

TECHNICAL REPORT 1

GOALS AND SCHEDULING

JACKSONVILLE DOWNTOWN PEOPLE MOVER
FEASIBILITY AND IMPACT STUDIES

PREPARED FOR
JACKSONVILLE TRANSPORTATION AUTHORITY
AUGUST 1978

JACKSONVILLE DPM

PARSONS BRINCKERHOFF/FLOOD & ASSOCIATES
A JOINT VENTURE

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INTRODUCTION

This report is technical documentation for the major portion of Task 1 of the Jacksonville Downtown People Mover Technical Study. Task 1 consists of three major parts. The first part required the scheduling of just the Jacksonville DPM Technical Study itself. Part Two called for the establishment of goals and the formulation of objectives for the Downtown People Mover (DPM) project, as a whole. Part Three is the scheduling of the implementation of the Jacksonville DPM project, a subject of later work in the study. The results of effort put forth by staff and citizens, together with an explanation of the general process followed in accomplishing Parts One and Two of this Task 1 forms the body of information contained in this Technical Report No. 1.

The first study for a Downtown People Mover in Jacksonville, Florida was done in 1972 under the aegis of the Florida Department of Transportation in response to local interest in having such a transit alternative. In 1976, the Jacksonville DPM study was updated and modified by a consultant to the Jacksonville Area Planning Board and then submitted by the Jacksonville Transportation Authority (JTA) to the U.S. Urban Mass Transportation Administration (UMTA) as an application for a demonstration grant to build a DPM for downtown Jacksonville. This application responded to a nationwide competition sponsored by UMTA to fund the engineering and construction of three DPM systems in the United States to demonstrate the feasibility of DPM's in an actual urban environment. The Jacksonville DPM application was one of eleven finalists in the screening process. After much consideration, UMTA selected four initial cities for construction of a DPM. Jacksonville was not one of the four cities. However, the Jacksonville project application was of such merit that UMTA decided to provide planning funds for a feasibility study for a Jacksonville DPM. In response to that offer, the JTA, in December 1977, issued a request for proposals to do

the Jacksonville DPM Technical Feasibility Study. By mid-June 1978, a consultant had been selected, a contract negotiated and work begun.

As conceived in the 1976 application to UMTA, the Jacksonville DPM consisted of approximately 4.2 miles of double guideway system in a modified cross pattern through the downtown area of Jacksonville and across the St. Johns River into Southside. The first construction phase of the DPM program consisted of a two-way segment of elevated guideway about 1.8 miles long with seven stations. Phase I extended from the hospital medical complex at the intersection of 8th Street and Hogan Creek, southward along Hogan Creek through Jacksonville Junior College campus and down Hogan Street, past Hemming Park until it reached Water Street. Here the alignment turned eastward and followed Water Street to the City government buildings at the intersection of Market and Water Streets. The 1976 capital cost outlay for this system was estimated to be approximately thirty-four million dollars (\$34,000,000) with local government funding of ten percent (10%); Florida Department of Transportation, ten percent (10%); and UMTA, eighty percent (80%). The initial fare for the DPM was to be fifteen cents (\$0.15) and the revenues derived from the fare box were considered sufficient to maintain and operate the system.

Although the description above details the basic system configuration as proposed in the application to UMTA, this technical study will consider all route alternatives and systems to determine the feasibility of the Jacksonville DPM system; therefore, the demonstration project description is only valid as a reference. The final system configuration determined during the study will in all probability differ from the one outlined in the UMTA application.

During the first month of work on the Jacksonville DPM Technical Study, a set of study goals and objectives was formed and approved by the DPM Citizens Advisory Committee (CAC). In addition, a critical path method (CPM) network was formulated together with a

calculated critical path for the study. These were approved by the DPM Task Force. The individual work efforts are discussed separately in the following paragraphs.

CRITICAL PATH METHOD

The critical path method (CPM) is essentially the logical ordering of the work effort required to accomplish a given project. It is a simple, easy to understand, but very powerful tool for project management.

The first management tool of this type was originally developed under the name PERT, which is an acronym for Program Evaluation and Review Technique. This PERT system was created for the design and construction of the Polaris nuclear submarine in the 1950's. As a parallel effort, the critical path method was also developed by DuPont engineers to manage several large construction projects. The two methods were combined over time into what we now know as the "critical path method".

Any major project, regardless of its many different parts and complex relationships, can be broken down into individual but simple work efforts, called activities. In the development of a CPM, these activities are arranged in a chain or network depicting which activity must be accomplished before a succeeding one. It also shows the interrelationships of all activity chains. Each activity is assigned a time and manpower effort estimate. The time for each activity is added from the beginning of the project to the end for the entire set of network chains. The critical path (CP) is that particular set of activity chains in the network that takes the longest time to accomplish within the allowable project duration. Adjustments in the CPM and its CP may be necessary to reflect changing project conditions.

Inevitably, some activities which were estimated to take a certain period of time take longer; or perhaps the activity which must be done before a subsequent activity, cannot for some reason occur when it should and is delayed. The result is that the project is delayed all along subsequent activities and the total project runs over the time scheduled. When this happens, the project manager must take some action to make up for the delays or time overruns. He can rearrange activities so one occurs simultaneously with another activity even though this might be less than ideal. He can also apply more manpower to a given activity to accomplish it in a shorter length of time.

With these tools at hand, a project manager can manipulate the number of people or the sequence of activities to keep the project on schedule and so finish it within the period of time set forth by the client. The CPM, therefore, is a management tool created by knowledge of where the project is and how much effort has been spent at any given period of time. More importantly, it is necessary for the project manager to be able to regulate the project far enough in advance to have some practical effect on the outcome of the schedule. Therefore, it is necessary for him to have foreknowledge of what will be the effects of delays in the accepted CPM. The CPM gives him this information far in advance of the actual progress of the work. By keeping a running comparison of the CPM and the actual implementation of the project, he can determine soon enough where a change in effort is needed to maintain the project schedule.

CPM, in short, is a useful device to determine the interrelationships of the many complex elements of which any major task is composed. It gives a logical and reasonably fail-safe method of tracking the project from its beginning to its end, yet gives the project manager the capability of affecting or altering the course of the project in order to reach the stated goals and finish as scheduled.

