

MARTA

OPERATION INTERCEPT -- A PROGRAM MEMORANDUM

This memorandum describes an action process for improving the transportation serving Atlanta Center City which has been developed jointly by Atlanta agencies and the Center Cities Transportation Project Team. The process is called OPERATION INTERCEPT and will have a number of steps, starting with initiation of a new shuttle bus service on December 1, 1969, which will lead in successive steps to the eventual development of a complete transportation system for the center city as part of the region's basic transportation system.

This process has been developed in response to concern of the Secretary of Transportation and the Urban Mass Transportation Administrator for action to help solve problems brought on by the growth and expansion of center city. This memorandum is the beginning of a program which we hope will combine the energy and resources of Atlanta and the Urban Mass Transit Administration to achieve a series of specific action goals over time.

## CENTER CITY GROWTH: ATLANTA, THE CENTER OF THE SOUTHEAST

Since 1960, Atlanta's Center City has grown beyond all predictions. <sup>Source?</sup> During these past nine years, almost eight million square feet of office space has been added to the Atlanta Center City, an increase of 175 percent. The trend is expected to continue, with both planners and developers foreseeing rapid urban expansion -- perhaps at a rate leading all other cities of comparable size. Planners anticipate that employment in the central city will double within the next two decades, and with redevelopment space contiguous to the already highly developed core, builders are actively keeping pace with their <sup>EXPECTATIONS</sup> ~~expectations~~.

Several reasons for recent growth also insure its continuation. Atlanta is the pre-eminent city in the Southeast region -- often considered ~~as~~ the nation's next frontier for accelerated development and economic growth. The city has become the gateway to this region of vast potential, and retains a position unparalleled, in fact unchallenged, by other areas of <sup>Source?</sup> urbanization. More than four-fifths of the nation's 500 largest corporations have established bases in Atlanta for operations in the Southeast, and are expected to increase their demands for space as the region develops. As in the past, location within the region has a positive effect on growth. The city is nearly mid-center in the Southeast Region, and with the exception of water, enjoys excellent service by all forms of transportation. As a center for the distribution of services and products, Atlanta serves the region. Unless unforeseeable events occur, its location will become increasingly significant in location decisions for both business and government growth programs.

A most significant growth catalyst is the relationship of local business and government and how they work together in directing continued center city development. In abstraction this is often stated as the "business spirit of Atlanta" based on ~~the~~ optimism stemming from a proud and spectacular growth record -- a sense of certainty that Atlanta holds a key to the future of the Southeast. In reality this means a strong and articulate business community working with <sup>the</sup> government to provide direction and coordination for anticipated levels of growth. Nowhere is the business-government relationship more evident or visible than in the center city, for all acknowledge that if this area is to absorb a doubling in size of the already highly developed core, such a partnership is requisite for its proper guidance.

There is no doubt that Atlanta's center city will remain the economic focus of its metropolitan region. Planning efforts accept this as a given and work for its continuation with an avowed distaste for a vastly decentralized city. The "Regional Development Plan" (1962) calls for a strong central area, with the City of Atlanta's "1983 Land Use Plan" specifically citing the central area as ". . . so complex it requires a well conceived, well developed, and well executed plan of its own." Special transportation studies have also acknowledged the center city as unique and requiring specific detailed analysis of its own. To fulfill these special needs for center city planning, an elaborate study design (the central area study) has been developed as a joint city-business community attempt to chart the course and needs of center city growth.

#### PROBLEM OF CONGESTION AND ACCESS

Center city growth has not, of course, evolved without creating problems. With few exceptions development has taken place upon a little changed and

now antiquated street network. After an initial setback on a rapid transit referendum, agencies are busy at revising a plan which should win enthusiastic approval. Mayor Allen perhaps best sums up such concerns in his statement that, "We cannot accommodate any more traffic on our existing street patterns. And there is not enough money on God's green earth to change street patterns in Atlanta." Current long range planning programs will help solve such problems. Yet until now, near-term planning efforts have not included coordinated interim steps for relief of center city congestion. Such steps are critically needed, and this program, along with the Central Area Study, are designed for just that purpose.

