course to the bond retirement dates. The millage rate requirements, of course, could be adjusted downward as the tax digests continue to go up MARTA requirements remain steady.

It should also be noted that the millages would have to go considerably beyond the ceilings showed in Table 6 if the heavier earlier payments to MARTA are not made. If the governments simply pay into MARTA what is actually needed to amortize the bonds in the early years, Atlanta's millage rate would go above four in the later years and the rates of the other two governments would be proportionately higher also.

<u>Curtailment of Federal Funds</u>. The question now arises: What happens if the second $50,000,000 of Federal funds does not become available after the first two-year commitment in the same amount?

The answer is that a decision can be made (presumably in 1970 when the facts are known) to build a smaller system than the 30-mile system, if it is assumed that the ceiling on local funds would be held at the previously established levels. The engineers have designed a 21-mile "operational" system that can be maintained without a current operating deficit. It would cost $276,000,000, only $56,000,000 less than the 30-mile system.

This 21-mile operational system would take the same amount of local funds as the 30-mile system, assuming one-half as much available Federal money:

	Amount (000,000)	Percent
Local	$199	72.1%
State	27	10.0
Federal	50	17.9
	$276	100.0%

From the standpoint of engineering, the 21-mile operational system could be built in six years instead of eight. However, inasmuch as the same volume of local funds would be required to finance this system as to finance the 30-mile system, the local financing would have to extend over the eight-year period if ceilings on individual government outlays are to be maintained. A delay in construction could result in higher costs which could be partly offset by interest earned on advance payments held in trust. Bad Policy

Prospects for Full System

The full 52-mile system that the engineers have designed would cost $479,000,000 and take 12 years to build (with completion set for 1981). It would reach deep into Clayton and Gwinnett counties and would have a considerably broder coverage of the Atlanta-Fulton-DeKalb area.

Assuming that the 30-mile system is well underway with $100,000,000 in Federal funds available, how much additional Federal money would be required to move directly into the 52-mile program without greatly increasing the local outlay (in total or on an annual basis)? If in 1972 or 1973 it would become clear that another $50,000,000 in Federal funds would be made available, this would not be enough to support the 52-mile total system without a heavy increase in the local load. With the Federal government at $150,000,000 and the state at $48,000,000 (10 percent of the total), the local share would be $281,000,000 -- considerably above the "ceiling" set at the beginning for local financing.

If in 1972 or 1973 it becomes clear that as much as $200,000,000 in total Federal funds might be made available -- an additional $100,000 over and above the same amount already plowed into the 30-mile system -- the local share would not be much greater for the 52-mile system than for the 30-mile system. Here is the overall breakdown:

	Amount (000,000)	Percent
Local	$231	48.2%
State	48	10.0
Federal	200	41.8
	$479	100.0%

This is not an improbable assumption if Federal funds ever do break loose on a larger scale than at present. Indeed, it is presently estimated in Washington that $500,000,000 a year will be needed on a regular basis to meet U.S. metropolitan transit needs rather than the $200,000,000 level currently projected for the 1969 and 1970 fiscal years. MARTA's share in 1973 and thereafter could run as high as $50,000 or $60,000,000 a year.

At any rate, the availability of $200,000,000 in Federal funds could swing the 52-mile system with an overall outlay for the three central governments only slightly higher than the 30-mile requirement. The point is that all <u>five</u> local governments would now share the totals, with the following distribution of the burden based on the formula presented earlier:

	30-Mile System (000,000)	51 ~~30~~-Mile System (000,000)
City of Atlanta	$124.2	$130.7
Fulton County	26.3	27.7
DeKalb County	48.5	51.1
Clayton County		13.6
Gwinnett County		7.9
	$199.0	$231.0

It is assumed on a preliminary basis that the 51-mile system would call for at least seven MARTA bond issues compared with the six that might be scheduled for the 30-mile system (see Table 2, earlier). The carrying charges will be higher, of course, but five governments will be picking up the tab.

In Table 7 on the next page, the bond issue and carrying charge schedules of the two systems are compared.

Table 7. COMPARISON OF LOCAL COSTS, 30-MILE AND 51-MILE SYSTEMS IN SEQUENCE
(000)

	Bond Issues		Carrying Changes	
	30-Mile	51-Mile	30-Mile	51-Mile
1969	$ 25,000	$ 25,000	$ 1,825	$ 1,825
1970			1,825	1,825
1971	35,000	35,000	4,380	4,380
1972			4,380	4,380
1973	50,000	40,000	8,030	6,995
1974			7,725	6,995
1975	50,000	40,000	11,375	9,915
1976	30,000		13,138	9,488
1977	9,000	40,000	13,795	12,408
1978			13,185	11,920
1979		30,000	13,185	14,110
1980		21,000	12,575	15,155
1981			12,209	15,155
1982			12,099	15,155
1983			12,099	14,667 1/
et seq	$199,000	$231,000		

1/ Drops to $14,301,000 in 1984 and levels off at $14,045,000 in 1985

The reason for the lower local requirements for the 51-mile system in the 1973-76 period, of course, is the projected availability of $100,000,000 more in Federal money. This fact, plus the sharing of the local cost by five instead of three governments, would produce an actually lower demand upon Atlanta, Fulton and DeKalb for the larger system in a number of years.

The following table (Table 8) compares the projected millage rate equivalents of each local government's share of financing the two projected systems.

Table 8. COMPARATIVE MILLAGE RATES NEEDED TO SUPPORT 30-MILE AND 52-MILE SYSTEMS

	30-Mile System 1/			52-Mile System 2/				
	Atlanta	Fulton	DeKalb	Atlanta	Fulton	DeKalb	Clayton	Gwinnett
1969	2.0	1.3	2.0	2.0	1.3	2.0		
1970	2.0	1.2	1.9	2.0	1.2	1.9		
1971	3.0	1.9	2.8	3.0	1.9	2.8		
1972	3.0	1.8	2.7	3.0	1.8	2.7		
1973	3.0	1.8	2.6	3.0	1.8	2.6	1.4	1.5
1974	3.0	1.8	2.5	3.0	1.8	2.5	1.4	1.5
1975	3.0	1.8	2.4	3.0	1.8	2.4	1.4	1.5
1976	3.0	1.7	2.3	2.8	1.6	2.2	1.4	1.5
1977	3.0	1.7	2.2	2.8	1.6	2.1	1.4	1.4
1978	3.0	1.7	2.2	2.8	1.5	2.0	1.4	1.4
1979	3.0	1.6	2.1	2.8	1.5	2.0	1.4	1.4
1980	3.0	1.6	2.0	2.8	1.5	1.9	1.4	1.4
1981	3.0	1.5	2.0	2.8	1.4	1.8	1.4	1.4
1982	3.0	1.5	1.9	2.8	1.4	1.8	1.5	1.5
1983 et seq	3.0	1.5	1.8	2.8	1.4	1.7	1.5	1.5

1/ From Table 6. Assumes $100,000,000 in Federal and $33,000,000 in state funds.

2/ Assumes $200,000,000 in Federal and $48,000,000 in state funds.

All of the indicated millage rates (or their equivalents) will drop after 1983 -- for all governments. Bond service charges remain constant and property digests continue to rise. The actual dollar amounts involved in the 52-mile schedule are given in Appendix Table C.

A Note on Clayton and Gwinnett. Until the decision is made to go to the 51-mile system, Clayton and Gwinnett counties would not be involved. In order to keep a ceiling on the cost of the system to these governments even after they are brought into the picture (assumed to be in 1973), their participation is calculated in a lower rate up to 1983 than their ultimate share of the total cost would indicate. This simply means a deferral of the main impact on these outlying governments until the system is actually in operation -- and their tax base more able to handle the burden. Even so, the peak impact would never exceed the 1.5 mills shown in Table 8.

Appendix Table A. REVENUE FROM PROPERTY TAXES TO LOCAL GOVERNMENTS, THIRTY-EIGHT LARGEST METROPOLITAN AREAS, 1964-65 1/

Rank	Metropolitan Area	Per Capita Revenue to Local Governments from Property Sources	Property Revenue as Percent of Revenue from Local Sources	Property Revenue as Percent of Revenue from All Sources
1	Newark	$202.74	82.0%	68.6%
2	San Francisco	$199.39	69.8%	46.5%
3	New York	$180.29	56.1%	41.2%
4	Los Angeles	$178.30	69.7%	46.8%
5	Milwaukee	$178.29	80.1%	54.2%
6	Boston	$176.86	85.6%	60.0%
7	Anaheim	$176.03	73.6%	47.5%
8	San Bernardino	$169.67	67.7%	43.4%
9	Paterson	$168.92	84.6%	74.4%
10	Minneapolis-St. Paul	$156.14	73.3%	52.1%
11	Buffalo	$155.90	75.6%	49.0%
12	Cleveland	$154.08	75.1%	59.1%
13	Denver	$143.58	71.9%	53.5%
14	Chicago	$143.24	72.9%	56.7%
15	Portland (Oregon-Wash.)	$141.90	73.4%	55.5%
16	Detroit	$140.04	71.2%	49.6%
17	Indianapolis	$136.89	83.5%	62.1%
18	Rochester	$132.76	67.7%	40.7%
19	San Diego	$129.96	66.6%	39.4%
20	Dayton	$122.79	70.1%	52.3%
21	Miami	$119.88	56.7%	44.6%
22	Cincinnati	$117.14	60.1%	46.1%
23	Providence	$116.19	87.0%	65.8%
24	Houston	$113.65	71.5%	55.4%
25	Washington, D.C.	$111.00	49.3%	31.6%
26	Baltimore	$110.83	71.8%	42.3%
27	Kansas City	$108.00	61.0%	48.0%
28	Seattle	$103.49	53.9%	35.8%
29	Philadelphia	$101.48	58.8%	47.9%
30	St. Louis	$101.40	62.0%	50.8%
31	Dallas	$ 97.77	67.9%	53.5%
32	Columbus (Ohio)	$ 97.06	63.4%	45.2%
33	ATLANTA	$ 95.52	59.6%	43.7%
34	Pittsburgh	$ 94.42	59.8%	46.3%
35	Tampa-St. Petersburg	$ 87.61	49.9%	37.9%
36	Louisville	$ 70.28	47.2%	36.0%
37	San Antonio	$ 59.34	66.6%	41.6%
38	New Orleans	$ 44.75	38.6%	23.3%
	Average	$129.94	67.3%	48.6%

1/ These are the areas recorded as the most populous SMSA's in the nation by the 1960 Census of Population, when each of them had at least 700,000 inhabitants.