JACKSONVILLE CPM

One of the most useful by-products of the CPM is the greater understanding of work that the CPM process gives to the creators of the network. This was true in the case of the Jacksonville DPM Technical Study. At the time the JTA sent out requests for proposals from consultants, a generalized description of the study work scope accompanied the request. Each of the consultants then interpreted that work scope in accordance with their understanding of what needed to be done to determine the feasibility of a DPM for Jacksonville. This interpretation formed the beginning logic of the CPM and a tentative schedule was developed. After the start of the study, the first attempt at the CPM was created using the basic work scope descriptions, the interpretive logic and the tentative schedule.

The first step in the creation of the CPM was to subdivide the twelve major tasks of the entire project into 48 subtasks. Each of the subtasks were further subdivided into the simplest complete series of activities. Some of the subtasks have as little as three activities and some as many as twenty. In all, there are over 400 activities stretching through the entire technical study. A complete list of the activities is included with this report as Appendix A. The complete list of activities was discussed with the DPM Task Force on June 28, 1978. Subsequently, revisions were made and a final list was produced on July 11, 1978.

The second step in creating the CPM was to determine the order of precedence of each of the activities. This was accomplished by flagging those activities which were critical to the project and all related activities which had major input. This was done for each of the more than 400 activities and the logic of the work flow for the project was generally determined. Following this step, a trial network of all of the activities was put on paper and discussed with the DPM Task Force. After revisions, the final CPM was developed as shown in Appendix B of this report. In the CPM, each activity begins and ends with a circle called a

node. Each one of these nodes was given a unique number. The number is a combination of the subtask number and the node number itself. Properly described, every node has a three or more digit number such as 12.14 or 7.36 which is written in the upper part of the node above the line. Below the horizontal line is an additional number which is the accumulation of all estimated activity durations to that point in time. The activity itself is represented by a single line. Above the line is a brief verbal description. Below the line is a number which represents the calendar weeks duration estimated for that particular activity.

The large blocks shown on the network represent input from one node to another node and are connected by an arrow which is called a dummy activity. The dummy activity is a device to show the activity interrelationship, but no work actually takes place and there is no duration of time. Finally, there are three other indicators on the network. The first is a large block which shows output from an activity node which is usually a contract deliverable or the interconnecting point between one task and another not on that page. The second indicator is a hexagon which is a milestone within the project and represents some critical or important point in the progress of the work. The third is a double line along a certain activity chain which indicates the critical path.

As stated, the total duration of this technical feasibility study is twelve months stretching from June 12, 1978 to June 11, 1979. This duration places an artificial constraint on the study; the duration of all the activities cannot take longer than twelve months. There are, however, other restraining dates within the study. The most important of these is the week of December 11, 1978. This is the week in which the JTA Board should approve the recommended alternative to be used (Activity 6.48-9). This activity must be completed prior to the design of the system or the determination of its financial feasibility. This activity is scheduled to end at the end of the 26th week of work. In an earlier version of the network, this activity occurred about January 8, 1979, which was unacceptable because all the critical activities or events leading up to the actual approval of the Recommended Alternative

involve heavy participation from the JTA Board, the JTA staff, the consultant, and the public. To allow the Recommended Alternative to be selected in the first week in January meant that most of this activity would occur during the Christmas holiday season. The expected response of all involved during the Christmas season would be low and sporadic delaying the review and selection of the Recommended Alternative until near the end of February. This delay would add approximately seven weeks to the process and would extend the project beyond the final termination date in June. Therefore, it was necessary to hold December 11 as an absolute during the formation of the CPM.

Another task extremely important to the study progress is the determination of the estimated ridership or patronage that the system will be expected to attract. Estimated ridership sets the configuration of the system, sizes equipment, facilities, maintenance and determines the financial feasibility of the entire system. Ridership must be estimated before most of the design and prior to the selection of the Recommended Alternative. Therefore, it was critical to begin this Task 4.3 as early as possible in the study. It is now scheduled to start at the beginning of the seventh week, and if it does not begin on time, the entire study will be delayed.

A final critical activity is Task 11 in which the project financial feasibility will be determined. By logic, this work must occur after the design work is far enough advanced to begin determining unit costs and prices for all elements of the system. Task 11 must be completed before the final report can be printed, which should occur near the end of the 12th month study duration. A major portion of the writing and graphic preparation has to be done by the consultants and time must be allowed for reviews by the Citizens Advisory Committee and the JTA staff. These efforts could only begin after Task 11, the Financial Feasibility Report, has been substantially completed. Therefore, Task 11 had to be placed between these two major tasks and by necessity shortened to a period of about five weeks. This is ample time to complete the task but there is very little room for mistakes. In the CPM vocabulary, Task 11, Financial Feasibility, has zero float.

The initial CPM network was presented to the JTA Task Force on July 6, 1978. It was extensively reviewed both by the Task Force and individual JTA staff members. To aid the accomplishment and review of the total DPM study, a summary schedule was created as a replacement for the earlier proposal schedule and is included in this report as Appendix C.

After the list of activities and the initial CPM network was reviewed and revised, a critical path was calculated for the project. As previously defined, the critical path of any particular project is that chain of activities which would take the longest to accomplish. Any duration change, such as an extensive delay or a shortening of the work activity would alter that critical path and perhaps shift it to some other chain of activities. The critical path, therefore, is the measuring stick by which the success of the project schedule is determined and the chain of activities that requires the most careful attention of management.

When originally calculated, the critical path showed a negative float of about five weeks, meaning that the cumulative duration of all the activities by the longest path actually would have taken five weeks longer than the client assigned to the total duration of the project. This required extensive revisions which removed all the negative float. A new critical path was traced and time calculated for the study. The critical path, as shown in Appendix B, begins in Task 3.1 and continues through its activities and through about half of Subtask 3.3 to a point where enough information has been gathered to begin the forecasting process. The critical path then jumps from this point in Subtask 3.3 directly to the beginning of Subtask 4.3, with the evaluation of the Jacksonville Urban Area Transportation Study (JUATS) forecasts done in 1974. It then follows the entire Subtask 4.3 and into Subtask 6.1, which further details the ridership and estimates patronage for the system. When the JTA has reviewed and approved the estimated patronage, work can begin on a large number of study activities.