Problems of congestion and access are not just anticipated; there are severe problems now. A good example ~~was revealed~~ <sup>WAS CONVEYED</sup> in the Atlanta Journal-Constitution article following the mid-day traffic tie-up last July 3.

"Downtown Atlanta traffic ground to a halt for hours in rippling heat Thursday, choking intersections and clogging main arteries in and out of the city . . . many public transit schedules were wrecked as some buses marked time for as long as an hour in motionless lines of simmering cars and trucks . . ."

Freeway proximity, then, and improved outer area arterial streets have vastly increased the propensity for usage of the automobile as a means of transportation to the central city. Center city parking facilities have been growing to accommodate the demand, yet street patterns remain fixed, often unable to pass the high volumes of both vehicles and pedestrians.

Over-capacity is ~~an~~ a fact and measurable in hours per day. Given the expected growth in the center city with no improvement in access ~~congestion~~, all-day over-capacity could be a reality.

*Continued all-day Congestion*

Of special concern are access problems of center city residential neighborhoods, particularly those in model city and NDP project areas. Although public transit is available, most residents are considered captive riders with special needs and demands on center city transportation. A technical grant application is now pending (EOA-MARTA) for study of neighborhood access problems not only within the center city but to suburban employment centers as well. It is anticipated that this program of interim steps could be instrumental in resolving these problems.

The rapid transit program will of course relieve problems of center city access, yet an operational status is years away. Until then, congestion continues to mount, and interim programs for improvement ~~are~~ overshadowed by the desire to see the primary rapid transit system approved and operational.

#### OPERATION INTERCEPT

As previously stated, Atlanta is currently experiencing severe center city access and congestion problems. The rapid transit program has yet to be approved by the voters, and is at least eight to ten years away from an operational status. Planning has been strongly oriented towards the long range rapid transit program, and with meeting everyday demands ~~as well~~ <sup>serious consideration</sup> must now be given to ~~recently been unable to seriously consider~~ a large scale interim program of relieving center city congestion problems.

An answer to this need for an interim program has been found through the DOT CCTP. Uncoordinated and unarticulated ideas and concepts for interim solutions found in various planning and transit agencies have with the direct help and inspiration of the center cities consortium been developed into programmatic form, the total concept being called <sup>OPERATION INTERCEPT</sup> ~~Operation Intercept~~.

The program simply involves taking a series of interim steps towards improving center city access and alleviating congestion problems. The first step employs existing transit technology, local equipment, and local financing, and later the last an application of new technology and hardware as a permanent center city distribution system complementing the proposed primary rapid transit system. Intermediate steps employ improvements on technology, hardware, and application, with various arrangements of local-federal financial support. A key element, nearly requisite for the success for ~~Operation Intercept~~  
~~op~~, will be the development of a monitoring process for each step along the way. In this way the particular characteristics of each step can help determine the program for the next.

#### OPERATION INTERCEPT

~~Operation Intercept~~ is divided into three general steps, each building upon the success of the one(s) before. By maintaining the monitoring system in each step, large quantities of information will be available for planning the next. Thus, continuous feedback will shape and direct service characteristics from initial steps.

The initial step is divided into two phases. The first, a 100% local effort, is sponsored by both City and business community. This phase will see into service by December 1 a high frequency shuttle bus operation routed through the center city and terminating at existing North and South parking facilities located just outside the center city. The service results from a joint effort between the City of Atlanta, Atlanta Transit Company, and the business community to provide immediate relief for center city congestion. The service is aimed primarily at the driver commuter, with hopes of intercepting him at the periphery parking facilities (both located on the express-way system) and bussing him to center city employment. The shuttle service

is not without precedent. Currently, two shuttle services are in operation and have proved most successful -- one, a special application, is nearly an identical service concept as this first phase of Step I. The service is being operated between Georgia State University, a downtown school with very limited parking facilities, and the same south parking facility as proposed in this first phase of Step I. The other shuttle operation is the "Shoppers Special" routed within the center city, serving major retail outlets.

