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 unlike streets and schools in that they produce operating revenues, few systems yield 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.

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.

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). Although other parts of the report describe a five-county area that includes Cobb County, the financial analysis excludes Cobb which is not presently participating in the MARTA program.

In analyzing the financial aspects of the projected rapid transit system of Metropolitan Atlanta, three basic premises have been established:

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

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

Primary Local Commitment. 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 is not possible accurately to predict how much Federal money might become available. It is hypothetically possible under Federal formulas that two-thirds of the cost 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 at that scale. Moreover, under present regulations Federal funds can be committed for only two years at a time.

The truth is 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 Federal funds that do become available but these funds must 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 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. For purposes of planning, it is reasonable to assume that the state will indeed contribute 10 percent of the cost of the Atlanta system. This still leaves the main burden on local shoulders. This is the way in which the operating rapid transit systems in other big U.S. cities have been built -- primarily with local funds. On the other hand, the existence of the Federal program is itself testimony to a clear recognition that new rapid transit systems in the future are not likely to be built without some of the costs being shared at the Federal level. The burden on the local governments is too great on top of mounting demands for a whole range of other services and facilities.

It can be hoped that large-scale Federal funds might eventually be made available for this purpose in Metropolitan Atlanta. However, to plan on this basis would invite disappointment and even disaster if this hope were not realized -- and would also represent a denial of the high priority that the public has already put upon rapid transit through its approval of the MARTA program so far.

Commitment to Full-Scale System. A 30-mile basic system has been designed 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 practical solution of its desperate circulation 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. It will cost approximately $332,000,000 to build, assuming that construction gets underway in 1969.

Flexible Development Policy. 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 where this report, the 52-mile system would cost $479,000,000. (This system would include extensions to the basic 30-mile system within the two central 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, 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, and be undertaken beyond the 30-mile system as more Federal money becomes available to match state and local funds.

Allocation of Local Costs

In determining the proportion of the local share of MARTA's capital costs that should be allocated to each of the participating local governments, the objective should be so far as possible to develop a formula based on the benefits that the system will provide to each jurisdiction. 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 throughtout 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. 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 overriding 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.

The 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.

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.

A fair and equitable formula for allocating rapid transit costs must be based on indexes that measure 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 indexes by itself would provide the basis for a fair and equitable cost distribution, but 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, well documented and authenticated from official sources.

Two additional considerations would appear essential. 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 presumably 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 is the need for 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. This weighting is accomplished by constructing percentage distribution tables to show each county's share of each element (population, tax digest and employment) and then including each table once, twice or three times to reflect its relative importance in the formula.

It was determined that employment should be given the greatest weight (3) because it most nearly measures the economic strength of the various jurisdications. 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 real and personal 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). Transit patronage would of course bear some direct relationship to population. However 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 residential densities near the transit corridors would be more intense.

In Table 1, these three basic factors are set forth in statistical form in terms both of the actual numbers and of the percent distributions among each of the four counties participating in the MARTA program. These figures are shown for a present (1965) and a future year (1983).

The proposed allocation formula is the composite index that combines all of these factors at the assigned weights. It is expressed in terms of the percentage share of total capital cost that would be allocated to each jurisdiction, as follows:

Table 1. ELEMENTS IN RECOMMENDED FORMULA FOR ALLOCATING MARTA CONSTRUCTION COST AMONG LOCAL COUNTIES, ACTUAL 1965 AND PROJECTED 1983

	Population (1)			
	Numbers (000)		Percent	
	1965	1983	1965	1983
Fulton	587.4	861.0	57.1%	50.5%
DeKalb	319.6	582.7	31.1	34.2
Clayton	69.2	153.3	6.7	9.0
Gwinnett	52.1	107.1	5.1	6.3
Total	1,028.3	1,704.1	100.0%	100.0%

	Tax Digest (2)			
	Amount (000,000)		Percent	
	1965	1983	1965	1983
Fulton	$ 3,959	$10,360	63.1%	56.1%
DeKalb	1,778	5,848	28.4	31.7
Clayton	350	1,437	5.6	7.8
Gwinnett	184	816	2.9	4.4
Total	$ 6,271	$18,461	100.0%	100.0%

	Employment (3)			
	Numbers (000)		Percent	
	1965	1983	1965	1983
Fulton	349.6	556.1	78.8%	72.6%
DeKalb	68.1	147.3	15.3	19.2
Clayton	18.2	40.1	4.1	5.3
Gwinnett	8.0	22.4	1.8	2.9
Total	443.9	765.9	100.0%	100.0%

NOTES: Relative weights used in totaling percentages in the allocation formula are shown in parentheses. Both 1965 and 1983 percentage figures are weighted accordingly. The property tax digests were put on a comparable basis for each jurisdiction (100 percent of market value).