Source: U.S. Bureau of the Census, *Local Government Finances in Selected Metropolitan Areas in 1964-65*, Series G.F. - No.9.

Appendix Table B. ANNUAL FUND REQUIREMENTS FOR LOCAL GOVERNMENTS TO SUPPORT MARTA BONDS, 30-MILE BASIC SYSTEM

Assumptions:		
	Federal funds	$100,000,000
	State funds	33,000,000
	Local funds	199,000,000
		$332,000,000

	City of Atlanta (000)	Fulton County (000)	DeKalb County (000)
1969	$ 2,828	$ 598	$ 1,106
1970	2,962	626	1,158
1971	4,659	986	1,822
1972	4,884	1,033	1,910
1973	5,121	1,083	2,004
1974	5,373	1,137	2,101
1975	5,643	1,194	2,206
1976	5,922	1,253	2,314
1977	6,222	1,316	2,434
1978	6,537	1,383	2,556
1979	6,873	1,454	2,686
1980	7,221	1,527	2,823
1981	7,596	1,607	2,979
1982	7,983	1,689	3,122
1983	8,400	1,777	3,284
1984	7,825	1,655	3,060
1985	7,550	1,597	2,952
1986-96 (11 years @1985 rate)	83,050	17,567	32,450
1997	7,550	1,597	2,950
1998	6,602	1,396	2,581
1999	6,602	1,396	2,581
2000	5,273	1,116	2,062
2001	5,273	1,116	2,062
2002	3,376	714	1,320
2003	3,376	714	1,320
2004	1,479	313	579
2005	342	72	133

Appendix Table C. ANNUAL FUND REQUIREMENTS FOR LOCAL GOVERNMENTS TO SUPPORT MARTA BONDS, 52-MILE TOTAL SYSTEM

Assumptions:		
	Federal funds	$200,000,000
	State funds	48,000,000
	Local funds	231,000,000
		$479,000,000

	City of Atlanta (000)	Fulton County (000)	DeKalb County (000)	Clayton County (000)	Gwinnett County (000)	Total
1969	$ 2,828	$ 598	$ 1,106			$ 4,532
1970	2,962	626	1,158			4,746
1971	4,659	986	1,822			7,467
1972	4,884	1,033	1,910			7,867
1973	5,121	1,083	2,004	$ 288	$ 168	8,661
1974	5,373	1,137	2,101	312	178	9,100
1975	5,643	1,194	2,206	340	194	9,577
1976	5,527	1,169	2,161	371	212	9,440
1977	5,807	1,228	2,271	405	231	9,942
1978	6,101	1,291	2,385	444	254	10,475
1979	6,415	1,357	2,508	482	275	11,037
1980	6,740	1,426	2,635	528	302	11,631
1981	7,090	1,500	2,772	578	330	12,270
1982	7,451	1,576	2,919	677	387	13,005
1983	7,840	1,658	3,066	740	423	13,727
1984	7,923	1,673	3,103	1,015	586	14,301
1985	7,781	1,643	3,048	997	575	14,045
1986-96 (11 years @1985 rate)	85,591	18,073	33,528	10,967	6,328	
1997	7,781	1,643	3,048	997	575	14,045
1998	6,940	1,465	2,718	889	513	12,525
1999	6,940	1,465	2,718	889	512	12,525
2000	5,761	1,216	2,256	738	426	10,397
2001	5,761	1,216	2,256	738	426	10,397
2002	4,412	932	1,728	566	327	7,965
2003	4,412	932	1,728	566	327	7,065
2004	3,065	647	1,200	393	227	5,533
2005	3,065	647	1,200	393	227	5,533
2006	1,719	363	672	220	127	3,101
2007	1,719	363	672	220	127	3,101
2008	708	149	277	91	52	1,277
2009	708	149	277	91	52	1,277

Desk Copy
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Preliminary Draft

FINANCING THE CONSTRUCTION OF ATLANTA'S RAPID TRANSIT SYSTEM

Prepared for
Metropolitan Atlanta Rapid Transit Authority

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FINANCING THE CONSTRUCTION OF ATLANTA'S RAPID TRANSIT SYSTEM

The capital costs of Metropolitan Atlanta's rapid transit system clearly must be financed by funds obtained from sources beyond the fare box. The system can generate enough operating revenues to cover operating expenses and maintenance and to finance the purchase of the basic rolling stock and operating equipment. For the capital costs of the system, however -- the tracks, bridges, stations and other elements of the fixed investment -- rapid transit in Metropolitan Atlanta must look to the local governments of the area and to Federal and state sources.

This is, of course, normal. Rapid transit systems are basically public enterprises operating public facilities comparable to streets and schools and performing essential public services. Although they are unlike streets and schools in that they produce operating revenues, few systems are able to spin off enough net returns to make any substantial contribution to basic costs of the fixed investments. Some systems do better than others but all share the characteristic of being public service enterprises that require direct public support if they are to meet public needs.

The legislation that set up Metropolitan Atlanta's system authorizes the local governments to make funds available for capital costs in two ways. One is to utilize the bonding capacity of each jurisdiction, if such capacity is available, for the issuance of general obligation bonds whose proceeds would be turned over directly to the Metropolitan Atlanta Rapid Transit Authority (MARTA) for land acquisition and construction costs. The other provides for stipulated payments from the local governments to the Authority to cover the costs of servicing bonds which MARTA itself would issue. The MARTA bonds would be generally classed as revenue bonds because their security would be revenues pledged from local governments.

In the following section, all aspects of the local financing of the capital costs of Metropolitan Atlanta's rapid transit system will be explored. The underlying premise to be reiterated is that the public nature of the rapid transit enterprise calls for the public assumption of responsibility for paying for the fixed investment. This premise has already been clearly recognized locally and indeed was assumed in the creation of MARTA and in the legislation providing for MARTA's support and operations.

Questions and Principles

Three key questions need to be particularly highlighted in this analysis:

> To what extent can the local area count on financial help from Federal and state sources to supplement the funds that must be made available from the local government?
>
> After the local share is determined, how should this burden be allocated among the several governmental jurisdictions within the metropolitan area?
>
> After this allocation is made on a fair and equitable basis, what would be the potential impact of this new expenditure commitment upon the local governments and taxpayers?

Each of these questions involves different kinds of considerations. The potential availability of Federal and state funds involves policy assumptions that are not subject to precise corroboration. Allocating the local share among the different governmental jurisdictions -- Fulton, DeKalb, Clayton, Gwinnett and later Cobb counties (with a possible break-out of the City of Atlanta from the counties in which it is located) -- calls for devising a formula that considers both benefits from the transit system and financial capabilities. Analyzing the impact of rapid transit financing upon the budgets of the different local governments calls for evaluation of the practical problems of accommodating additional costs within governmental structures that are already under financial pressure.

Specific answers to each of these questions will be provided later in this section. First there might be an exploration of principles involved in order to get a general perspective for the subsequent analysis.

Federal and State Assistance. All of the major rapid transit systems in the United States built up to the present time -- in New York, Chicago, Philadelphia, Boston and Cleveland -- have been preponderantly financed from local revenue sources, both public and private. It has only been in recent years that the Federal government has developed a program of assistance in this field and the amount of Federal money involved to date has been relatively small. The most recent rapid transit system to get under construction -- the Bay Area Rapid Transit system (BART) in San Francisco -- is being almost completely financed from state and local sources, with the current flow of Federal funds representing a small fraction of the total costs (which may reach one billion dollars). The states have assumed new responsibilities for rapid transit financing where local systems exist, but again the share of the costs from this source so far is small. The primary responsibility clearly rest with the local area.

On the other hand, virtually all urban governments in the U.S. are badly in need of money. The financial plight of American cities has reached a point of national crisis. Urban populations are growing rapidly, demands for urban services are mounting, critical urban problems are multiplying -- and all of these factors are creating unprecedented needs for additional revenues in the face of limited availability of funds. Although existing sources are producing sharp increases in revenues each year, demands are outrunning revenue supplies in most local governments. Even as new local revenue sources are developed, there has been increasing need to turn to the Federal and state governments for help.

It can be taken as a basic assumption that Metropolitan Atlanta's rapid transit system must -- and will -- get some aid from both Federal and state sources. The primary responsibility for financing this system, however, cannot be shifted away from the local governments. In developing a financial plan for the Metropolitan Atlanta system, the approach must be to make the most realistic possible estimate of funds that can be expected from Federal and state sources and then to test the feasibility of producing the remaining funds from the local sources.

It can be anticipated that the amount available from the Federal government for rapid transit purposes in the immediate future will be limited. Despite talk of potentially massive Federal outlays for this purpose, there is no evidence that such funds are imminent. The pressure of the Viet Nam war and the rising demands for Federal funds for other urgent urban problems make it unreasonable to assume any large scale availability of funds. Because of its head start in rapid transit planning, Metropolitan Atlanta is assured of its share of the funds that do become available but these funds will supplement what is raised locally rather than represent the basic share -- at least in the immediate future.

As to assistance from the state, the people of Georgia in November 1966 approved a constitutional amendment declaring public transportation to be an "essential governmental function and a public purpose for which the power of taxation of the state may be exercised and its public funds expended". The amendment also provided, however, that the State of Georgia shall not provide more than 10 percent of the total cost of a public transportation system, either directly or indirectly. Subsequently, the General Assembly made an appropriation to the Metropolitan Atlanta system even before the total cost had been determined and before local financing for building the system had been assured.

For purposes of planning, it is reasonable to assume that the State of Georgia will contribute 10 percent of the capital costs of Metropolitan Atlanta's system. It is quite possible, of course, that the legislature will not approve contributions in this magnitude. On the other hand, there is no sound basis for assuming that the legislature will not do so. Preliminary financial planning should take the maximum state contribution as a premise.