The critical path shifts from Node 6.18 to Node 6.28, which begins reducing the number of

suggested alternatives to a restricted set of recommended alternatives. It then follows the remainder of Task 6.2 into Task 6.4 through the selection of the alternatives to Node 6.49. This is the event node where the JTA Board approves the Recommended Alternative. This JTA Board approval releases the remainder of the study activities. The critical path, therefore, shifts from Node 6.49 to Node 8.21, which is the beginning of the design of the guideway for the Recommended Alternative. As often happens, there is more than one chain of activities which are parallel and cover the same duration of time. This occurs at the point in the study where Task 8.2 and Task 8.3 become parallel paths of the critical path. Delays in either one of these parallel activities will cause a delay in the project.

The critical path shifts from Node 8.38 to Node 9.20, which is the beginning of the design of station sites. It follows this work task to its end and then shifts to Subtask 9.7, which is the beginning of the assembly of capital cost estimates. After the capital cost estimates are completed, the critical path flows directly into Task 11.1, which estimates project costs and revenues and stops at Node 11.110, the review by the JTA of the capital funding program. From there the critical path goes to the recommended financial plan and its review by the JTA at Node 11.28. This is the end of the recommended financial plan work effort and is scheduled at the end of the 42nd week, or around April 6, 1979. There remains only to write the final project and summary reports and print them for public use. This final series of activities extend over a period of ten weeks to the end of the 52nd week.

The above discussion basically describes the DPM and its calculated critical path through the duration of the Jacksonville DPM Technical Study, as accepted on August 1, 1978 by the JTA Task Force. Throughout the study, changes will be made to the duration of time, the sequence of activities, or to the addition, deletion or revision of activities themselves. As the study work proceeds and unforeseen problems or opportunities present themselves, the CPM will be monitored and revised to reflect changing conditions. Revisions to the CPM are available from the JTA.

GOALS PROCESS

Any human endeavor needs to have direction and obtainable goals before it can proceed. How well the goals and direction are defined often determines the success of the endeavor itself. There have been many projects, both public and private, which floundered from poorly defined purpose and a lack of leadership. Moreover, even successful endeavors run into problems associated with the environment or anti-growth public sentiment. Many projects conceived as a major benefit have not served the public very well and were expensive to maintain. Therefore, it is essential the Jacksonville DPM Technical Study define program goals and objectives to design a system which will be a major benefit to the people of Jacksonville.

The goals and objectives (G & O) will be used during the course of this study as a touchstone to guide the project to its proper conclusion. The goals and objectives will be used as a basis for an evaluation process of the recommended alternatives of route, systems and operations. This will be done by determining a set of system specifications which are general statements describing the system and derived from the objectives of the study. The G & O will also be used to determine the criteria upon which the alternatives will be judged as well as the weights for each one of the criteria within the total value of the system. Later in the study, the G & O will again be measured against the process of reducing the number of alternatives and the selection of one recommended alternative to be used for the Jacksonville DPM. The Jacksonville DPM Technical Study will conceptually design the Recommended Alternative so details of environmental impact, operational cost, capital cost, system design, structural requirements, and financial planning can be described and measured. Once again, the G & O will be used to guide the development of these details. More importantly, the G & O will be used to determine if the conceptual design and system feasibility have achieved the purposes set forth at the beginning of the study. Finally, the G & O will

be used during the presentation of the total system conceptual design to demonstrate its beneficial effect upon future growth in Jacksonville.

DEFINITIONS

While the term Goals and Objectives (G & O) is widely used in many planning projects by many people, the definition of a goal in contrast to an objective is often confused. For the purposes of this technical study, the goals and objectives are used as defined below.

A goal is defined as a general statement of intent or a general description of the ultimate purpose of the study. A goal allows room for various methods of achievement or fulfillment but in itself does not change throughout the course of the study. Moreover, for the purposes of this technical study, the goals as established by the Citizens Advisory Committee should remain the goals of implementation and construction for the entire DPM project, should that take place.

Objectives are steps in the fulfillment of a goal. They are methods and milestones in the progress towards the goal and may change throughout the course of the study to adapt to a changing understanding or conditions.

The contrast between goals and objectives can best be understood using an analogy of a football field. In this analogy, the goal is obviously the goal line at one end of the field at which a touchdown is scored and the objectives would be the individual series of plays which would be used to achieve that touchdown. Without the assistance of goals and objectives, the success of the study or project can only be generally determined.

GOALS AND OBJECTIVES PROCESS

The process to achieve the goals and objectives listed in this technical report began with the drafting of an initial set of goals and objectives by the consultant. These initial G & O's were obtained from three sources, those G & O's identified from previous DPM technical studies and from JUATS transportation planning processes, conversations with JTA staff and CAC members individually, and the addition, by the consultant, of G & O's thought appropriate for the Downtown People Mover system.

These initial G & O's were presented to the JTA Task Force on July 19, 1978 in a regularly scheduled meeting. The Task Force reviewed the G & O's at the meeting and made some initial suggested changes. On July 26, 1978 the Task Force again altered the G & O's to include a complete rearrangement to make them more readable.

A parallel process for G & O's was started when the initial G & O's were presented to the CAC on July 13, 1978. The CAC was asked to review the goals, reflect upon them and to phone or write in suggested changes to the JTA staff. This was done by several of the CAC members and the goals were again revised at the end of July 1978. At the regularly scheduled CAC meeting on August 3, 1978, the G & O's were again reviewed and approved by the CAC as the official G & O's for the DPM Technical Study.

The major goals and more important objectives are discussed in the paragraphs below. Copies of all the drafts of the G & O's are included as Appendix D with the appropriate revision dates marked on them.

- Goal 1 - Revitalize the Downtown Area as a Multi-use Activity Center. One of the major advantages of a fixed guideway transit system is the resulting concentrations of new

development around the system stations. This has great community benefits by providing a more concentrated use of utilities, lessening of traffic congestion and a new sense of urban design. The revitalization or new development within the downtown area is one of its central purposes of a DPM system. Of all transit systems, the DPM system will foster this new development better than any other.

One of the values of development adjacent to the system encourages new public-private joint development opportunities. One method of financing and operating a DPM is to encourage new private development opportunities which will pass on to the Jacksonville city government some of the new revenues derived from increased values of real estate directly benefited by the use of the DPM. A DPM system is a powerful inducement to new commercial development because it increases the amount of pedestrian traffic associated with a commercial development and, therefore, increases the sales potential for that development. Increased sales translate quickly into new taxes or revenue to support the operation of the DPM system. Value capture will, therefore, reduce the public development costs required in the initial development of the system and its future operation. This is a worthy goal.