Proposed allocation formula:	
Fulton County	66.7%
DeKalb County	24.1
Clayton County	5.9
Gwinnett County	3.3
	100.0%

Each figure shown in Table 1 was calculated on the basis of extensive research utilizing all available data from official sources. However, it was necessary to use independent judgment in arriving at some of the estimates, particularly the forecasts for future years, and the responsibility for them rests solely with the consultant. All of the data used can be documented and the methods can be easily tested and evaluated.

As noted earlier, the basic 30-mile system would lie entirely within the boundaries of Fulton and DeKalb counties. It would therefore 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. Presumably they would then be asked to pay their full shares of the total system called for in the formula, 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. On balance, however, the formula would appear to be fair and equitable. Although some obvious elements might be considered for addition -- 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.

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, have 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 a 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 might be assumed, however, that at least an additional $50,000,000 might be forthcoming forllowing the initial allotments in the 1969 and 1970 fiscal years. Even if Viet Nam or other international crises remain, it is reasonable 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 a second $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.

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 be made available on a uniform basis, with the availability of these funds extending over the nine-year period of construction. 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: 1) bonds issued by MARTA itself based upon the local governments' underwriting the payment of principal and interest; and 2) 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 contractual 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 protecturing 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 palnning 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/ (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 preliminarily set forth, does not directly match the schedule of fund needs. Both sets of figures are necessarily tentative and preliminary and will be altered in the course of time. The development of such a base 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 in 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 contracts 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 advisors agree that a spread of perhaps one-half of one percent should reasonably be assumed. In these calculations, therefore, the interest rate on the MARTA revenue bonds is set at 4½ percent and the rate on GO bonds at 4 percent per annum.

The annual cost of carrying rapid transit bonds issued at the local level are shown in Table 3.

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

	Principal Amount of Bonds	Annual Costs[1/] MARTA Issues	Annual Costs[1/] GO Issues
1969	$ 25,000,000	$ 1,824,000	$ 1,720,000
1970		1,824,000	1,720,000
1971	35,000,000	4,380,000	4,127,000
1972		4,380,000	4,127,000
1973	50,000,000	8,030,000	7,567,000
1974		7,725,000	7,279,000
1975	50,000,000	11,376,000	10,719,000
1976	30,000,000	13,137,000	12,378,000
1977	9,000,000	13,792,000	12,995,000
1978		13,180,000	12,419,000
1979		13,180,000	12,419,000
1980		12,569,000	11,843,000
1981		12,206,000	11,501,000
1982		12,099,000	11,400,000
		(Level payments continuing until bonds are retired)	
Total	$199,000,000	$362,986,000	$342,020,000

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 sinking fund reserve is provided for in each of the first five years of each issue amounting to 20 percent per year, and at the end of five years each issue then reverts back to 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 a heavy additional burden. 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 shares of the cost only if the system is extended outward to its full 52 miles.

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.

All local governments face a cost-revenue squeeze in the future. The range of public services being offered is widening and the unit costs of providing these services is 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 revenues 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 central city activity and the growing demands for high-quality services commensurate with big city status have all been important factors in Atlanta's financial difficulties.

Diction

Local counties have been also impacted, 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 major 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 out-running the growth trends in revenues. DeKalb County is basically a "municipal county" providing the full range of city services, and there will be pressures for future tax increases and new sources of revenue if first-class public services will continue 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. 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 bleak, however. Although tax increases and new revenue sources are both indicated, two favorable factors are clearly present: 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 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 afford them.

Reliance on Property Tax

Studies indicate that financing rapid transit in Metropolitan Atlanta will clearly call for new revenue sources or additions to existing taxes. 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 in 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. The local governments will probably 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 timing is uncertain and the need for a definite financial plan for rapid transit is immediate.

2. Even when new sources of revenue are made available to the local governments, the proceeds will be needed for other purposes 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 purposes.