Allocation Among Local Jurisdictions. Determining the proportion of the local share of MARTA's capital costs that should be allocated to each of the participating local governments is an important matter. Ultimately, of course, the people in each jurisdiction must decide by vote whether or not these funds will be made available. However, a formula must be devised for making a fair and equitable allocation on the basis of which this decision might be made.

The objective should be so far as possible to base each jurisdiction's share on the benefits that the system will provide. It is not difficult to identify the overall kinds of benefits that such a system might produce; the problem is to determine how these benefits might be distributed and measured geographically throughout the metropolitan area. Up to now, no rapid transit system has been able to define these benefits in any precise way on an area-by-area basis.

The evidence of the overall value of rapid transit to a metropolitan area is unmistakable. The costs of moving people by transit is considerably less than by expressway. Reduction of highway and street traffic through provision of transit facilities saves time for individuals and businesses and means heavy savings in public costs for maintenance of transportation facilities. New tax values are created along rapid transit rights-of-way (in Toronto, for example, approximately two-thirds of the net increase in taxable valuations over the past ten years have been created on properties directly served by the new rapid transit system). Valuable land is preserved that would otherwise be taken for expressways. The availability of jobs to the local population is increased and wider choices of employment are permitted. The destructive and costly effects of continued urban sprawl are lessened as close-in densities are increased. In short, overall efficiency of the metropolitan area is improved and each jurisdiction shares in the benefits and advantages.

Setting each jurisdiction's specific share of the benefits, however, is not subject to easy measurement. There are different transit mileages in each area, different patronage levels, different initial costs, different impacts in terms of both savings and tax values, different effects on area growth. It can be argued that each benefit to a jurisdiction can be offset by a liability. The transit system may generate large new tax values along its rights-of-way in the central city but at the same time make possible a diffusion of employment centers and population to other areas. The system may accelerate growth in suburban areas but this can create vast new demands for public services and facilities as well as new tax values. A rapid transit system can take property off the tax rolls as well as add tax values, and it can potentially blight the neighborhood as well as create substantial new environments.

The simple fact is that rapid transit benefits the metropolitan region as a whole. A fast-growing region the size of Metropolitan Atlanta will not be able to function efficiently without a balanced transportation system that includes rapid transit. Practically speaking, it will be impossible to build the streets and highways that can accommodate Metropolitan Atlanta's future vehicular traffic. All forecasts of Metropolitan Atlanta's future employment and population levels assume an efficient system of local circulation and the absence of this system (which necessarily includes rapid transit) will simply mean that anticipated growth levels will not be reached. The effects of a circulation breakdown upon the economy of a particular jurisdiction can mean sharp losses in public revenues in relation to demands for public services.

The tight internal linkages within the metropolitan area must be particularly recognized. The efficient operation of Downtown Atlanta, for example, has a direct importance to all parts of the metropolitan region. The functions of this central business district in one way or another have a critical bearing upon every major industrial investment in the entire region, and these industrial investments in turn support widely scattered commercial and residential investments. Similarly but on a different scale, Emory University, Conley Depot, Peachtree Industrial Boulevard, Lockheed Aircraft, the Atlanta Municipal Airport, the Farmer's Market, Georgia Tech and other major enterprises and institutions have regional significance regardless of their locations.

A rapid transit system accentuates and increases the efficiency of the internal linkages in a metropolitan area. A formula to allocate the costs of such a system within the area, therefore, must be based upon some common-sense indexes that measure each jurisdiction's relative size and function in the region and its proportion of the region's wealth and its relative pattern of growth. The benefits of a rapid transit system will be reflected in each jurisdiction's participation in the area's overall economic and land use development.

With these types of relative measures, a fair and equitable formula for allocating rapid transit costs can be devised. The basic assumption must be that the transit system will help make possible the full realization of the entire area's potential. The growth and well-being of each jurisdiction will be the best measure of its share of the benefits that the system produces.

Local Fiscal Capabilities. As a part of this analysis of capital costs financing, a comprehensive study was made of the fiscal problems of the local governments of Metropolitan Atlanta. The purpose was to determine the potential impact of adding the burden of the new rapid transit system to the complex of public services and facilities which the local governments already carry. This fiscal study involved forecasts of operating revenues and expenditures for each local government, analyses of capital fund requirements and projections of economic indexes on the basis of which the availability of funds for capital purposes might be estimated.

This study showed that every local government in Metropolitan Atlanta is already under financial pressure. Like municipal and urban county governments elsewhere, they are hard pressed to meet both operational and capital needs from existing sources of revenue. Demands for new services and facilities have been growing faster than new revenues have been produced, despite large increases in the latter.

The prospects are for even greater financial stringency in the future. If no additional revenue sources are opened up, the major local governments in Metropolitan Atlanta face deficit situations in both operating and capital budgets. This is true despite optimistic forecasts of future revenues from existing sources reflecting extremely favorable growth prospects for the area. The outlying areas will demand the full range of municipal services as population and employment expand; the close-in areas will need increased expenditures for rehabilitation and redevelopment as well as for the solution of pressing social problems.

It can be assumed, however, that new sources of revenue will be made available to meet the needs that have already been projected without rapid transit. Although efforts to get a local sales tax option failed in the 1967 General Assembly, there is general optimism that either this or the payroll tax will receive favorable legislative attention in the near future and that local voters will approve one of the new tax measures. It is also likely that the major governments will in addition have to increase property taxes to meet gross future needs.

Within the framework of expanded future budgets, the local governments can accommodate the additional costs of financing rapid transit if a sufficiently high priority is placed on the transit function. Assuming that additional funds are forthcoming anyway, money will be available for rapid transit if the people decide that they want it. Local voters have already demonstrated their approval of the proposition that rapid transit is essential, through establishment of MARTA and favorable votes on participation in MARTA's program. It is reasonable to anticipate that this favorable opinion will be expressed again when issues of financing the system are brought to the voters for consideration.

Basic Premises of Analysis

This financial analysis is concerned only with the areas embraced by the four counties of Fulton, DeKalb, Clayton and Gwinnett (including the City of Atlanta). It does not cover Cobb County which is not presently participating in the MARTA program.

In analyzing the financial impact upon the respective local governments of building the rapid transit system in Metropolitan Atlanta and in evaluating their capacities to undertake the program, three basic premises have been established:

1. That the major share of the financial responsibility involved in building the system will be assumed by the local governments, with a minimum dependence upon financial help from the outside;

2. That the minimum target will be the construction of a 30-mile system capable of achieving the major part of the goals set for rapid transit in the area;

3. That a policy and program will be adopted that will provide for an extension of this basic system to 52 miles later if and when additional funds become available from non-local sources.

Each of these premises is regarded as highly important. The first premise -- that the local governments will commit themselves to move ahead with a rapid transit system for which they would pick up the major part of the financial tab -- is both reasonable and necessary. It is not possible to predict with accuracy how much Federal money might become available, and the state funds are limited to a fraction of the total cost. It is hypothetically possible that two-thirds of the cost of Atlanta's rapid transit system could eventually be paid for by Federal funds but there are grave uncertainties as to when such funds might be made available if at all. Moreover, under present regulations Federal funds can be committed for only two years at a time. It would therefore seem imperative, if Metropolitan Atlanta wants a rapid transit system, that a local decision be made to shoulder the main burden locally. This means taking some reasonable assumption about the availability of Federal and state funds but at the same time assuring the construction of the system through a heavy local commitment.

This is the way in which the operating rapid transit systems in other big U.S. cities have been built. On the other hand, the existence of the Federal program is itself testimony to a clear recognition that new rapid transit systems ar[illegible]ot likely to be b[illegible] without [illegible] the costs being shared at the Feder[illegible] 1. The burde[illegible] the loc[illegible]ernments is too great on top of mounti[illegible] for a whole r[illegible] of othe[illegible]vices and facilities. Clearly new s[illegible] will be n[illegible] if loc[illegible]ernments are to meet their futu[illegible]rom rapid tra[illegible]t [illegible], an impossible situation. [illegible] growing m[illegible]itan Atlanta has vast economic resources that c[illegible] tapped for [illegible] pur[illegible]. Rapid transit simply must be given the ne[illegible]ry priori[illegible]he list [illegible]ssential facilities.

It would [illegible]nrealistic [illegible]oach Atl[illegible] transit financing problem under any other assu[illegible]e hop[illegible] large-scale Federal funds might eventually be made ava[illegible]or thi[illegible], but to plan on this basis would invite disappointment and even d[illegible] if this hope were not realized -- and would also represent a denial o[illegible]igh priority that the public has already put upon rapid transit through [illegible]pproval of the MARTA program so far.

The second premise -- a commitment from the beginning to a full-scale basic system -- would also appear both reasonable and necessary. The engineers have designed a 30-mile system that covers the heart of the metropolitan area in which are located the greatest concentrations of people and jobs, the highest densities of development, and the corridors of heaviest traffic congestion. An initial commitment to a system of less capabilities would not move the area toward a head-on confrontation with the basic problem.

As already described in this report, the 30-mile system would extend between Brookhaven on the north and the Tri-Cities on the south, Decatur on the east and Lynhurst Drive on the west, with spurs off to the northwest and northeast. This basic system would not reach into the suburban areas of Clayton and Gwinnett counties. As a result, it would not be proposed that these two counties assume any share of the local costs of the 30-mile system until and unless extensions are made from it into these outlying counties.

The basic 30-mile system will cost approximately $332,000,000, assuming that construction gets underway in 1969. It is projected to take nine years to complete which would carry the construction period through 1977.

The third premise, which relates to future expansions of the system as additional non-local funds become available, calls for a flexible future policy. The key factor is the future availability of Federal funds. If the decision is made to move ahead with the 30-mile system assuming minimum Federal participation, another decision can be made later to go to the 52-mile system (which would push rapid transit lines into Clayton and Gwinnett counties) if sufficient Federal funds become available to match expanded local funds. Later, if and when Cobb County decides to participate in the program, the decision can be made to go to the 63-mile five-county system as further funds become available.