Phase two of Step I will hopefully begin in early spring with Federal participation in the form of a Demo. Grant. At this time service improvements will be made in whatever form the monitoring of the first phase <sup>decreed?</sup> suggests. This may include increased headway, revised fare schedules, altered or additional routes, and the use of more parking facilities.

Step II of Operation Intercept will be based on the monitoring implications of Step I, and is expected to require considerable capital investment. It is in this step that new technology will be employed and a large expansion of services put into effect. The new technology will more than likely be a surface application, but special routing on exclusive lanes, special traffic signalling, additional parking terminals, improved terminal facilities, and center city street stations are anticipated as the kind of improvements to be developed.

Several applications for federal assistance will be forthcoming in this step, and will include not only Capital grants for construction, but technical study grants as well.

Step II can also see the initiation of specific access-link-ups to the Model Cities and NDD project areas, if their studies find it desirable. Already in operation is a Model Cities shuttle bus program, which can even in Step I become a part of the Operation Intercept process.

The monitoring program as developed by the CCT team will in Step II be given over to local agencies for operation; where it will not only be maintained, but revised in anticipation of and preparation for Step III.

Step III will become a part of the longer range transit planning and

development program. This does not mean however a loss of center city orientation. In fact, the ultimate goal is to see into operation a permanent secondary distribution system~~s~~ within the center city in full compliment of the regional rapid transit system~~s~~, and embodying those successful service applications of Steps I and II. The Step II monitoring operation will be oriented towards this Step III system concept, and the Step III planning time frame compatible with the long range primary system program such that complimentary systems can be insured.

## ORGANIZATION

Operation Intercept will involve a number of the Atlanta agencies in its different facets.

### 1. Basic Policy Making and Coordination

Operation Intercept has been considered as part of the basic transportation program of the Atlanta area. It is being discussed and reviewed by the policy making and coordinating organizations in Atlanta, including the Policy Committee and Technical Coordinating Committee of the Atlanta Area Transportation Study, and the Planning and Development Committee of the City of Atlanta's Board of Alderman, and the Board of Directors of Central Atlanta Progress. The technical planning work will be coordinated with the regional planning operations of the Atlanta Region Metropolitan Planning Commission.

2. Long Range Planning - The Central Area Study, an operation jointly sponsored by the City of Atlanta and Central Atlanta Progress and the Metropolitan Atlanta Rapid Transit Authority, and the State Highway Dept. are the agencies which have primary responsibility, under this overall policy framework, for the specific long range planning of public transportation facilities and services as they affect center city. Operation Intercept will be tied into <sup>THE</sup> ~~an~~ going planning programs of these agencies.

3. Monitoring - During Step 3 of Operation Intercept, the CCT Team will be responsible for the technical work required to monitor operation under the direction of a Working Committee consisting of the City of Atlanta, MARTA, Central Atlanta Progress, and the Atlanta Transit Company. In subsequent steps, this technical work will be absorbed by local agencies, mostly ~~as~~ likely ~~to~~ to the Central Area Study team.

4. Federal Applications - Initially the City of Atlanta will be the applicant for federal applications coming directly out of Operation Intercept.

5. Operations - The Atlanta Transit System will operate the service in the first step of Operation Intercept. The operation of subsequent services will depend on the responsibilities assigned to various of the operating agencies coming out of the basic transportation planning process.

## OPERATION & TIMETABLE

### I. ACTIVITIES TO DATE

A. The idea for this project was generated out of the interaction between the Center City's Project Team and various groups in Atlanta during Phase I of the CCT Project. Officials of the Atlanta Transit Systems, the Central Atlanta Progress, the City Planning Department, and ~~others~~<sup>OTHERS</sup> began to develop ideas on quick action projects to help solve some of the center city's immediate transportation problems.

B. When Phase II of the CCTP was announced by Secretary Volpe in September 1969, Atlanta was ready to make a specific proposal for an immediate action program to provide an all-day shuttle bus service connecting major peripheral parking facilities at Atlanta Stadium and the Civic Center to drivers off the expressway connector and downtown arterials before they reached the most congested areas. The CCT Core Team met in Atlanta on September 24, were presented with the project concept, made field inspections of the proposed route, and generally endorsed the project as a suitable experiment for Phase II of the CCTP.