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

3. The contracts under which the local governments would underwrite the revenue bonds issued by MARTA (if that is the financing method that is adopted) might need to contain a pledge of a specific millage rate against local property if the MARTA bonds are to find the most favorable market when offered for sale. Bond advisors suggest that this pledge of a property tax levy might help 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.

As already indicated, there will be pressures for additional property tax increases even without rapid transit and even if brand-new sources of revenue are made available. 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 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". This provision clearly 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 the property tax is regressive -- that is, whether it falls with disproportionate 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 latter source is not likely to become available for rapid transit financing in Atlanta in the near future. The protection afforded low-income people by 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 would all point to the conclusion that 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. (The term "local governments" here includes all general governments, agencies, authorities, special districts, and school systems.) 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 comparisons:

	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.

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. Equally important, virtually the entire burden of local public school financing falls on the property tax, and school millage rates actually exceed those for general government operations. The property tax is a dependable and fast-growing revenue source, however, and it can sustain additional responsibilities as well as remain the mainstay of county government and school financing.

Under recent court rulings, counties in Georgia are required to carry all of their property tax assessments at approximately 40 percent of market value. Fulton County has just completed the revaluation 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 and the advice is that such an adjustment may not be necessary inasmuch as assessments are already within the "tolerance limits" of the 40 percent figure. Both Clayton and Gwinnett counties already carry their assessments generally 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 30-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. Residents of the City of Atlanta, of course, 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. The following table shows these relative shares of local capital costs the two county governments would assume:

	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 approaches: 1) the financing of the system through the issuance of bonds by MARTA based upon payments from the local governments for bond amortization; 2) the issuance of general obligation (GO) bonds by the governments themselves with proceeds paid over to MARTA; and 3) 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 interest 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 4 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 4. INDICATED COUNTY SHARES OF MARTA BOND CARRYING CHARGES, 30-MILE SYSTEM
(in thousands of dollars)

Year	Indicated Shares: Fulton County	Indicated Shares: DeKalb County	Total Annual Cost
1969	$ 1,341	$ 483	$ 1,824
1970	1,341	483	1,824
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	3,015	11,376
1976	9,656	3,481	13,137
1977	10,137	3,655	13,792
1978	9,687	3,493	13,180
1979	9,687	3,493	13,180
1980	9,238	3,331	12,569
1981	8,971	3,235	12,206
1982	8,893	3,206	12,099
	(Level payments continuing until bonds are retired beginning in 1998)		
Total	$266,795	$96,191	$362,986

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 4. One mill, it should be noted, is equivalent to one-tenth of one percent, which can be translated in terms of $1.00 per $1,000 of assessed valuation.

	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

(Then continued reductions as tax digests increase and payments remain level)

Millage rates in this analysis have not been calculated beyond 1983 because tax digest projections have not been made. Continued digest increases are anticipated in each county, however. The projected digests for all four counties between 1969 and 1983 are given in Table 5. It would be highly 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 3.0 mills in Fulton County in the peakyears 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, the construction cost schedule could be revised to make use of the available funds in the early years, and advance purchases of land with these additional funds could possibly save a substantial amount of money in face of rising land values in the area.

Table 5. PROJECTED PROPERTY TAX DIGESTS, LOCAL COUNTIES, 1969-83
(In millions of dollars)

	Gross Digest 1/				Net Digest 2/			
	Fulton	DeKalb	Clayton	Gwinnett	Fulton	DeKalb	Clayton	Gwinnett
1969	$2,010	$1,230	$188	$100	$1,855	$1,081	$148	$ 76
1970	$2,108	$1,312	$202	$108	$1,950	$1,158	$160	$ 82
1971	$2,210	$1,405	$219	$117	$2,049	$1,243	$175	$ 90
1972	$2,327	$1,503	$236	$128	$2,162	$1,335	$189	$100
1973	$2,448	$1,614	$255	$138	$2,279	$1,438	$206	$109
1974	$2,579	$1,726	$275	$150	$2,406	$1,545	$223	$120
1975	$2,720	$1,850	$297	$163	$2,543	$1,663	$242	$122
1976	$2,868	$1,983	$321	$177	$2,688	$1,791	$265	$145
1977	$3,027	$2,127	$348	$194	$2,842	$1,929	$289	$161
1978	$3,200	$2,281	$378	$210	$3,011	$2,078	$317	$176
1979	$3,385	$2,451	$408	$228	$3,192	$2,243	$344	$193
1980	$3,580	$2,629	$443	$250	$3,383	$2,416	$377	$213
1981	$3,790	$2,819	$481	$273	$3,589	$2,602	$413	$235
1982	$4,013	$3,025	$522	$297	$3,808	$2,804	$451	$258
1983	$4,251	$3,261	$566	$323	$4,043	$3,035	$493	$283

1/ The assessed value of all real and personal property and utilities less old age exemptions, taxed for support of general obligation bonds.