As noted earlier in this report, the 52-mile system would cost $479,000,000 and would take 12 years to build with completion scheduled by the end of 1980. The addition of Federal money beyond that available for the 30-mile system, plus the participation of Clayton and Gwinnett, would result in only a slight increase in cost for the larger system to the residents of the close-in counties, Fulton and DeKalb. (The 52-mile system, of course, would include extensions to the basic system within the two counties as well as extensions outward to the suburbs.)

To summarize the foregoing, this analysis of financing will be concerned basically with two rapid transit systems:

> The basic 30-mile system which will cost $332,000,000, operate only in Fulton and DeKalb counties, take nine years to build, and be financed on the assumption of minimum Federal and state assistance.
>
> The overall 52-mile system which will cost $479,000,000, extend out into Clayton and Gwinnett counties, take 12 years to build, and be undertaken beyond the 30-mile system as more Federal money becomes available to match state and local funds.

Allocation of Local Costs

The determination of a formula might be recommended for allocating the local share of the capital costs of the Metropolitan Atlanta rapid transit system among the local jurisdictions has involved a major research effort. Methods used in other metropolitan areas have been studied. A wide variety of factors relating to potential benefits of rapid transit to different parts of the metropolitan area have been explored.

The basic conclusion has already been stated -- that the entire metropolitan area benefits from development of rapid transit and that it is substantially impossible to match up costs and benefits for any particular area in any precise sense. It is possible, however -- and necessary -- to identify general indexes that would guarantee a fair and equitable allocation of the local burden. These indexes must take into account three essential factors -- relative intensity of useage, relative capacity to pay, and relative economic development impact.

Three sets of measurements -- population, property tax digest and employment -- would most clearly reflect these basic considerations. None of these factors by itself would provide the basis for a fair and equitable cost distribution, and the absence of any would prejudice the fairness of the allocation formula. These three elements have the additional merit of being simple and measurable by basic data that can be readily obtained and well documented and authenticated from official sources.

Two additional considerations must be introduced to assure the fairness and equity of a final allocation formula utilizing these factors. One is the importance of taking future as well as present patterns into account. This can be accomplished by getting two sets of figures for each element -- a figure for the present (using 1965 as the base year for which data can be verified) and a projected figure for a future year. Inasmuch as official forecasts have been made of both population and employment for the year 1983 by the Atlanta Region Metropolitan Planning Commission (in connection with the Atlanta Area Transportation Study), this year can be used for the future date (by which time, incidentally, the rapid transit system would be in operation). The property tax digests utilizing in part these population and employment figures can be projected for the same year. All three elements can therefore be put into the formula with well documented present and future components.

The other consideration involves the use of common sense and good judgement in assigning different degrees of importance to each of the basic factors. This is done by giving a different weight to each element in the allocation formula. It was determined that employment should be given the greatest weight (3) because it most nearly reflects the economic strength of the various jurisdictions. Employment means investments, payrolls, purchases and sales, and the employment index is a fair measure of economic activity. Apart from the convenience factor, the greatest "benefit" derived by a local government from an efficient transit system would come from the maintenance and expansion of its economy. The area with the heaviest employment would have the most to gain from the system and would generate the largest capacity to finance it.

The property tax digest -- the assessed value of property put on a comparable basis at 100 percent of market value in each jurisdiction -- would be given the next highest weight (2). The property tax digest also reflects ability to pay on the part of the governments and in addition helps to measure the potential impact of the system on physical growth. Each of the county governments in Metropolitan Atlanta rely heavily upon the property tax and all are now required to maintain their assessments at roughly 40 percent of market value.

In the formula, population would carry the basic weight of one (1). Although transit patronage would bear some direct relationship to population, a formula giving a heavier weight to population would penalize outlying areas whose level of transit ridership would probably not carry the same relationship to population as patronage levels in the close-in areas where densities near the transit corridor will be more intense.

In Table 1, following, these three basic factors are set forth in statistical form in terms of percent distributions among each of the four counties participating in the MARTA program. These percent distributions are shown for a present (1965) and a future year (1983). The composite index that combines all of these factors at the assigned weights becomes the proposed allocation formula, which is also shown in terms of the percentage share of total capital cost that would be allocated to each jurisdiction.

Table 1. ELEMENTS IN RECOMMENDED COST ALLOCATION FORMULA FOR MARTA CONSTRUCTION: PERCENT DISTRIBUTION OF POPULATION, PROPERTY TAX DIGEST, AND EMPLOYMENT, 1965 and 1983

County	Population (1) Actual 1965	Population (1) Projected 1983	Tax Digest (2) Actual 1965	Tax Digest (2) Projected 1983	Employment (3) Actual 1965	Employment (3) Projected 1983	Proposed Allocation Formula
Fulton	57.1%	50.5%	63.1%	56.1%	78.8%	72.6%	66.7%
DeKalb	31.1	34.2	28.4	31.7	15.3	19.2	24.1
Clayton	6.7	9.0	5.6	7.8	4.1	5.3	5.9
Gwinnett	5.1	6.3	2.9	4.4	1.8	2.9	3.3
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Notes: Relative weights used in arriving at formula are shown in parentheses. Both 1965 and 1983 figures are weighted accordingly. The property tax digests were put on a comparable basis for each jurisdiction (100% of market value).

The basic figures used in deriving the percent distributions shown in Table 1 are set forth in Chart 1. Each figure has been calculated on the basis of extensive research utilizing all available data from official sources. It was necessary, however, to use independent judgment in arriving at each figure, particularly the forecasts for future years, and the responsibility for the figures rests solely with the consultant. All of the data used can be documented and the methods can be easily tested and evaluated.

In allocating the costs of the basic 30-mile system which would lie entirely within the boundaries of Fulton and DeKalb counties, it would seem reasonable to limit the local responsibility for this system to these two jurisdictions. As soon as the decision is made to extend the system to its full length of 52 miles, the participation of Clayton and Gwinnett counties would be assumed and presumably they would be asked to pay the shares of the total system called for in the formula shown in Table 1, including their pro rata parts of the 30-mile basic system whose construction would get underway before their financial involvement.

The breakdown of financial responsibility between Fulton and DeKalb counties in connection with the 30-mile basic system, based upon the same factors set forth in Table 1, would be as follows:

Fulton County	73.5%
DeKalb County	26.5
	100.0%

Clearly there is room for differences of opinion about the elements selected for inclusion in the allocation formula and about the relative weights assigned to each. There might also be questions as to the base figures themselves. On balance, however, the formula would appear to be fair and equitable, and the underlying statistics have been derived objectively on the basis of full research. Although some obvious additional elements might be considered for inclusion -- such as, for example, projected patronage levels used by the engineers in station location, mileage or linear feet of track built in different jurisdictions, and potential land development prospects along transit rights-of-way -- the measurement of these elements is likely to be highly speculative. After considering them, it was determined that a simpler and more easily documented set of measurements would be more satisfactory.

Financing the Basic System

As already noted, the 30-mile basic system proposed as the minimum construction program for Metropolitan Atlanta would cost an estimated $332,000,000 to build. The full capital cost of this system must come from provided funds -- that is, funds not generated from the operation of the rapid transit system itself. Although, as noted earlier in this report, the projected rapid transit system would operate with net revenues after the early years, the funds generated by the fare box would not be capable of underwriting even a small part of the basic capital cost. They would be needed to underwrite the purchase and provide for the replacement of rolling stock and to maintain and improve the physical system.

. Federal Funds. The first assumption to make in developing a financial plan for meeting the capital costs of Metropolitan Atlanta's rapid transit system is to make a specific estimate of the availability of Federal funds. The current Federal appropriation supporting mass transportation planning and programming throughout the United States is for $175,000,000 per year, effective through the fiscal year ending June 30, 1968. There is a 12½ percent ceiling on what any one state might receive out of this appropriation. If MARTA operations were now underway, it might be expected that a large part of Georgia's share -- perhaps as much as $20,000,000 -- might be available from Federal sources.

It has been estimated that Federal appropriations for mass transportation will have to reach the level of at least $500,000,000 per year to provide any substantial assistance to the cities and metropolitan areas that are building or expanding their mass transit systems. The intense fiscal pressures caused by the Viet Nam war and other heavy demands upon the Federal treasury, however, has resulted in a deferral of any programming at this level. It is hopefully anticipated that funds made available by Congress for mass transportation for the two fiscal years beginning July 1, 1968, and extending through June 30, 1970, would be in the range of $200,000,000, or year. Prospects appear fairly optimistic at this stage.

Using this estimate it might reasonably be assumed that MARTA would be in a position to request and receive as much as $25,000,000 per year in the calendar years 1969 and 1970 from Federal sources, if voter approval has been given in the meantime and local funds committed. This would mean that a basic $50,000,000 in Federal funds might be counted on as a minimum.

How much more Federal money might subsequently be made available is of course speculative. It would be reasonable to assume, however, that at least an additional $50,000,000 might be forthcoming following the initial allotments in the 1969 and 1970 fiscal years. Even if Viet Nam or other international crises remain, it is not unreasonable to expect that the present level of appropriations for mass transportation will continue. If the international situation clears up, there could be a sharp increase in Federal funds for mass transportation in line with current thinking. In short, there is probably little chance that current levels of appropriation will be cut back and there is a good chance that large outlays might become available.

In light of these considerations, it would appear reasonable to anticipate that at least another $50,000,000 might be obtained from Federal sources for MARTA's basic 30-mile system. As a conservative approach, the availability of $100,000,000 in Federal funds might be taken as a given for local fiscal planning. This would provide considerably less than the hypothetical two-thirds of total cost that the Federal government might be expected to provide, but it would be a substantial contribution. The heavy burden would fall upon the local area, which is a realistic basis for sound planning.

State Funds. Another important assumption relates to the availability of state funds. As already noted, mass transportation has already been declared to be a public purpose in Georgia for which state funds might be made available, although not more than 10 percent of the cost of a local rapid transit system might be borne by the state. The General Assembly earlier in 1967 appropriated a sum of $500,000 as a contribution against the planning and other pre-operating expenses of MARTA.