Conserving energy, reducing pollution and minimizing environmental impacts, are certainly goals which are much in the mind of the general public. A DPM system is a more efficient user of energy, reduces air and water pollution significantly and minimizes impacts to the environment. Just the decrease in the use of automobile in the Jacksonville downtown area will be significant evidence of the value of the DPM.

One of the best methods to revitalize the downtown area is to make it a center of day long activity. Therefore, another subgoal would be promoting increased use of downtown as the cultural, educational and recreational center of the region. Certainly, in the past, downtown Jacksonville was the center of all these activities but with the increased mobility achievable by the automobile, much of the cultural, educational and recreational uses moved from

downtown to the suburbs. This drastically reduces the use of downtown Jacksonville after business hours and during weekends. The City has done a great deal to revitalize cultural activities by the construction of the auditorium, coliseum, museum, and much of the river-front recreational facilities. More can be done, but these facilities require an easy method of access.

A growing trend evidenced in most urban centers of the United States today is the re-immigration of people back to central core residential areas. Therefore, the subgoal of strengthening middle and upper income residential development is of major significance for the DPM system. There has been a significant amount of new housing built in recent years in the central core. Additional market value housing for upper and middle income families is planned in the downtown area. The Springfield residential area is presently undergoing a revitalization. A DPM system available for use during all hours to transport residents to work and cultural areas would materially help attract new residents to the downtown area.

- Goal 2 - Improve Downtown Area Access and Mobility. Before everything else, the DPM is still a transportation system. It must, if it is to be successful, increase the mobility of people it is intended to serve.

At a bare minimum, the DPM ought to provide safe, efficient, convenient, and pleasurable travel for its users. However, much more can be achieved in this area by taking every opportunity to increase the pleasure and excitement of the DPM system during its travel through the downtown area. Vistas through the various developments to the river and the parks and to other major sources of visual attraction should certainly be encouraged. Clean, efficient stations directly connected to major activity centers so that people will have all-weather access to the system should certainly be built. Encouraging the separation of pedestrian and vehicular traffic is certainly desirable. The downtown plan envisions second-story walkways to be tied into the DPM system so that a distinct separation of these two modes can be

achieved. The DPM also should be tied into the second-level pedestrian system already proposed.

One of the subgoals listed is to promote increased transit ridership. This is a goal of nearly every transportation system. One of the major problems associated with transit commuting for the worker is the need to make trips during the course of the working day. Many downtown workers do not have available a method of transportation which will take them on their errands and back again during a reasonable time. This lack of midday mobility often causes people to drive an automobile even though they might prefer riding transit to work. A DPM system will provide increased midday mobility for workers in the downtown area and should in itself increase the desirability of using the transit system. Moreover, there are major midday "captive" riders, including students and elderly who would use a quick, efficient method of transit in the central core.

The final subgoal is a greater mobility for all persons, especially low-income, elderly and handicapped. Once again, the DPM is ideally suited to fit this particular goal because it provides not only mobility but direct access to many areas not now available to the elderly and handicapped because of physical barriers. The DPM system will help provide greater mobility by providing barrier-free access to its system for use by this special group of citizens.

- Goal 3 - Create a Financially and Operationally Viable DPM System. One of the major elements of the DPM feasibility should be a financially viable system. If the system cannot be affordable in both terms of initial capital investment and operational costs, the Jacksonville area does not need such a system. The goal of the DPM is to provide a system that would be operated in much the same way as the existing transit system. The system should operate when it is needed, should be dependable and should not be a major tax burden to the citizens of Jacksonville.

Certainly, a major part of viability is a high level of citizen participation, thereby promoting the achievement of the goals and objectives of the community. Earlier in this report, it was stated that the goals of a particular project should remain stable throughout the life of the project. However, the very success of a project will suggest the goals originally contemplated be expanded without changing their original intent. This expansion can be accommodated by a high level of citizen participation throughout the development of the DPM system. As major goals are achieved and conditions are improved, the horizons that they represent will be expanded and extended to fit new conditions. This will, in turn, make the operation and construction of the DPM system more viable and more necessary. The DPM will become a part of the cycle of capital investment leading to new development, to greater use by the public, to more demand for services, and again to new capital investment. This is a process that is desirable and which has been achieved in many urban areas of the nation.

OBJECTIVES

Each of the goals and subgoals listed above will be achieved through intermediate steps which are termed objectives. A list of objectives as adopted by the CAC is included below and has been grouped for comparison with the goals described.

The objectives for Goal 1 of revitalization include the following:

- Link the downtown area major activity centers and promote an interconnection among such centers.
- Create a DPM system that will help implement the Downtown Development Plan.
- Encourage joint development and value capture opportunities to reduce public investment and integrate the DPM with new developments.

- Provide support to the evenings and weekend use of the downtown area by providing safe, easy, convenient, and rapid transit.
- Help promote hotel, restaurant and convention use of the downtown area.
- Promote commercial activity by making shopping faster, all-weather controlled, more convenient and more fun.
- Minimize traffic disruption and real estate relocations.
- Control construction noise, air pollution and service disruption to an acceptable level.
- Complement the present and future urban landscape.
- Design a DPM with a minimum of visual intrusion.
- Use existing public right-of-way to the maximum extent possible.
- Provide tested and simplified DPM systems to reduce capital investment and subsequent operations and maintenance costs.

The objectives for Goal 2 of improved accessibility include the following:

- Provide for the second level walkway concept.
- Stimulate the development of a system of peripheral parking centers and provide access to and from major downtown area facilities.
- Provide a quiet, stable, clean, and energy-efficient mode of DPM.
- Provide barrier-free access to the system for the elderly and handicapped at all major points.
- Provide complementary, rapid, low-fare transit system which is safe, clean, reliable, convenient; which will result in easy movement throughout the downtown area.
- Provide complete inter-modal transportation facilities.
- Concentrate bus transit to inter-modal facilities on the downtown area periphery.
- Reduce quantity of buses in downtown area circulation so they might serve other areas in the region.

The objectives of Goal 3 of system viability include the following:

- Set up an effective Public Involvement Program.
- Define the intergovernmental requirements, laws, regulations, and financial commitments needed to implement the DPM.

The above objectives are a beginning step in the description and selection of the DPM system. During the course of the study, new objectives will be added and old objectives will be altered to fit changing strategies and conditions. The greatest change in objectives will occur during the alternative selection process using the criteria and weights system formulated as an outgrowth of the goals and objectives.