2/ The gross digest less homestead and personal property exemptions, taxed for support of operations (including potential support of MARTA bonds).

The recommended schedule of county payments and millage rates for MARTA bond financing is set forth in Table 6. The peak year payments would be substantially reduced under this schedule and the peak impact upon local taxpayers would be correspondingly 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
	(Subsequent reduction as tax digests continue to increase)		(Then level annual payments to the retirement of bond issues beginning 1998)	

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 con- 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 assessments in both counties are at 40 percent of market value). 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:		
$10,000	$ 6.00	$ 3.20
$15,000	$12.00	$ 6.40
$20,000	$18.00	$ 9.60
$25,000	$24.00	$12.80
$30,000	$30.00	$16.00

Commercial and industrial properties, of course, would pay a large part of the total bill (with the Federal government assuming a good part of the burden because local property taxes are deductible from Federal income taxes). 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 per year 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 the burden only in the peak years when the millages levied for support of rapid transit would be at their maximum.

It is recognized, of course, that property already carries a substantial tax load locally (although, as pointed out earlier, Metropolitan Atlanta taxpayers pay considerably less on their property than most residents in large urban areas). The present schedule of tax rates applicable in the City of Atlanta and Fulton and DeKalb counties is given in Table 7 (all taxes for servicing bonds are levied on gross assessments without homestead exemptions, and all operating millages except those for Atlanta's schools are levied on net assessments after exemptions).

Table 7. PROPERTY TAX RATES, CITY OF ATLANTA, FULTON AND DEKALB COUNTIES, 1967

	(In terms of millage)			
	Inside Atlanta		Outside Atlanta	
	Operations	Bonds	Operations	Bonds
City of Atlanta:				
General government	10.50	3.50 1/		
Schools	22.00	-		
Total	32.50	3.50		
Fulton County:				
General government	14.84 2/	1.56	14.84 2/	1.56
Schools	1.25	-	20.25	4.75
Total	16.09	1.56	35.09	6.31
DeKalb County:				
General government	8.45 2/	2.00	9.75 2/	2.00
Schools	-	-	18.00	4.00
Total	8.45	2.00	27.50	6.00

1/ Includes bond service charges for both general government and schools.

2/ Includes .25 mills for state.

Atlanta taxpayers, of course, pay both city and county taxes. However, the city assessments are lower than those of the county's (real property, for example, is assessed at only 35 percent of market value in the city compared with a presumed 40 percent in the counties).

Financing by GO Bonds

The process of issuing general obligation (GO) bonds which are retired by levies against assessed valuation of 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 and personal property exemptions).

There would be some advantage to the use of GO bonds by Fulton and DeKalb counties in meeting the counties' obligations for MARTA's capital cost. These bonds are backed by the full faith and credit of local governments and (as already noted) usually carry a lower interest rate than bonds issued by special authorities.

On the other hand, there are some potential 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 large backlogs of capital needs. The amounts of capacity available for rapid transit will not be large enough to cover all of the projected requirements for transit and all other purposes, as discussed later.

2. It might be difficult to schedule the issuance of GO bonds to meet the full requirements of the MARTA drawdown schedule, if the GO route is exclusively used for transit financing, rapid transit bond needs would probably 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 would approve subsequent GO bond issues for rapid transit. In light of the size of rapid transit requirements, it would not be possible 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.

Available 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 values 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. Perhaps 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. This would represent about one-half of the county's potential obligation to MARTA.

DeKalb County currently has unused bonding capacity of about $30,000,000 and is increasing its capacity by about $2,500,000 per year, which would add another $25,000,000 over the next 10 years. However, DeKalb also has a range of pressing capital improvement needs coming up in the near future. As much as $25,000,000 might possibly be made available for rapid transit purposes, which again would give about 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 by state law. 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 tax rate 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, do not get the benefit of homestead exemption and would pay less tax under GO financing with its lower millage rate than under MARTA financing.