C. A working team from the Atlanta Transit Company, the City of Atlanta (Planning Department), Central Atlanta Progress, and the CCTP began to put together a complete program for this operation. This included:

1. Preparation of an operational plan by ATS for a five-bus, all-day shuttle service, operating at 10-minute headways from the two parking lots through the heart of the downtown area, including plans for

parking lot operations, operating costs, fares, and revenue estimates.

2. Clearance by the city for use of the two publically owned parking facilities.

3. The downtown business community, through their organization Central Atlanta Progress, have agreed to support the project financially in the interim between the time service will start on December 1 and the time UMTA will be able to support the project through demonstration and capital grants.

4. Preparation of this OPERATION INTERCEPT memorandum by the working group which is designed to obtain UMTA support and guidance for this whole program.

D. The meeting with Administrator Vaillarreal on November \_\_, 1969, is expected to be the last of the initial phases of the operation. We are now ready to roll.

## II. IMMEDIATE ACTION

A. On December 1, Atlanta Transit will begin the new shuttle bus through central city from the Stadium and Civic Center parking lots. A fifty cent fare will be charged for this service. Included in this will be the cost of all-day parking and round trip bus fare. Those passengers who use the bus service without parking will be charged 15¢ per ride.

Funds to provide for the difference between operating costs and revenues during the initial months of the service will be provided by the local business community who, in addition, will pick up the costs of promotion. Parking will be provided by the city. Buses and operations will be provided by Atlanta Transit. The costs of publicity are expected to run about \$\_\_\_\_\_. The net costs of operation are expected to be about \$<sup>12</sup>~~30~~,000 per month initially.

B. Just prior to beginning the service, the CCT team, working with the Atlanta agencies, will develop a program of monitoring the shuttle bus service. This program will include:

1. Studies of the operations of the service, including O-D and passenger counts, speed and delay analysis, counts on the expressways and arterials to determine impacts.
2. Studies of the current and potential market for the service, including analysis of the characteristics of the current riders.
3. Analysis of the economics of the operation including costs and revenues, user attitude toward fares, ability to pay, break-even costs for service, etc.
4. Studies of other areas and routings where similar shuttle service could be applied including an inventory of fringe parking sites, route locations, new central city developments, etc.
5. Analysis of the opportunities for new technological innovation at subsequent stages of the project, including new vehicles, separate

rights of way, people movers, station and platform handling, joint development, etc.

6. Assistance to Atlanta in preparing applications for federal grants for subsequent stages of OPERATION INTERCEPT.

For this monitoring operation, the CCT Atlanta team has requested a budget of \$75,000 from the funds available to the CCT Project for city projects.

C. Along with this monitoring effort, Atlanta hopes to have the Central Area Study planning program in full operation during December. The start-up of this program is dependent on the approval of the technical studies grant application for \$300,000 (\$200,000 from the federal government) that UMTA now has under consideration. The city and the business community through Central Atlanta Progress are co-sponsoring this program which is expected, along with the planning activities of AMRPC, AATS, and MARTA, to provide the overall planning framework for subsequent stages of OPERATION INTERCEPT. The CCT team expects to work along with the CAS program to help formulate the basic planning framework for transportation improvements in Central Atlanta and to develop systems to obtain base data about the conditions affecting its present and future development. The CCT Atlanta team is requesting a total of \$87,000 from the CCTP budget for city projects for this purpose.

D. Assuming the general endorsement of UMTA for OPERATION INTERCEPT, the working group in Atlanta will begin ~~the~~ <sup>to</sup> prepare applications for funds to carry the operation past the initial three month start-up period into the continuation of the Step I and the development of Steps II and III. We expect these applications to be of two kinds initially:

1. A capital grant application to provide for the purchase of 11 new buses that can be used to expand the shuttle service in the latter stages of Step I to supplement or replace the existing equipment that will be put into operation immediately. We now estimate the cost of the buses and other equipment to be approximately \$500,000.