The subsequent availability of the state money, of course, rests entirely with the legislature. It might be reasonable to expect, however, that the legislature will see fit to contribute the full 10 percent of the cost of Metropolitan Atlanta's rapid transit system if and when it is approved by the voters. The precise way in which these state funds might be made available is not yet clear -- through direct appropriations, through the channels of some existing authority, or in part through the donation of state-owned lands for transit rights-of-way -- but the strong public sentiment behind rapid transit in Atlanta should assure the state's maximum participation. For purposes of fiscal planning, therefore, it might be assumed that as much as $33,000,000 will be made available against the total capital cost of the 30-mile basic system in Metropolitan Atlanta.

Assuming that Federal and state funds are made available as indicated, the local share of the basic system would be approximately $199,000,000 and the distribution of capital costs by sources would be as follows:

	Amount	Percent
Local	$199,000,000	59.9%
State	33,000,000	10.0
Federal	100,000,000	30.1
	$332,000,000	100.0%

For planning purposes, it might be assumed that the Federal funds would be made available in four consecutive annual payments of $25,000,000 each. It might also be assumed that the state's contribution would also be made available on a uniform basis, with the availability of these funds extending over the 9-year period of construction. In the case of both state and Federal funds, of course, the pattern of availability may be different from that indicated here, but these might be taken as reasonable assumptions.

Issuance of Local Bonds. Local funds would be made available in the form of bonds issued as appropriate to meet the projected drawdown schedule of construction costs set up by the engineers. As provided in the MARTA act these local bonds might be of two kinds -- bonds issued by MARTA itself based upon the local governments' underwriting the payment of principal and interest, and general obligation (GO) bonds issued by the local governments against their own bonding capacities with the proceeds turned over to MARTA in lump form. In either case, the funds would be made available to MARTA under agreements with the local government setting the relative shares of MARTA's total obligations to be assumed by each government, the ceilings upon local obligations that might be stipulated, and other terms and conditions providing for maximum flexibility while protecting the interests of local taxpayers.

The final scheduling of local bond issues for the rapid transit system, of course, will undoubtedly be quite different from any preliminary fiscal planning that might be done. The timing and dimensions of each issue (either of MARTA's bonds or of GO bonds issued for rapid transit by the governments directly) will involve many factors including the current status of the bond market, the scheduling of other local government issues and obligations, the actual amounts made available by state and Federal government at any one time, and possible variations in the drawdown schedule.

For preliminary planning purposes, however, the schedule of local bond fund needs related to fund availability from other sources can be set up as follows for the projected 30-mile basic system:

Table 2. POTENTIAL SOURCES OF CAPITAL FUNDS FOR THE 30-MILE RAPID TRANSIT SYSTEM (000,000)

	Drawdown 1/	Availability of Funds				
	(cumul.)	Federal	State	Local 2/	Total	Cumulative
1969	$ 25	$ 25	$ 4	$ 25	$ 54	$ 54
1970	54	25	4		29	83
1971	102	25	4	35	64	147
1972	158	25	4		29	176
1973	207		4	50	54	230
1974	258		4		4	234
1975	298		4	50	54	288
1976	320		4	30	34	322
1977	332		1	9	10	332
		$100	$33	$199	$332	

1/ Preliminary schedule of needs for land purchase and construction established by the engineers.

2/ MARTA revenue bonds supported by local government underwriting or general obligation bonds of local governments issued for rapid transit purposes.

It is noted that the above schedule of fund availability, as preliminary set forth, does not directly match the schedule of fund needs. This is simply because both sets of figures are necessarily tentative and preliminary. Both will be altered in the course of time. The development of such a preliminary table is necessary, however, in order to set the general dimensions of the financial impact of MARTA operations upon the local governments. Bond issues are tentatively sized and spaced to meet anticipated conditions in the bond market as well as provide the funds as needed. In practice, there may be more issues of smaller sizes or fewer issues of larger sizes than indicated in this preliminary table.

These projected local bond issues must then be translated into terms of annual carrying charges for which the obligation would fall upon the local governments under the sharing formula discussed earlier. It is assumed that the local bonds (either MARTA revenue bonds or GO bonds of the local governments) would be 30-year issues. Despite contractual agreements with the local governments under which MARTA's issues would be underwritten with pledges of property tax levies to support the obligation, it is anticipated that MARTA's revenue bonds would carry a somewhat higher interest rate than general obligation bonds issued directly by the local governments. Bond counsel agrees that a spread of perhaps one-half of one percent should reasonably be assumed.

The annual cost of carrying rapid transit bonds issued at the local level are shown in Table 3 on the following page. Revenue bonds issued by MARTA and guaranteed for payment by local government contracts carry a four and one-half percent interest rate, and general obligation (GO) bonds issued for rapid transit purposes by the local governments are shown at four percent.

Table 3. ANNUAL CARRYING CHARGES OF RAPID TRANSIT BONDS, ALTERNATIVE METHODS, METROPOLITAN ATLANTA

	Principal Amount Of Bonds	Annual Costs 1/ MARTA Issues	GO Issues
1969	$25,000,000	$ 1,825,000	$ 1,715,000
1970		1,825,000	1,715,000
1971	35,000,000	4,380,000	4,116,000
1972		4,380,000	4,116,000
1973	50,000,000	8,030,000	7,546,000
1974		7,725,000	7,264,000
1975	50,000,000	11,375,000	10,694,000
1976	30,000,000	13,138,000	12,357,000
1977	9,000,000	13,795,000	12,974,000
1978		13,185,000	12,407,000
1979		13,185,000	12,407,000
1980		12,575,000	11,844,000
1981		12,209,000	11,505,000
1982		12,099,000	11,404,000

(Then level payments until bonds are retired)

1/ Amortization (principal and interest) charges of all outstanding bonds for rapid transit under the two alternative methods of financing MARTA's capital costs.

It is noted that the annual cost of servicing these bonds drops off after 1977 (the date of the last issue) and declines to a level amount in 1982. This is because a 20 percent sinking fund reserve is provided for over the first five years of each issue, and at the end of five years each issue then carries a level payment to maturity. In effect, six years of payments are made in the first five years of each issue, and the amortization period is actually 29 instead of 30 years. The level payments after 1982 would continue through 1997 at which time they would drop off as the 1969 issue is retired and so on until all issues are paid off.

Impact On Local Governments

Clearly the assumption of an additional $199,000,000 worth of rapid transit bonds by the local governments would be an additional heavy burden. Even with amortization payments spread over 30 years, the charges would represent substantial additions to the costs of the government whose financial burdens are already substantial. Under the assumptions used in this analysis, the full responsibility for financing the capital costs of the 30-mile basic system would fall upon Fulton and DeKalb counties, with Clayton and Gwinnett taking up their share of the cost only if the system is extended outward to its full 52 miles.

At the same time, the facts are equally clear that the Metropolitan Atlanta area has a flourishing and expanding economy capable of supporting the full range of necessary public services and facilities in the years ahead. Local taxpayers on the whole are not over burdened by local taxes and service charges -- indeed the aggregate tax load carried by local taxpayers in Metropolitan Atlanta is considerably less than comparable loads in most other major metropolitan areas. The demand for local government services are sharply rising on both a per capita and an overall basis as Metropolitan Atlanta grows larger, but income and wealth are clearly growing at a commensurate rate.

Local Fiscal Prospects

A great deal of research has been undertaken to determine the future prospects for local government finance in the Metropolitan Atlanta area.

Forecasts have been made of future operating and capital needs of the local governments and of future revenues from all existing sources. In addition, potential new revenue sources have been thoroughly researched. (The detailed findings of these studies are transmitted separately in a technical document.)

All local governments face a cost-revenue squeeze in the future. The range of public services being offered is constantly widening and the unit costs of providing these services is constantly rising. In Metropolitan Atlanta, the upward spiral of local government costs in part reflects the area's emergence as a major urban center where public service costs are generally higher because both the quality and quantity of local public services are clearly superior.

The financial problems of the City of Atlanta are particularly acute. The heavy burdens of central city problems coupled with the less than proportional increase in revenue from existing sources have resulted in real difficulties. Atlanta is not unlike other major cities in this regard, however. The spill-over of population and industry into outlying areas, the growing obsolescence of parts of the central core, the increased congestion of the central city activity and the growing demands for a level of high quality service commensurate with big city status have all been important factors in Atlanta's financial difficulties.

Local counties have been also impacted, however, and prospects are for much more serious financial pressures in the future. Although most of Fulton County's urban development is within the city limits of Atlanta, a vast expansion of outlying population is forecast with a predictable increase in demand for services and facilities. The costs of providing county-wide services such as health, welfare, and court activities are far out-running the growth trend in revenues. DeKalb County is basically a "municipal county" providing the full range of city services, and there is no question about the need for future tax increases and new sources of revenue if first-class public services are to be provided. The outlying counties of Clayton and Gwinnett face the same financial pressures that have already beset fast growing suburban counties in other large metropolitan areas.

It is a fact of simple arithmetic that the local governments in Metropolitan Atlanta will need increases in existing tax rates (which means primarily the property tax) or completely new sources of revenue or both in the years ahead. This is by no means a unique situation -- every other major urban area in the nation faces, has faced, or will face the same financial problems. Most large urban centers have already added sales or payroll taxes and some have also added income taxes to their revenue sources. Efforts to get a sales tax for local governments in Georgia failed at the last session of the General Assembly but there will continue to be persistent pressures from the state's cities and urban counties.

The local situation is by no means as bleak as is often stated, however. Although tax increases and new revenue sources are both indicated, two favorable factors are obviously present, both of which have already been mentioned but need reiterating: 1) the area is rapidly increasing its income and wealth and hence its capacity to pay for expanded and improved public services; and 2) the present tax burden in the area is clearly not high compared with the tax load in other major urban centers. The local area has undoubtedly reached its limits in certain types of levies but not in others. If the people of the area want more and better local government services, they can clearly afford them.

Reliance on Property Tax

It would appear logical -- and it is hereby recommended -- that the local governments' support of MARTA's rapid transit system be achieved through an increase of the tax on property. There are three basic reasons for this recommendation:

1. The property tax is already available as a source. No additional legislation would be required to tap it for rapid transit financing. It is quite possible that the local governments will succeed in their efforts to get additional sources of revenue in the days ahead -- a sales tax, a payroll tax, an income tax or some other new source -- but the prospects at the moment are speculative and the need for a definite financial plan for rapid transit is immediate.