Table 8 sets forth the county payments and recommended millage rates 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 in later years.

Table 8. RECOMMENDED COUNTY PAYMENTS AND MILLAGE RATES, GENERAL 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
	(Subsequent reductions as tax digests continue to increase)		(Then level annual payments to the retirement of bond issues beginning in 1998)	

Assuming the lower interest rates on GO bonds, the peak millage requirements under GO financing would be lower than those required to underwrite MARTA bond issues. This is true both because the overall financing cost is lower and because the gross rather than the net digest is used. As already mentioned, the reduced millage rate does not necessarily produce a lower tax for the residential taxpayer inasmuch as 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 home with market value of:		
$10,000	$10.00	$ 5.60
$15,000	$15.00	$ 8.40
$20,000	$20.00	$11.20
$25,000	$25,00	$14.00
$30,000	$30.00	$16.80

Recommended: The Combination Approach

It is recommended that both methods of financing 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.

Voter approval could be sought for an overall dollar commitment to MARTA authorizing the governing bodies to use either or both methods to meet this commitment. It would seem clear that the act establishing MARTA recognized this possibility by stating:

> "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."

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 GO bond capacity whenever available 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 its financing 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 total GO bond issue fails (or voter approval is not received for the specific mass transit item in the bond schedule submitted to the public), 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 that would be provided in the contracts between the governments and MARTA, such funds to be obtained either through general obligation bonds or through a property tax pledge to underwrite MARTA bonds, and a ceiling could be established on the amount of principal and interest to be paid. 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 contractual commitments to MARTA.

Another important advantage would be the opportunity offered to obtain some 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 existing effective 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 tax levies already outstanding.

It is strongly recommended that MARTA 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 for GO bond financing on the straight-line basis shown in Table 8.

Prospects for Full System

The full 52-mile system would cost $479,000,000. 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. However, if it becomes clear that a total of $200,000,000 in Federal funds might be made available -- an additional $100,000,000 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 estimated that at least $500,000,000 a year will eventually 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 support the 52-mile system with an overall outlay for the two central governments only slightly higher than the 30-mile requirement. 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 52-mile system would call for at least seven MARTA bond issues compared with the six that might be scheduled for the 30-mile system. In Table 9, the bond issue and carrying charge schedules of the two systems are compared. (The MARTA rather than the GO bond schedule is used as a base.)

Table 9. COMPARISON OF LOCAL COSTS, 30-MILE AND 52-MILE SYSTEMS IN SEQUENCE (000)

	Bond Issues		Carrying Charges	
	30-Mile	52-Mile	30-Mile	52-Mile
1969	$ 25,000	$ 25,000	$ 1,824	$ 1,824
1970			1,824	1,824
1971	35,000	35,000	4,380	4,380
1972			4,380	4,380
1973	50,000	40,000	8,030	7,296
1974			7,725	6,994
1975	50,000	40,000	11,376	9,907
1976	30,000		13,137	9,481
1977	9,000	40,000	13,792	12,397
1978			13,180	11,913
1979		30,000	13,180	14,100
1980		21,000	12,569	15,150
1981			12,206	15,150
1982			12,099	14,665
1983			12,099	14,665
1984			12,099	14,302
1985			12,099	14,046
			(Level payments continuing until bonds are retired)	
Total	$199,000	$231,000	$362,986	$421,355

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 actually a lower demand upon Fulton and DeKalb for the larger system in a number of years. The necessary millage rates are shown in Table 10 through 1983.

Table 10. COMPARATIVE MILLAGE RATES NEEDED TO SUPPORT 30-MILE AND 52-MILE SYSTEMS

	30-Mile System 1/		52-Mile System 2/			
	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	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 would drop after 1983 -- for all governments. Although estimates are not available because tax digests have not been forecast beyond that year, the rates would drop because bond service charges would remain constant and property digests would continue to rise.

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 after they are brought into the picutre (assumed to be in 1973), their participation is calculated at 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.

Full Availability of Federal Funds

The assumptions in this report about the potential availability of Federal funds for Metropolitan Atlanta's rapid transit system are admittedly conservative. The basic idea is that when local voters are asked to approve or disapprove the financial plan (presumably in 1968), it will not be realistically possible to anticipate any more Federal money than the $100,000,000 that is assumed. The voters would be asked to make a "do-it-yourself" commitment based on only a one-third share for the Federal government.