2. A demonstration grant application to provide the funds required to test out new and improved shuttle service to allow for experimentation with fares and charges to provide additional inducements for patrons to permit promotion for expanded services, to provide whatever reimbursement is required to the Atlanta Transit Company for unrecovered costs of operating the service, and to begin the process of designing new equipment, vehicles, stations, rights of way that will be needed for Step II of the operation. We expect that this initial demonstration will cost approximately \$280,000.

It is possible that other applications may be forthcoming from this process. In any case, we would like to request that UMTA allow our working team to keep in very close touch with various of the UMTA staff, to seek their advice and guidance on the proper and most suitable way to develop applications. We also anticipate that UMTA itself may want to use the first phase of OPERATION INTERCEPT to try out some new types of vehicles that are currently available and suitable for this service. We feel that close working relations with UMTA staff will be essential during this process.

E. During this same period we expect that MARTA will begin the technical work required to detail the regional rapid transit system plan, including the portion of the system within or affecting Central Atlanta.

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UMTA now has under consideration an application for a technical studies grant of \$\_\_\_\_\_ for this purpose. Just as with the CAS planning program, the MARTA program will be developed under the aegis and support of the regional transportation planning body in Atlanta, the Atlanta Area Transportation Study, and will be reliant on and supported by the Atlanta Metropolitan Regional Planning Commission, which will insure coordination of key inputs to both processes. The CCT team will help these agencies, as requested, to develop and systematize various elements of these work programs and outputs.

### III. THE LATTER STAGES OF STEP I

A. By the first of March 1970 we would hope to have the demonstration grant application approved which will allow for continuation and improvement of the service. As soon as possible we would hope to have the capital grant application approved in order to permit the earliest possible delivery of new buses.

B. The CCT team will continue its monitoring operations on this improved and expanded service. Prior to the end of this contractual obligations in June 1970 it will prepare a report evaluating the results of Step I of OPERATIONS INTERCEPT for Atlanta and UMTA. This report will contain recommendations for Step II and III of the OPERATION, and if feasible will provide a basis for supplementary or additional applications to UMTA for demonstrations and capital grants. These might cover:

1. Specification and tests for new vehicles which may be more adaptable to the needs of this particular service than conventional buses.
2. Development of exclusive rights of way in central city along with specially designed station stops and other facilities.
3. Expansion of service to parking facilities in other locations outside the central city bus adjacent to expressways or major arterials.
4. Relation of this service to central city residential neighborhoods, particularly the model cities neighborhoods.

At this point in the operation, we should be able to determine whether a modest level of capital investment in parking facilities, vehicles, exclusive lanes, and stations will provide a system to handle the near-term growth in commuter traffic to downtown expected as a result of continued center city development. We should be able to determine how a final form of this service can become a basic part of the transportation system for downtown. The CCT team will also set up procedures to transfer its monitoring operations to local organizations before it is terminated.

C. As a result of this effort, we expect to have additional applications for Step II of OPERATION INTERCEPT which is anticipated to last about two years. While it is too early to estimate costs for these, their magnitude might be as follows:

1. Technical Studies \$100,000
2. Demonstrations \$800,000 - \$1,500,000
3. Capital grants \$2-4 million

#### IV. STEP II OF OPERATION INTERCEP

A. Step II would begin with the acceptance by UMTA of these supplementary or additional grant requests. This would start the process of designing and developing new vehicles, ~~Setting up exclusive rights of way~~ (if this proves desirable), putting in stations, platforms, and other facilities in the terminal parking areas and along the downtown streets. We anticipate Step II will involve more construction and investment in facilities than Step I which will operate with a minimum of new capital investment. The principal feature of Step II may be the development of new vehicles especially designed for this service -- with lower platforms, more doors, and different seating arrangements than conventional buses. Tests might be made on non-polluting propulsion systems, articulated vehicles, etc., in order to develop the kind of service that fits in the best with downtown traffic and development patterns. In addition, we anticipate that changes might be made in sidewalks and streets to provide special turnouts, channels, shelters, and other facilities that may prove necessary.

B. During the development and operation of Phase II, a monitoring program similar to that conducted in Phase I will go on. This could be the responsibility of the CAS program which will have been working with the CCT team during Step I.