2. Moreover, if new sources of revenue are made available to the local governments, the proceeds will be needed for other purposes quite apart from rapid transit -- expanded current operations of the governments and of the school systems. As already noted, studies demonstrate the need for new sources of revenue whether or not property tax rates are raised for rapid transit or other pruposes.

   The property tax is not unduly burdensome on local taxpayers in Metropolitan Atlanta. Indeed the evidence is clear that the local property tax could be substantially raised and still be safely within the margin of reasonableness and economic feasibility.

   The governments of Metropolitan Atlanta in the aggregate have one of the lowest effective taxes on property of any local governments in major metropolitan areas in the United States. Local taxpayers pay considerably less on their property than taxpayers in major areas elsewhere. In short, there is excess capacity in this local revenue source at the present time.

3. Any payments made by local governments to MARTA under contract to underwrite the authority's bond issues must be based upon a specific millage rate — against local property if the MARTA bonds are to find a ready and acceptable market when offered for sale. Bond counsel agree that this pledge of a property tax levy is essential to assure the proper market reception of these bonds at a money-saving interest rate. General obligation bonds issued by local governments in behalf of MARTA, of course, would also be retired by property tax levies.

All local governments in Metropolitan Atlanta have good bond ratings based upon the strength of the economy and sound fiscal management. Supported by a specific millage rate on property, new bonds issued for rapid transit should enjoy favorable market acceptance which can result in savings of thousands and even millions of dollars in interest over the period of long-term financing.

It is patently unreasonable to anticipate that the local governments can support the additional obligation of underwriting the capital cost of rapid transit from their current budgets without some increases in taxes for that purpose. New sources of revenue are needed even without rapid transit, as already indicated. There will also be pressures for additional property tax increases without rapid transit. The fact remains, however, that the property tax is the most likely source of funds for underwriting the cost of rapid transit -- it is, as noted, an available source and one with additional capacities to produce.

The decision, of course, is the people's. The law establishing MARTA and authorizing the participation of local governments in the financing of the rapid transit system clearly states that any proposed financing that would result in the levy of a new or increased tax on property must be submitted to a referendum of all qualified voters to determine "whether or not the local government should so obligate itself to the extent of the dollar amount or amounts involved therein". The necessity of getting voter approval for such tax raises is regarded as highly desirable because it enables the people to determine the level of priority that they would put upon rapid transit vis-a-vis other types of public services.

Some question might be raised as to whether or not the property tax is regressive -- that is, falling with disapportionate burden upon persons with limited ability to pay. The point is arguable. In general, most taxes are regressive except the carefully graduated income tax and this source is not likely to become available for rapid transit financing in Atlanta in the near future. With the protection of the $2,000 homestead exemption, the obvious correlation between income and property values (including rentals) and the high proportion of all property taxes paid by nonresidential properties, the property tax is considerably less regressive on individuals than most forms of levy.

The point about Metropolitan Atlanta's relatively low property tax burden at the present time should be stressed. In 1964-65, Metropolitan Atlanta ranked 33rd out of the 38 largest metropolitan areas in the nation in per capita revenue to local governments from property sources. Atlanta's per capita load was only 74 percent as great as the median for all the areas. Property revenue as a percent of revenue from local sources and from all sources was lower in Metropolitan Atlanta than the overall median.

These points are shown in the following table:

Table 4. ATLANTA COMPARED WITH OTHER METROPOLITAN AREAS ON PROPERTY TAX PAYMENTS, 1964-65

	Metropolitan Atlanta 1/	38 Largest Metropolitan Areas (Median)
Per capita revenues to local governments from property sources	$95.52	$129.94
Property revenue as percent of revenue from local sources	59.6%	67.3%
Property revenue as percent of revenue from all sources	43.7%	48.6%

1/ All local governments in Metropolitan Atlanta combined.

Financing rapid transit through the property tax would involve a straightforward set of operations. The local governments would execute contracts with MARTA under which MARTA would agree to perform the functions of operating a rapid transit system and the governments would obligate themselves to underwrite the capital costs of the system under specified conditions and specified ceilings. As already described, one method of financing would be the issuance of general obligation bonds by the local governments with the payment of the proceeds to the authority, such bonds being supported by property tax levies within the constitional limitations established for such bonds. The alternative method would be the levy of specific millage rates to produce periodic payments to MARTA for the retirement of the principal of and interest on any revenue bond obligations issued by the authority for the purpose of financing the cost of the rapid transit system.

It is recognized, of course, that the property tax already carries the main burden of local government financing in Metropolitan Atlanta (as in most local governments). Approximately three-fourths of the local government revenues of the two central counties -- Fulton and DeKalb -- are derived from property tax receipts. (The City of Atlanta relies upon property taxes for only about one-fourth of its revenue, being forced to develop a wide range of additional sources to meet municipal obligations.) The property tax is a dependable and fast-growing revenue source and it will continue to be the mainstay of county government financing.

Under recent court rulings, counties in Georgia are required to carry all of their property taxes assessments at approximately 40 percent of market value. Fulton County has just completed the reevaluation of its assessment rolls to meet this requirement, with an accompanying downward adjustment in the tax rate (millage rate). DeKalb County has made no adjustment as yet and has advised that such an adjustment may not be necessary inasmuch as assessments are already fairly close to the 40 percent level. (Some estimates indicate that DeKalb County's assessment levels are closer to 50 percent of market value than 40 percent and some downward adjustment may subsequently be necessary, with an upward adjustment in millage.) Both Clayton and Gwinnett counties already carry their assessments at the 40 percent level.

Financing the Basic System

As already stated, it is recommended that the basic 30-mile system be financed entirely by Fulton and DeKalb counties until the subsequent decision is made to extend the system out to its full 52-mile length. If and when the full extension is undertaken, it is recommended that Clayton and Gwinnett counties participate in the financing under arrangements that would enable them to pick up their pro rata share of the overall system, including the 36-mile basic program.

The recommended formula under which the capital cost of this basic system would be allocated between the two county governments has already been given. It is possible that an alternative formula might be considered that would break out the City of Atlanta as a separate jurisdiction for financing purposes, but it would appear more reasonable to proceed on the county basis. The rapid transit system clearly will extend beyond municipal boundaries and its implications will be felt over a broad area. It should be emphasized, of course, that residents of the City of Atlanta are also residents of both Fulton and DeKalb counties and they would pay their proportionate share of county levies. Under a system of financing that utilizes the county property tax, the large commercial and industrial installations in the City of Atlanta would carry a major share of the overall burden.

As already noted, it is assumed that the local share of financing MARTA's capital costs on the 30-mile system would be $199,000,000, plus interest. Under the recommended formula, Fulton County would pay approximately three-fourths of this amount and DeKalb County would pay one-fourth.

The following table shows these relative shares of capital costs under the two methods of financing:

	Share of Capital Costs	Amount Of Capital Costs (Principal)
Fulton County	73.5%	$146,265,000
DeKalb County	26.5	52,735,000
Total	100.0%	$199,000,000

A more detailed analysis will now be made of the year-by-year impact of rapid transit financing upon the two governments. This analysis will cover three alternative programs -- the financing of the system through the issuance of bonds by the authority based upon payments from the local governments for bond amortization, the issuance of general obligation bonds by the governments themselves with proceeds paid over to MARTA, and a mixed system in which both methods might be employed.

Issuance of Bonds by MARTA

The method of contracting between the local governments and MARTA to produce funds with which the authority can meet annual carrying charges on its capital bond issues involves a straightforward procedure. To effectuate this plan, voters would be asked to authorize the levying of the necessary tax (millage) rates with ceilings as to both rates and the total amounts of funds to be raised. No local bond capacities would be involved inasmuch as the bonds would be issued by MARTA rather than the local governments. The tax rate would be applied against the net rather than the gross tax digest, which means that it would be applicable to a taxpayer's assessment after deduction of the homestead exemption of $2,000.

Table 5, following, breaks down the share of MARTA's projected carrying charges (based upon the tentative schedule of bond issues set forth earlier) that would be indicated for each of the two central counties in connection with the 30-mile system:

Table 5. INDICATED COUNTY SHARES OF MARTA BOND CARRYING CHARGES, 30-MILE SYSTEM
(in thousands of dollars)

	Indicated Shares		Total
Year	Fulton County	DeKalb County	Annual Cost
1969	$ 1,341	$ 484	$ 1,825
1970	1,341	484	1,825
1971	3,219	1,161	4,380
1972	3,219	1,161	4,380
1973	5,902	2,128	8,030
1974	5,678	2,047	7,725
1975	8,361	3,014	11,375
1976	9,656	3,482	13,138
1977	10,139	3,656	13,795
1978	9,691	3,494	13,185
1979	9,691	3,494	13,185
1980	9.243	3,332	12,575
1981	8,974	3,235	12,209
1982	8,893	3,206	12,099

(These level annual payments to the complete retirement of bond issues beginning in 1997).

As noted, relatively small payments would be required in the early years of construction of the transit system. MARTA's bond issues could be modest because of the initial availability of sizable Federal funds under the given assumption. Subsequently, however, the impact upon the local governments would be more substantial.

Following is the schedule of millage rates that would need to be levied against the net property digests in each county in order to meet the indicated payments set forth in Table 5, above:

	Fulton	DeKalb
1969	.7	.4
1970	.7	.4
1971	1.6	.9
1972	1.5	.9
1973	2.6	1.5
1974	2.4	1.3
1975	3.3	1.8
1976	3.6	1.9
1977	3.6	1.9
1978	3.2	1.7
1979	3.0	1.6
1980	2.7	1.4
1981	2.5	1.2
1982	2.4	1.1
1983	2.2	1.1

It is possible and it would be desirable to reschedule these levies to provide more substantial payments in the earlier years and lower payments during the peak years between 1975 and 1978. It is recommended that an alternative schedule of taxes might be considered, which would make possible a ceiling of only three mills in Fulton County in the peak years and a ceiling of 1.6 mills in DeKalb County. This revised schedule would produce more funds in the earlier years than would be needed if the MARTA bond program set forth herein is followed. However, this bond program could be revised to make use of the available funds in the early years and advance purchases of land with these additional funds could well save a substantial amount of money in face of rising land values in the area.