APPENDIX A

CPM ACTIVITIES LIST
JACKSONVILLE DPM STUDY

| TASK | ACTIVITY DESCRIPTION | LINK | | DURATIO |
|------|---|------|----|---------|
| | | B | E | |
| 1.1 | Technical Studies/Impact Assessment Programming | | | |
| * | Draft a statement of project goals and objectives | 0 | 2 | 0.6 |
| * | Review goals and objectives with JTA | 2 | 5 | 1.0 |
| * | Refine goals and objectives statement | 5 | 8 | 0.2 |
| * | List all study activities of PB/FA and reviews and approvals by JTA, CAC, DDA, JAPB, City of Jacksonville, FDOT, and UMTA | 1 | 3 | 1.0 |
| * | Assign direction to activities | 3 | 6 | 0.2 |
| * | Derive CPM logic | 6 | 9 | 1.4 |
| * | Assign event times | 4 | 7 | 0.4 |
| * | Correlate event times with work effort budget | 7 | 10 | 0.4 |
| * | Establish CPM network | 9 | 11 | 0.6 |
| * | Review draft CPM network with JTA | 11 | 13 | 0.2 |
| * | Develop final CPM network | 13 | 15 | 0.6 |
| * | Develop scaled-down bar chart schedule for reporting and public information purposes | 12 | 14 | 0.6 |
| * | Discuss bar chart schedule, goals and objectives, and task output list with CAC | 16 | 18 | 0.2 |
| * | Prepare display and publication documents and transmit to JTA for approval | 15 | 17 | 1.0 |
| * | Finalize display and publication documents | 17 | 19 | 1.0 |
| * | Print Technical Report No. 1 | 19 | 20 | 0.4 |
| 1.2 | Long Range Programming | | | |
| * | List all proposed major activities of DPM implementation program for conceptual design, preliminary engineering, EIS, grant development program, ROW acquisition, final design, | 0 | 1 | 1.0 |

| TASK | ACTIVITIES DESCRIPTION | LINK | | DURATIO |
|--------------|--|------|---|---------|
| | | B | E | |
| 1.2 Con't | contract documents, construction schedule, procurement schedule, testing, start-up revenue service and financing | | | |
| | * Develop general CPM for major tasks for entire program and detailed CPM for PE, EIS, and grant program | 1 | 2 | 2.0 |
| | * Discuss with JTA staff and Board, CAC, DDA, and City of Jacksonville | 2 | 3 | 1.0 |
| | * Make CPM revisions | 3 | 4 | 1.0 |
| | * Transmit to JTA for approval | 4 | 6 | 1.0 |
| | * Discuss task output with CAC | 5 | 7 | 0.2 |
| | * Prepare final documentation for transmittal to JTA for approval and later submission for UMTA, FDOT and others | 6 | 8 | 1.0 |

| TASK | ACTIVITIES DESCRIPTION | LINK | | DURATION |
|------|--|------|----|----------|
| | | B | E | |
| 2.1 | Orientation of Committees | | | |
| * | Collect and compile data on existing organizations | 0 | 2 | 1.0 |
| * | Prepare list of members | 1 | 3 | 1.0 |
| * | Consult with selected CAC members and JTA | 2 | 4 | 1.0 |
| * | Formulate tentative agency reorganization | 4 | 7 | 1.0 |
| * | Identify agencies and organizations to add to the list | 5 | 8 | 1.0 |
| * | Formulate reorganization and recruitment for JTA staff | 6 | 9 | 1.0 |
| * | Obtain agency approval | 7 | 12 | 1.0 |
| * | Establish project liaison with agencies | 12 | 13 | 0.6 |
| * | Outline types of problems and issues which may be of agency concern | 10 | 11 | 2.0 |
| * | Discuss issues with identified entities | 13 | 14 | 0.8 |
| * | Obtain agreement on problems, issues and concerns | 14 | 15 | 0.6 |
| 2.2 | Program Development | | | |
| * | Formulate draft Public Involvement Program (PIP) for: | 0 | 2 | 2.0 |
| | - neighborhoods, interest groups and agencies | | | |
| | - issues discussions | | | |
| | - design and service inputs | | | |
| | - impact evaluation | | | |
| * | Develop PIP elements of: | 1 | 3 | 2.0 |
| | - issue-oriented organizational structure by CAC, Ad Hoc, or formal subcommittee | | | |
| | - schedules for meetings | | | |
| | - review schedules for work progress | | | |
| | - mass media communications | | | |

| TASK | ACTIVITIES DESCRIPTION | LINK | | DURATIO |
|-------|--|------|----|---------|
| | | B | E | |
| 2.2 | * Review draft PIP with JTA | 2 | 4 | 1.0 |
| Con't | * Adjust draft PIP | 4 | 5 | 0.6 |
| | * Review PIP with CAC and other entities | 6 | 8 | 1.0 |
| | * Obtain JTA approval of PIP | 5 | 7 | 0.6 |
| | * Finalize PIP | 7 | 9 | 0.4 |
| | * Prepare text of Technical Report No. 2 | 9 | 10 | 1.0 |
| | * Print Technical Report No. 2 | 10 | 11 | 0.4 |
| 2.3 | Operation of Public Involvement Program | | | |
| | * Develop schedule for CAC review at critical points | 0 | 2 | 1.0 |
| | - end of Task 5 | | | |
| | - mid-point of Task 7 | | | |
| | - mid-point of Task 10 | | | |
| | - mid-point of Task 6 | | | |
| | - end of Task 6 | | | |
| | - end of Task 10 and mid-point of Task 11 | | | |
| | - end of Tasks 7 and 8 | | | |
| | - end of Tasks 9 and 11 | | | |
| | - end of Task 12 | | | |
| | * Develop schedule for subcommittee review | 1 | 3 | 1.0 |
| | * Operate PIP as approved | 2 | 4 | 36.0 |
| 2.4 | Support of JTA Presentations | | | |
| | * Support JTA in preparation of presentation schedule (maximum of six presentations) | 0 | 1 | 35.0 |