C. During this same period, AATS and MARTA will be firming up the basic plan and program for the regional rapid transit system. The CAS sub-area planning process will be developing the specifics of the center city system required to supplement the basic regional system. This work will provide the basis for a specific long term plan and program for

center city circulation, which will include the basic subway-busway system, people mover systems to distribute travelers within the downtown area to and from rapid transit stations, major peripheral parking facilities, and key downtown centers; and pedestrian, goods, vehicular movement, and off-street parking facilities. This system plan will also include a specific time phase action program for implementation and specific plans for organizational responsibility.

D. This planning will result in about two-three years in requests to UMTA for the implementation of various parts of Atlanta's basic plan. This might include:

1. Technical study grants to do detailed design of specific facilities.
2. Capital grants for construction of these facilities.
3. Demonstration grants for testing out new "people mover" facilities required as part of the basic plan.

This package of improvements for a center city system (exclusive of the subway and busway system) will probably cost in the neighborhood of \$40 million (which should be checked with MARTA).

#### V. PHASE III OF OPERATION INTERCEPT

During Phase III, OPERATION INTERCEPT will move into the development program for implementing the basic plan. We expect the plan to be implemented

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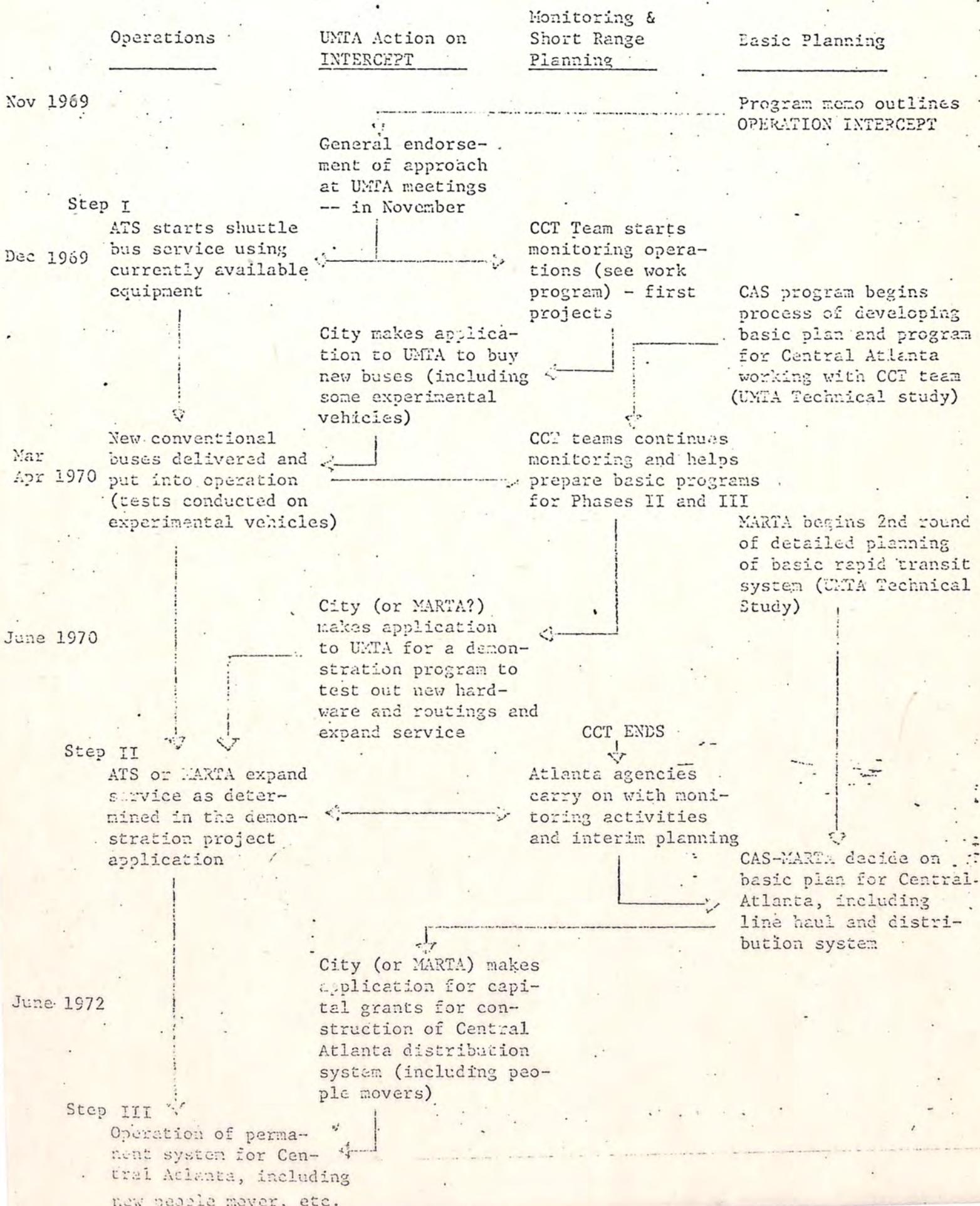
in a specific time-phased sequence so that there will be a continuous program of phasing in new elements to the basic downtown distribution system and phasing out others, including services established earlier in OPERATION INTERCEPT that will no longer be needed. Based on the plan, we expect that new technologies for center city circulation will be developed and tested in this phase, including possible moving belts or conveyors to perform or supplement the functions of the shuttle bus of Phase I and the more exotic facilities operation in Phase II.