The recommended schedule of county payments and millage rates for MARTA bond financing is set forth below in Table 6. The peak year payments would be substantially reduced under this schedule and the peak impact upon local taxpayers would be corrospondingly less.

Table 6. RECOMMENDED COUNTY PAYMENTS AND MILLAGE RATES, MARTA BOND ALTERNATIVES

	Millage Rates		Dollar Amounts (000)	
	Fulton County	DeKalb County	Fulton County	DeKalb County
1969	1.5	1.0	$2,783	$1,081
1970	1.5	1.0	2,925	1,158
1971	2.0	1.1	4,098	1,367
1972	2.0	1.1	4,324	1,489
1973	2.5	1.4	5,698	2,054
1974	2.5	1.4	6,015	2,169
1975	3.0	1.6	7,629	2,751
1976	3.0	1.6	8,064	2,907
1977	3.0	1.6	8,526	3,074
1978	3.0	1.6	9,033	3,257
1979	3.0	1.5	9,576	3,453
1980	2.5	1.3	8,459	3,048
1981	2.5	1.2	8,973	3,235
1982	2.3	1.1	8,893	3,206
1983	2.2	1.1	8,893	3,206

(These level annual payments to the complete retirement of bond issues beginning in 1997)

This schedule of financing would not involve heavy burdens upon the individual taxpayer (although most taxpayers probably would argue that all additional taxes are burdensome). In the first two years of MARTA's construction, the owner of a $20,000 house in Fulton County would pay only $9.00 a year and the comparable property owner in DeKalb County would pay only $6.00 (assuming that DeKalb's rate assessment is also 40 percent of market value, as in Fulton). In the years of peak tax impact (1975-79), the burden upon the average home owner in each county would still be modest, as shown in the following schedule:

	Fulton	DeKalb
Maximum millage needed for MARTA bond financing	3.0	1.6
Years of maximum	1975-79	1975-79
Annual cost of maximum millage to owner of home with market value of:		
$15,000	$12.00	$ 6.40
$20,000	$18.00	$ 9.60
$25,000	$24.00	$12.80

In Chart II, later, the impact of these millage rates upon a wider variety of property owners is shown compared with the similar impact of rapid transit financing under alternative systems. Commercial and industrial properties, of course, would pay a large part of the total bill. Under the schedule of payments set forth above, most home owners in Fulton County would pay substantially less than one-tenth of one percent of the market value of their property for the construction of the rapid transit system each year, and the tax bite in DeKalb County would be about half that rate. This would be true in the peak years when the millages levied for support of rapid transit would be at their maximum.

Financing by GO Bonds

The process of issuing general obligation bonds which are retired by levies against assessed property is the conventional method of raising capital funds by local governments. In Georgia a vote of the people is required on all general obligation bond issues. Counties operate under a constitutional limitation that places a ceiling upon the amount of GO bonds outstanding at seven percent of the gross property digest (calculated without deductions for homestead exemptions).

There would be an obvious advantage to the use of GO bonds by Fulton and DeKalb counties in meeting the counties' obligations for MARTA's capital cost. These bonds, based upon the full faith and credit of local governments, usually carry a lower interest rate than bonds issued by special authorities. Bond counsel estimates that the savings from going on GO bond route rather than the MARTA channels might be as much as one-half of one percent on the interest charge, which could mean a saving of as much as \$15,000,000 over the years on the projected issues of \$199,000.000. (The 30-year GO bonds are estimated to have a potential interest rate of four percent compared with a four and one-half percent estimate for the MARTA issues).

On the other hand, there are some obvious disadvantages to the GO method for rapid transit financing:

1. The GO bonds issued by local governments for rapid transit would have to be charged up against the bond capacities of each government. This simply means that rapid transit would be competing directly with streets, schools, parks, water, sewer and other public needs for capital funds.

   Although both Fulton and DeKalb counties have excess capacities at the present time, both have backlogs of capital needs. The amounts of capacity available for rapid transit will not be large enough to cover the projected requirements, as discussed later.

2. It would be difficult to schedule the issuance of GO bonds to meet the requirements of the MARTA drawdown schedule. Rapid transit bond needs would have to be considered as part of larger public issues covering a variety of other local government needs. There is an understandable reluctance of government leaders to go to the people with proposals for GO bond issues too frequently.

   Moreover, it would be difficult if not impossible to make a commitment with MARTA ahead of time that voters at a future date will approve GO bond issues for rapid transit. In light of the size of rapid transit requirements, it would not be impossible to meet all of these needs through a single GO bond issue, and this would require subsequent votes by the people for which no prior commitment could be made in the MARTA contract.

MARTA does not, of course, have taxing power of its own. If it were able to levy its own tax on property within the rapid transit district, its bond issues would have the status of GO bonds. This is a method utilized in San Francisco for the Bay Area Rapid Transit System. Locally, if GO bonds are issued, they must be issues of the local government.

As already noted, there is not in prospect a sufficient bonding capacity in Fulton and DeKalb counties to meet the full requirements of these jurisdictions for MARTA's capital financing, assuming that the present level of assessments is held at 40 percent of market value. Both counties have substantial unused capacities, however, and at least part of the rapid transit needs could be met from this source.

Unused Bond Capacities. With its property assessments now pegged at 40 percent of market value, Fulton County has a bonding capacity, over and above outstanding issues, totaling more than $80,000,000. The combination of annual bond retirements and increased value in the tax digest will add capacity at a rate of about $3,000,000 per year, which means an additional $30,000,000 in capacity over the next 10 years (during the time that MARTA would be needing funds for construction purposes). However, Fulton County has a range of capital improvement needs that must be met by additional GO bond issues in the immediate future. It might be reasonable to expect that as much as $60,000,000 or $70,000,000 could be made available from Fulton's bond capacity for rapid transit purposes over the next decade, which would represent about one-half of the county's potential obligation to MARTA.

DeKalb County has unused bonding capacity of about $30,000,000 and it annually is increasing by about $2,500,000, which would add another $25,000,000 over the next ten years. DeKalb also has a range of pressing capital improvement needs coming up in the near future. It is possible that as much as $25,000,000 could be made available for rapid transit purposes, which again would give about one-half the amount that MARTA would need from this county.

It is possible that the courts, ruling on cases now before them, might hold that all property in Georgia must go on the assessment rolls at 100 percent of market value, as specifically stipulated in the state constitution. If this happens, the bonding capacities of Fulton and DeKalb counties would be more than doubled and there would be ample capacities for fully financing rapid transit as well as meeting other capital improvement needs.

As already noted, GO bond financing can save money through a reduction in the interest rate. However, the millage levied for the servicing of GO bonds is applied against the gross rather than the net digest -- and this means that the homestead exemption is not applicable. The owner of a low or modestly priced house might pay more tax on his gross assessment with a lower millage rate than he would if the homestead exemption applied but the millage rate was higher. Commercial properties, on the other hand, would benefit more from the lower millage rate made possible under GO financing than MARTA financing because no homestead exemption is involved either way.

In Table 7, on the next page the county payments and millage rates are set forth that would be recommended if GO bond financing is utilized for rapid transit. Again it is suggested that higher tax rates be established in the earlier years than actually required, in order to reduce the peak loads at later years.

Table 7. RECOMMENDED COUNTY PAYMENTS AND MILLAGE RATES, GOVERNMENT OBLIGATION BOND ALTERNATIVE

	Millage Rates		Dollar Amounts (000)	
	Fulton County	DeKalb County	Fulton County	DeKalb County
1969	1.5	1.0	$3,015	$1,230
1970	1.5	1.0	3,162	1,312
1971	2.0	1.1	4,420	1,545
1972	2.0	1.1	4,654	1,653
1973	2.5	1.4	6,120	2,260
1974	2.5	1.4	6,448	2,416
1975	2.5	1.3	6,800	2,452
1976	2.5	1.3	7,170	2,585
1977	2.5	1.3	7,568	2,729
1978	2.5	1.3	8,000	2,884
1979	2.4	1.2	8,124	2,929
1980	2.3	1.1	8,234	2,968
1981	2.1	1.0	7,959	2,870
1982	2.0	1.0	8,026	2,894
1983	1.9	.9	8,076	2,912

(The level annual payments to the complete retirement of bond issues beginning in 1997)

It is to be noted that the peak millage requirements under GO financing would be substantially lower than in the case of government payments to underwrite MARTA bond issues. This is true because the overall financing cost is lower and the gross rather than the net digest is used as basis for the calculations. The lower interest charges are by all odds the most important factor in this lower impact, the difference between gross and net digest being relatively small. As already mentioned, however, the reduced millage rate does not necessarily produce a lower tax for the residential taxpayer because the homestead exemption is not applicable. Following are representative figures on the tax impact of the maximum millage under GO bond financing, and these figures might be compared with the earlier figures for servicing MARTA revenue bonds:

	Fulton	DeKalb
Maximum millage needed for GO Bond financing	2.5	1.4
Years of maximum	1973-78	1973-74
Annual cost of maximum millage to owner of loan with market value of:		
$15.00	$15.00	$ 8.40
20.00	$20.00	$11.20
25.00	$25.00	$14.00

The projected gross and net tax digests/used as a basis for all of the foregoing calculations are shown in Chart 2.

Combination of Approaches

There is no reason, of course, why both methods of financing might not be employed by the local governments in meeting their obligations to MARTA for constructing the rapid transit system -- the collection of property taxes to support the issuance of MARTA bonds plus the issuance of general obligation bonds by the governments themselves.

The act establishing MARTA clearly recognized this possibility, as follows:

> "A local government may elect any method provided in this section to finance the participation required of it in whole or in part, and the election of one method shall not preclude the election of another method with respect thereto or with respect to any additional or supplementary participation determined to be necessary."

As a purely practical matter, there would be a number of distinct advantages to both Fulton and DeKalb counties in employing both methods. It would make possible the use of available GO bond capacity with the consequent saving in interest charges but it would not demand too much of that capacity in competition with other capital improvement needs. It would give each government greater flexibility in handling their finance programs. Items for rapid transit could be included within the schedule of purposes for larger GO bond issues when the timing of these issues fits into the MARTA drawdown schedule. If by chance a GO bond issue fails (or voter approval is not received for the mass transit item), the county would be in a position to utilize its alternate authority to levy a millage rate for underwriting bonds issued by MARTA itself. Both the governments and MARTA would be in a better position to take advantage of favorable conditions in the bond market for either type of issue.