| TASK | ACTIVITIES DESCRIPTION | LINK | | DURATION |
|------|--|------|---|----------|
| | | B | E | |
| 3.1 | Data Collection Planning | | | |
| | * Review and analyze available Jacksonville DPM and area transportation and planning reports | 0 | 2 | 1.0 |
| | * List all required data by availability, relevance, and collection responsibility | 1 | 3 | 1.0 |
| | * Review with JTA staff, expand as required, and agree on implementation | 2 | 4 | 0.2 |
| | * Prepare data collection plan | 4 | 5 | 0.8 |
| 3.2 | Site Specific Data | | | |
| | * Establish organization liaison | 0 | 1 | 1.0 |
| | * Obtain, review, and analyze available site-specific data on physical and operational features of all CBD and broad corridors of probable non-CBD routes including: | 1 | 2 | 2.6 |
| | - utilities - water, sewer, storm, telephone, electric and gas | | | |
| | - mapping - base, property, planimetric | | | |
| | - structure and conditions survey and plans | | | |
| | - traffic counts, traffic patterns and street capacity inventory | | | |
| | - aerial photography | | | |
| | - sub-surface conditions | | | |
| | - railroads and grade-crossings | | | |
| | - river, bridge crossings and river traffic data | | | |
| | - standards, codes, requirements and criteria for all applicable jurisdictions | | | |
| | * Assess data for adequacy for input to this study and use by others | 2 | 4 | 1.0 |
| | * Catalog data for easy retrieval | 4 | 5 | 0.4 |
| | * Continue data collection as necessary and catalog | 3 | 6 | 8.0 |

| TASK | ACTIVITIES DESCRIPTION | LINK | | DURATIC |
|------|---|------|---|---------|
| | | B | E | |
| 3.3 | Planning Data | | | |
| | * Establish organization liaison | 0 | 1 | 0.4 |
| | * Obtain, review and analyze available data for planning the DPM system including: | 1 | 2 | 4.8 |
| | - population, economic and social data | | | |
| | - existing and projected land use | | | |
| | - existing and projected major street plan | | | |
| | - zoning and proposed development | | | |
| | - traffic and parking demands | | | |
| | - daytime population and pedestrian circulation | | | |
| | - employment and attraction patterns | | | |
| | - travel and parking cost data | | | |
| | - CBD development plans and objectives | | | |
| | - regional goals and objectives | | | |
| | - travel model software and input data | | | |
| | - transit networks and patronage | | | |
| | - water-front development | | | |
| | * Assess data for adequacy by geographic scale, subject matter and study input requirements | 2 | 4 | 1.0 |
| | * Catalog data for easy retrieval | 4 | 5 | 0.4 |
| | * Continue data collection as necessary and catalog | 3 | 6 | 8.0 |
| 3.4 | Impact Data Base | | | |
| | * Establish organization liaison | 0 | 1 | 0.4 |
| | * Obtain, review and analyze existing and near-term environmental conditions including: | 1 | 2 | 4.8 |
| | - long-range, 30-day weather listing and forecasts | | | |

| TASK | ACTIVITIES DESCRIPTION | LINK | | DURATIO |
|---|---|------|-----|---------|
| | | B | E | |
| 3.4 Con't | - open space inventory and natural conditions | | | |
| | - ecological and eco-system data | | | |
| | - acoustic and seismic noise sensitive areas | | | |
| | - neighborhood character | | | |
| | - community service and conditions | | | |
| | - visual survey and prominent views | | | |
| | - historic and archeologic resources | | | |
| | - energy availability and cost | | | |
| | - identify 4(f) and 106 sites | | | |
| | * Assess data for adequacy by EIS catagories, design inputs and PIR needs and baseline survey | 2 | 4 | 1.0 |
| * Catalog data for easy retrieval | 4 | 5 | 0.4 | |
| * Continue data collection as necessary and catalog | 3 | 6 | 8.0 | |
| 3.5 | DPM Technical Data | | | |
| * Using system specification results, establish general DPM performance requirements | 0 | 1 | 1.0 | |
| * Identify DPM technologies within established performance requirements | 1 | 2 | 1.0 | |
| * Obtain, review and analyze updated DPM data from UMTA, manufacturers and operating agencies | 2 | 3 | 2.0 | |
| * Catalog data for easy retrieval | 3 | 5 | 0.4 | |
| * Continue liaison with DPM developers and R&D projects | 4 | 6 | 6.0 | |
| 3.6 | Base Map Preparation | | | |
| * Assemble and recombine existing aerial photography to produce base maps for alternatives analysis | 0 | 1 | 2.0 | |
| * Specify aerial photography requirements to FDOT | 2 | 3 | 1.0 | |

| TASK | ACTIVITIES DESCRIPTION | LINK | | DURATIO |
|--------------|--|------|---|---------|
| | | B | E | |
| 3.6 Con't | * Develop standard sheet format | 4 | 6 | 1.0 |
| | * Prepare base maps of recommended alignment | 5 | 7 | 2.0 |
| | * Complete reference data | 7 | 8 | 2.0 |

| TASK | ACTIVITIES DESCRIPTION | LINK | | DURATION |
|------|--|------|----|----------|
| | | B | E | |
| 4.1 | System Specifications | | | |
| * | Review DPM goals and objectives from CAC and others from Task 1.1 as modified | 0 | 2 | 0.4 |
| * | Assemble and analyze system elements and characteristics from Task 3.0 | 1 | 3 | 0.4 |
| * | Formulate a series of simple statements on what the DPM system is intended to do, including: | 3 | 4 | 1.0 |
| | - CBD transportation and service level | | | |
| | - transit and personal transportation support | | | |
| | - financial parameters | | | |
| | - regional implications | | | |
| | - joint developments | | | |
| | - acceptable impact levels | | | |
| * | Discuss statements with JTA staff | 4 | 6 | 0.6 |
| * | Discuss statements with CAC subcommittees | 5 | 7 | 0.6 |
| * | Revise statements | 6 | 9 | 0.4 |
| * | Make presentation to DDA and C of C | 8 | 10 | 1.0 |
| * | Develop a system specification to include: | 11 | 12 | 0.6 |
| | - ridership areas and service levels | | | |
| | - operational characteristics | | | |
| | - broad system configuration | | | |
| | - fare structure and net operating/cost ratio | | | |
| | - CBD development potential | | | |
| | - levels of impact | | | |
| | - system convenience, safety, security, reliability and maintenance | | | |
| | - construction impact levels | | | |
| * | Obtain JTA approval of system specification | 12 | 13 | 0.4 |