#### VI. SUMMARY

OPERATION INTERCEPT is viewed as a new dynamic action-planning-development process which ties together in a sensible way many pieces of circulation system development for central Atlanta. We see this as a unique approach, blending action and planning into a mutually compatible and supporting process which is able to respond to the needs of a growing central Atlanta over time. UMTA's support for this whole operation will be key to its success. Atlanta's agencies have already begun the tooling up process for this operation. Service will indeed be operating by December 1. From now on, we would like to remain in close contact with the UMTA staff to insure a high level of coordination in preparing and executing the subsequent steps in the process.

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OPERATION INTERCEPT -- WORK FLOWS



## OPERATION INTERCEPT

THIS would be  
better shown in  
a bar chart

1. Program Memo outlines whole strategy for OPERATION INTERCEPT Nov. 7, 1969
2. UMTA endorses basic program Nov. 10-20, 1969
3. ATS starts shuttle bus service with currently available equipment Dec. 1, 1969
4. CCT team starts monitoring operations (first projects in work program) Nov. 24-Dec 1, 1969
5. CAS program process of developing basic plan and program for Central Atlanta working with CCT team (ASSUMES UMTA TECHNICAL STUDIES GRANT) Nov-Dec 1969
6. City makes application for capital and demonstration for Phase I to UMTA to buy new buses (including experimental vehicles, if UMTA so desires) Dec. 1969
7. MARTA begins 2nd round of detailed technical studies required to plan and decide on basic rapid transit system (ASSUMES UMTA TECHNICAL STUDIES GRANT) Jan-Mar 1970
8. As result of 6, ATS gets delivery of new buses and puts them into operation on shuttle service (including testing experimental vehicles) Mar-Apr 1970
9. CCT team continues monitoring and helps prepare basic program for Phases II and III of OPERATION INTERCEPT Mar-Apr 1970
10. City (or MARTA) makes application to UMTA for a demonstration project for Phase II of INTERCEPT -- program involves tests of new hardware, routings, service expansion, if feasible June 1970
11. CCT project ends June 1970
12. ATS (or MARTA) expands shuttle service upon receipt of demonstration grant, begins operations with new features June 1970 to June 1972
13. Appropriate Atlanta agencies (CAS) continue monitoring activities as part of the demonstration project grant June 1970 to June 1972
14. CAS-MARTA complete work on basic plan, including system for Central Atlanta with line haul and distribution features (subway, people movers, Jan-June 1972

malls, street, pedestrian goods movement systems, parking, etc.), including TIME PHASE PROGRAM (approval by local authorities)

15. City -- MARTA make application for capital grants for construction of basic Central Atlanta distribution system, based on TIME PHASE PROGRAM

June 1972

16. Operations begin on construction and operation of parts of system, including people movers, etc.

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