However, it is possible -- once the system gets under construction following this local commitment -- that as much as two-thirds of the total cost might eventually be carried by Federal funds. Rapid transit undoubtedly will continue to have a high domestic priority and Atlanta would be in the forefront of eligible metropolitan areas. A resurgence of domestic programs following a major improvement in the international situation could spring loose the necessary funds.

Under this assumption, MARTA could receive as much as $300,000,000 in Federal money. Applied to the 52-mile system, this could mean a reduction of $100,000,000 in cost to the four counties -- from $231,000,000 to $131,000,000. Such a reduction would result in a sharp cut in the millage rates on property needed to retire local bonds.

Assuming that the local financing requirements would not be altered in the first four years of the construction program (1969-72) but that these large-scale Federal funds might become available after that period, the peak millage rate in any year thereafter is shown below for each of the governments.

	Using MARTA Bonds	Using GO Bonds
Fulton	1.8	1.3
DeKalb	1.0	.7
Clayton	1.0	1.0
Gwinnett	1.0	1.0

A Note on Atlanta

The option does exist, of course, of recasting the local financing program for rapid transit to include the City of Atlanta as a participating government along with the four counties. The only legal stipulation is that the county governments cannot levy a tax for rapid transit purposes on any subject of taxation within the city if the city also has a contract with MARTA and is itself "using its public funds or levying a tax" for that purpose.

Under the allocation formula described earlier, the shares of the local capital costs of MARTA to be assumed by the local governments would be as follows:

City of Atlanta	56.7%
Fulton County 1/	12.0
DeKalb County 1/	22.1
Clayton County	5.9
Gwinnett County	3.3
Total	100.0%

1/ Excluding the portion lying within the city limits of Atlanta.

As noted earlier, it was considered more reasonable in this report to develop the financing formula on a county basis without the city's independent participation. Inasmuch as the rapid transit system would serve the entire metropolitan area and would extend far beyond the boundaries of municipalities therein, it would appear logical to utilize the governmental bodies covering the widest geographical areas -- namely, the counties. City residents and taxpayers are also county residents and taxpayers; about 80 percent of Fulton County's property digest in 1966, for example, lay within Atlanta's city limits. The heavy concentrations of commercial and industrial properties within the city (such as the massive building complex in Downtown Atlanta) are reached as surely by county taxes as by city taxes and carry overwhelmingly the greatest burden of property taxation regardless of the channels through which the taxes are collected. (In 1965 in the City of Atlanta industrial and commercial property accounted for the great majority of the taxable digest--about 80 percent--with single family homes accounting for only 20 percent.)

There are other considerations. The city of Atlanta as a government faces a more serious financial problem than that faced by the counties. It has been forced to seek an ever-widening range of new revenue sources to supplement the property tax (which now accounts for only one-fourth of its revenue). It has immediate pressures on its operating budgets as well as a tremendous backlog of capital improvements calling for its entire GO bonding capacity as well as expanded revenue financing. Its relatively small dependence on the property tax is no proper justification for using city rather than county channels for a rapid transit levy on that source -- the fact that the same city property is already the main support of the county (and school) financial systems is one of the main reasons why the city has turned to other sources of revenues.

Clearly the county governments also face heavy financial pressures -- which is simply saying that all local governments, in Metropolitan Atlanta as elsewhere, are in need of additional funds. The facts remain, however, that the counties cover the broadest areas, embrace city as well as suburban taxpayers, enjoy faster rates of overall growth, and have some measure of excess general obligation bonding capacity essential to a flexible system of rapid transit financing.

Still, it would be feasible to approach MARTA's financing on the basis of city as well as county participation. The taxpayers in outlying portions of Fulton County would undoubtedly get a break under this system (although there would probably be little differences in DeKalb County). To be equitable, there would probably have to be a number of different tax rates in Fulton County outside Atlanta -- taxpayers in the Tri-Cities area of South Fulton, for example, would be directly served by transit and should be expected to pay as much as taxpayers across the line in Atlanta. The same might be true of near-in residents of North Fulton with easy access to transit stations. The situation could get complicated, but it would not be impossible to work out.

The objective, of course, must be to produce a fair and equitable financing method that would provide the greatest good for the greatest number. The basic point is that rapid transit is an essential metropolitan function and its support must come from the metropolitan community as a whole.