| TASK | ACTIVITIES DESCRIPTION | LINK | | DURATION |
|--------------|--|------|----|----------|
| | | B | E | |
| 4.1 Con't | * Prepare final copy and text of Technical Report No. 3 | 13 | 14 | 0.6 |
| | * Print Technical Report No. 3 | 14 | 15 | 0.4 |
| 4.2 | Alternatives Evaluation Criteria | | | |
| | * Develop a preliminary list of subject and topics by which systems and configurations are to be judged and selected | 0 | 1 | 0.6 |
| | * Establish a set of preliminary criteria and weights | 1 | 2 | 1.0 |
| | * Develop a preliminary balance sheet | 2 | 3 | 0.4 |
| | * Discuss with JTA staff and CAC subcommittee | 3 | 4 | 1.0 |
| | * Prepare draft technical report | 5 | 7 | 1.0 |
| | * Revise and develop final planning balance sheet and technical report | 4 | 6 | 0.4 |
| | * Obtain JTA approval | 6 | 8 | 0.4 |
| 4.3 | Travel Assignment Bases | | | |
| | * Evaluate the travel forecasts from JUATS from Task 3.3 for a subregional travel base forecasting especially in CBD zones in terms of accuracy, completeness, age and adaptability to Jacksonville DPM ridership forecasting, CBD growth, daylight population, parking demands and travel demands | 0 | 3 | 1.4 |
| | * Evaluate, test and confirm regional travel model adaptability to small area forecasting | 1 | 4 | 1.4 |
| | * Obtain 1985 and 2005 networks by FDOT | 2 | 5 | 1.0 |
| | * Develop forecast techniques and procedures to be used | 4 | 6 | 1.0 |
| | * Forecast travel demands to the CBD by regional transit and auto for both typical 24 hour periods and peak periods and stratified into those trip purposes currently available from JUATS and forecast total travel demands within the CBD area affected by the DPM including: | 5 | 7 | 0.4 |

| TASK | ACTIVITIES DESCRIPTION | LINK | | DURATIO |
|--------------|---|------|----|---------|
| | | B | E | |
| 4.3 Con't | - person trip tables to show travel between locations in the CBD | | | |
| | - induced travel that will be generated by new developments along DPM alignment | | | |
| | * Develop methods for estimating DPM ridership from the following trip types: | 6 | 8 | 2.0 |
| | - diversion from walking | | | |
| | - induced CBD travel | | | |
| | - bus transfer | | | |
| | - park and ride (auto diversion) | | | |
| | - kiss and ride | | | |
| | * Revise forecast | 8 | 9 | 1.0 |
| | * JTA approval | 9 | 10 | 1.1 |

| TASK | ACTIVITIES DESCRIPTION | LINK | | DURATIO |
|------|--|------|----|---------|
| | | B | E | |
| 5.1 | Identification of Route Alternatives | | | |
| * | Do field reconnaissance for system constraints and opportunities | 0 | 3 | 1.0 |
| * | Identify and analyze major planning features and opportunities, i.e. major employment and daytime population centers, the dynamics and probability of future development, social goals and constraints, impact sensitive areas, etc. | 1 | 4 | 1.6 |
| * | Measure level of activity at major CBD centers | 2 | 5 | 2.0 |
| * | Analyze, consolidate and simplify above data into a short list of reasonable alternative corridors | 4 | 6 | 1.0 |
| * | Review and discuss with JTA staff and CAC | 6 | 8 | 0.4 |
| * | Describe and delineate four route alternatives as defined in Task 4.3 for testing: | | | |
| | - do-nothing | 11 | 12 | 1.0 |
| | - DPM alternative #1 | 8 | 13 | 2.0 |
| | - DPM alternative #2 | 9 | 14 | 1.6 |
| | - bus only | 10 | 15 | 1.6 |
| 5.2 | Identification of Vehicle/Guideway Alternative | | | |
| * | Develop vehicle system parameters from data of Task 3.5, contrasting system specification of Task 4.1 against know systems' characteristics | 0 | 2 | 2.0 |
| * | Develop guideway parameters from data of Task 3.5, contrasting data from Tasks 3.2, 3.3, 3.4, 4.1, and 5.1 against guideway characteristics | 1 | 3 | 1.0 |
| * | Evaluate, simplify and combine the parameters above into a short worst case matrix to be used in later tasks | 2 | 4 | 1.0 |
| * | JTA review | 4 | 5 | 1.0 |
| * | Refine worst case matrix | 5 | 7 | 0.6 |
| * | JTA approval | 6 | 7 | 1.0 |
| * | Print Technical Report No. 4 | 7 | 8 | 0.4 |

| TASK | ACTIVITIES DESCRIPTION | LINK | | DURATIO |
|------|---|------|---|---------|
| | | B | E | |
| 5.3 | Identification of Operational Alternatives | | | |
| | * Measure level of activity at major CBD centers | 2 | 5 | 2.0 |
| | * Develop operational parameters | 1 | 3 | 2.0 |
| | * Develop operational scenarios | 2 | 4 | 1.0 |
| | * Present and discuss with JTA staff, DPM Task | 3 | 5 | 1.0 |
| | * Draft text for Technical Report No. 4 | 5 | 6 | 1.0 |
| 5.4 | Identification of Fare Alternatives | | | |
| | * Obtain and evaluate data on JTA fare structure and fare goals | 0 | 3 | 0.4 |
| | * Evaluate DPM ridership from data of Task 4.3 | 1 | 4 | 0.4 |
| | * Develop a set of fare structure alternatives contrasting revenues against ridership | 2 | 5 | 1.0 |
| | * Present and discuss with JTA staff, DPM Task Force and CAC | 5 | 6 | 1.0 |
| | * Prepare text for Recommended Alternative Report | 6 | 7 | 1.0 |

| TASK | ACTIVITIES DESCRIPTION | LINK | | DURATIO |
|------|--|------|----|---------|
| | | B | E | |
| 6.1 | Test Network Development | | | |
| | * Estimate induced travel for: | | | |
| | - do-nothing alternative | 0 | 5 | 0.4 |
| | - DPM alternative #2 | 1 | 6 | 0.6 |
| | - bus only transit alternative | 3 | 8 | 1.0 |
| | - DPM alternative #1 | 2 | 7 | 1.0 |
| | * Develop a microscale network for CBD area for each alternative | 4 | 9 | 1.0 |
| | * Test do-nothing and one DPM corridor configuration at regional level to estimate CBD oriented trip making | 6 | 10 | 1.0 |
| | * Test other DPM and bus only alternative at microscale level to estimate ridership flow values | 7 | 11 | 1.0 |
| | * Test CBD micro network | 9 | 12 | 1.0 |
| | * Test the system alternatives defined above using DPM ridership forecast method developed for the route, vehicle/guideway, operational and fare alternatives formulated in Task 5.0 | 11 | 14 | 1.0 |
| | * Estimate ridership flow levels | 12 | 15 | 1.0 |
| | * Produce DPM ridership for each DPM alternative stratified into peak periods, base period, weekday, direction, purpose and trip diversion type | 14 | 17 | 1.0 |
| | * Estimate CBD oriented parking demand by direction and zone | 13 | 16 | 1.0 |
| | * Present data in simplified format to JTA staff and CAC for discussion | 17 | 18 | 1.0 |
| | * Revise ridership | 18 | 19 | 1.0 |
| | * Reiterate alternative for minor revisions | 19 | 20 | 4.0 |
| 6.2 | Comparative Evaluation of Alternatives | | | |
| | * Prepare a planning balance sheet for each system alternative: | | | |