Moreover, this type of flexible financing policy might be easier to explain to the public and to obtain public approval. The proposition to be submitted at a public referendum could stipulate a maximum dollar commitment for rapid transit, such funds to be obtained either through general obligation bonds or through a millage rate pledge to underwrite MARTA bonds, and a ceiling could be established on the millage rate that might be levied for this purpose. The people would, of course, retain the right to vote on the GO bonds but the initial approval of the proposition by public referendum would give government leaders the discretion as to which route to follow in meeting the MARTA commitments.

Another particularly important advantage would be the opportunity offered to obtain some if not a substantial amount of the funds needed without an increase in the current tax rate. Upon approval of the voters, GO bonds are frequently issued without incurring a tax raise simply because the retirement of outstanding issues and the increase in the property tax digest makes it possible to absorb additional service charges within the existing rates.

It is possible that a substantial amount of both governments' commitments to MARTA might be met with little or no tax raise under such favorable circumstances. For example, Fulton County's share of the $25,000,000 tentatively scheduled as needed by MARTA from the local governments in 1969 would call for an annual servicing charge on GO bonds during the first five years (when sinking funds are built up) of about $1,261,000. This would represent only .6 of a mill on the gross tax digest, which might well be absorbed within the current bond servicing millage in that year. DeKalb's share of the same issue would cost $455,000 per year in the first five years, which would represent only .3 of a mill in 1969 and less thereafter as the tax digest increases.

Again, in 1971, Fulton's share of the $35,000,000 MARTA requirement could be handled through a GO bond which would represent only one mill on the 1971 digest, and DeKalb's share in the same issue would represent only .5 of a mill. Depending on other financial transactions at the time, these charges might well be covered all or in part by bond levies already outstanding.

It is strongly recommended that MARTA in turn propose to the local governments that both methods of financing be used in meeting the financial commitments for rapid transit. This recommendation is a corollary to the earlier one that the property tax should be the exclusive source of funds for this purpose.

It is not possible, of course, to make any precise estimate of the tax rate implications of a combination approach. Certainly the tax impact would be less than that shown for the MARTA bond route, and it could be even less than that shown for GO bond financing.

A Note On Atlanta. There does not appear to be any advantage in breaking out the City of Atlanta as a separate jurisdiction for purposes of financing rapid transit. Inasmuch as Atlanta lies almost completely within Fulton County, it would fully participate in the financial program. Atlanta's property taxpayers now account for slightly more than 80 percent of all property taxes collected by Fulton County, and this general ratio is likely to hold in the future.

The point should be added that Atlanta's financial condition is considerably more difficult than that of the two counties. It has a heavy backlog of capital improvement needs and it faces recurring deficits on an operating basis unless new sources of revenue are made available.

There is no doubt that the City of Atlanta would carry its full share of rapid transit financing under the county finance plans. The City of Atlanta's tax base will account for about 60 percent of the total cost.

Prospects for Full System

The full 52-mile system that the engineers have designed would cost $479,000,000 and take 12 years to build (with completion set for 1981). It would reach deep into Clayton and Gwinnett counties and would also have a considerably broader coverage of the Atlanta-Fulton-DeKalb area.

Assuming that the 30-mile system is well underway with $100,000,000 in Federal funds available, the question is how much additional Federal money would be required to move directly into the 52-mile program without greatly increasing the local outlay (in total or on an annual basis). If in 1972 or 1973 it would become clear that another $50,000,000 in Federal funds would be made available, this would not be enough to support the 52-mile total system without a heavy increase in the local load. With the Federal government at $150,000,000 and the state at $48,000,000 (10 percent of the total), the local share would be $281,000,000, which is considered to be above the local area's reasonable capacity based on conservative forecasts and assumptions.

If in 1972 or 1973 it becomes clear that as much as $200,000,000 in total Federal funds might be made available -- an additional $100,000 over and above the same amount already made available for the 30-mile system -- the local share would not be much greater for the 52-mile system than for the 30-mile system. Here is the overall breakdown:

	Amount (000,000)	Percent
Local	$231	48.2%
State	48	10.0
Federal	200	41.8
	$479	100.0%

This is not an improbable assumption if Federal funds ever do break loose on a larger scale than at present. Indeed, as mentioned earlier, it is presently estimated in Washington that $500,000,000 a year will be needed on a regular basis to meet U.S. metropolitan transit needs rather than the $200,000,000 level currently projected for the 1969 and 1970 fiscal years. MARTA's share in 1973 and thereafter could run as high as $50,000,000 or $60,000,000 a year.

The availability of $200,000,000 in Federal funds could swing the 52-mile system with an overall outlay for the two central governments only slightly higher than the 30-mile requirement. The point is that all four county governments would now share the totals, with the following distribution of the burden based on the formula presented earlier:

	30-Mile System (000,000)	52-Mile System (000,000)
Fulton County	$146.3	$154.1
DeKalb County	52.7	55.7
Clayton County		13.6
Gwinnett County		7.6
	$199.0	$231.0

It is assumed on a preliminary basis that the 51-mile system would call for at least seven MARTA bond issues compared with the six that might be scheduled for the 30-mile system. The carrying charges will be higher, of course, but four governments will be sharing the costs.

In Table 8, the bond issue and carrying charge schedules of the two systems are compared. (The MARTA bond schedule is used as a base.)

Table 8. COMPARISON OF LOCAL COSTS, 30-MILE AND 52-MILE SYSTEMS IN SEQUENCE
(000)

	Bond Issues		Carrying Changes	
	30-Mile	52-Mile	30-Mile	51-Mile
1969	$ 25,000	$ 25,000	$ 1,825	$ 1,825
1970			1,825	1,825
1971	35,000	35,000	4,380	4,380
1972			4,380	4,380
1973	50,000	40,000	8,030	6,995
1974			7,725	6,995
1975	50,000	40,000	11,375	9,915
1976	30,000		13,138	9,488
1977	9,000	40,000	13,795	12,408
1978			13,185	11,920
1979		30,000	13,185	14,110
1980		21,000	12,575	15,155
1981			12,209	15,155
1982			12,099	15,155
1983			12,099	14,667 1/
et seq	$199,000	$231,000		

1/ Drops to $14,301,000 in 1984 and levels off at $14,045,000 in 1985

The reason for the lower local requirements for the 52-mile system in the 1973-76 period, of course, is the projected availability of $100,000,000 more in Federal money. This fact, plus the sharing of the local cost by four instead of two governments, would produce an actually lower demand upon Fulton and DeKalb for the larger system in a number of years.

Table 9. COMPARATIVE MILLAGE RATES NEEDED TO SUPPORT 30-MILE AND 52-MILE SYSTEMS

	30-Mile System 1/		52-Mile System 1/			
	Fulton	DeKalb	Fulton	DeKalb	Clayton	Gwinnett
1969	1.5	1.0	1.5	1.0		
1970	1.5	1.0	1.5	1.0		
1971	2.0	1.1	2.0	1.1		
1972	2.0	1.1	2.0	1.1		
1973	2.5	1.4	2.0	1.1	1.5	1.5
1974	2.5	1.4	2.0	1.1	1.5	1.5
1975	3.0	1.6	2.5	1.4	1.5	1.5
1976	3.0	1.6	2.5	1.4	1.5	1.5
1977	3.0	1.6	3.0	1.6	1.5	1.5
1978	3.0	1.6	3.0	1.6	1.5	1.5
1979	3.0	1.5	2.8	1.4	1.5	1.5
1980	2.5	1.3	2.8	1.4	1.5	1.5
1981	2.5	1.2	2.6	1.3	1.5	1.5
1982	2.3	1.1	2.4	1.2	1.5	1.5
1983 et seq	2.2	1.1	2.3	1.1	1.5	1.5

1/ From Table 6. Assumes $100,000,000 in Federal and $33,000,000 in state funds.

2/ Assumes $200,000,000 in Federal and $48,000,000 in state funds.

All of the indicated millage rates (or their equivalents) will drop after 1983 -- for all governments. Estimates are not available, however, because tax digests have not been forecasted beyond that year. Bond service charges will remain constant and property digests will continue to rise, however.

<u>A Note on Clayton and Gwinnett.</u> Until the decision is made to go to the 52-mile system, Clayton and Gwinnett counties would not be involved. In order to keep a ceiling on the cost of the system to these governments even after they are brought into the picture (assumed to be in 1973), their participation is calculated in a lower rate up to 1983 than their ultimate share of the total cost would indicate. This simply means a deferral of the main impact on these outlying governments until the system is actually in operation -- and their tax base more able to handle the burden. Even so, the peak impact would never exceed the 1.5 mills shown in Table 9.

Curtailment of Federal Funds. Consideration should be given to the effects of a possible curtailment of Federal funds beyond the first two years of the MARTA construction program in 1969 and 1970. The question is what would happen if the second $50,000,000 does not become available?

The answer is that a decision can be made (presumably in 1970 when the facts are known) to build a smaller system than the 30-mile system, if it is assumed that the ceiling on local funds should be held at the previously established levels. The engineers have designed a 21-mile "operational" system that can operate without loss at the fare box and still provide full-scale transit service in the heart of the metropolitan area. This system would cost $276,000,000 and would take approximately the same amount of local funds as the 30-mile system:

	Amount (000,000)	Percent
Local	$199	72.1%
State	27	10.0
Federal	50	17.9
	$276	100.0%

From the engineering standpoint, the 21-mile operational system could be built in six years instead of eight. However, the local financing would have to extend over the eight-year period to stay within the same annual outlays.

The possibility of this 21-mile operational system is mentioned because it would provide a reasonable option for public decision if Federal funds are curtailed. The 21-mile system would itself be a massive operation capable of making a major impact upon the area's circulation problems.

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Mr. R. Earl Landers

FINANCING THE CONSTRUCTION OF
ATLANTA'S RAPID TRANSIT SYSTEM

Prepared for
Atlanta Region Metropolitan Planning Commission
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