| TASK | ACTIVITIES DESCRIPTION | LINK | | DURATIO |
|------------------------|--|------|-----|---------|
| | | B | E | |
| 6.2 Con't | - do-nothing alternative | 0 | 4 | 1.0 |
| | - DPM alternative #1 | 1 | 5 | 1.0 |
| | - DPM alternative #2 | 2 | 6 | 1.0 |
| | - bus only alternative | 3 | 7 | 1.0 |
| | * Present balance sheets to JTA staff and CAC for discussion and evaluation in CAC charette session | 5 | 8 | 1.0 |
| | * Revise balance sheets | 8 | 9 | 1.0 |
| | * Reduce number of route and system configurations to best match system specification | 9 | 10 | 1.0 |
| | * Reduce route configurations | 10 | 11 | 1.0 |
| * Prepare text for RAR | 11 | 13 | 2.0 | |
| 6.3 | River Crossing Requirements | | | |
| * | Prepare destinations of possible river crossing alternatives | 0 | 1 | 1.0 |
| | - Acosta | | | |
| | - Main Street | | | |
| | - new medium level | | | |
| | - new high level | | | |
| | - cable system | | | |
| * | Develop opportunities and constraints for sub-surface conditions, river traffic and navigational hazards, system operations, ridership, cost and permits | 1 | 2 | 2.0 |
| * | Reduce alternatives to practical minimums | 2 | 3 | 1.0 |
| * | Incorporate into system specification, evaluation criteria and route alternatives | 3 | 4 | 1.0 |
| * | Prepare text and graphics for RAR | 4 | 5 | 1.0 |
| 6.4 | Selection of Recommended Alternative | | | |
| * | Prepare a comprehensive but concise presentation of the study results and alternative selection process to date | 0 | 1 | 1.0 |

| TASK | ACTIVITIES DESCRIPTION | LINK | | DURATIO |
|----------------|--|------|---|---------|
| | | B | E | |
| 6.4 * Con't | Make presentation to JTA staff, CAC, DDA for review and comment | | | |
| | - JTA | 1 | 4 | 1.0 |
| | - CAC | 2 | 5 | 0.4 |
| | - DDA | 3 | 6 | 0.4 |
| | * Select a final recommended alternative for route, vehicle, control, propulsion, guideway, operational, maintenance, development phasing and fare structure | 4 | 7 | 2.0 |
| | * Prepare recommended system alternative presentation | 7 | 8 | 1.0 |
| | * JTA approval | 8 | 9 | 2.0 |

| TASK | ACTIVITIES DESCRIPTION | LINK | | DURATIC |
|------|---|------|---|---------|
| | | B | E | |
| 7.1 | Environmental Baseline Survey | | | |
| | * Obtain, analyze and complete data collected under Tasks 3.3 and 3.4 in EIA format | 0 | 1 | 1.0 |
| | * Prepare draft of EIA including: | 1 | 2 | 3.0 |
| | - history of Jacksonville and transit | | | |
| | - existing Jacksonville economic conditions and social characteristics | | | |
| | - neighborhood character in project area | | | |
| | - condition of community services | | | |
| | - transportation baseline | | | |
| | - visual quality survey of project area | | | |
| | - parks and open space inventory including historic landmarks and archeological sites | | | |
| | - environmental conditions baseline | | | |
| | - special conditions unique to project area | | | |
| | * Submit EBS to JTA staff for review and comment | 2 | 3 | 1.0 |
| | * Prepare final EBS text and copy | | | |
| 7.2 | Support of Alternative Evaluations | | | |
| | * Prepare an environmental impact profile for each system alternative of Task 5.1 and 6.2 to include only major impacts over baseline conditions in an order-of-magnitude scale for easy comparison in the following areas: | 0 | 4 | 2.0 |
| | | 1 | 5 | 2.0 |
| | | 2 | 6 | 2.0 |
| | | 3 | 7 | 2.0 |
| | - land use and redevelopment | | | |
| | - neighborhood character and services | | | |
| | - relocation | | | |
| | - transportation | | | |
| | - economics and cost | | | |
| | - environmental | | | |

| TASK | ACTIVITIES DESCRIPTION | LINK | | DURATION |
|--------------|--|------|----|----------|
| | | B | E | |
| 7.2 Con't | - aesthetics | | | |
| | - energy usage | | | |
| | * JTA approval and input summary | 4 | 8 | 2.0 |
| | * Prepare a list of major impacts for the recommended alternative presentation under Task 6.4 | 8 | 9 | 2.0 |
| | * Prepare a comprehensive but general EIA profile of the recommended alternative | 9 | 10 | 2.0 |
| 7.3 | Impact of Recommended Alternative | | | |
| | * Prepare a detailed outline of the Environmental Impact Assessment | 0 | 1 | 1.0 |
| | * Submit to JTA staff for review and approval | 1 | 2 | 2.0 |
| | * Develop a general statement for the recommended alternative for each element subject area for the positive and adverse impacts | 2 | 3 | 4.0 |
| | * Prepare a general statement of <u>land use</u> impacts | | | |
| | - calculate the total and DPM occupied land use both existing and proposed | | | |
| | - evaluate long-range planning goals | | | |
| | - assess the DPM effects on the redistribution and growth of land use types in the CBD | | | |
| | - describe the appropriateness of such growth on the DPM system | | | |
| | * Prepare a general statement on the project <u>neighborhood</u> impacts of: | | | |
| | - character and viability of existing neighborhoods | | | |
| | - temporary construction effects | | | |
| | * Prepare a statement on <u>relocation</u> effects by the DPM on: | | | |
| | - list of full and partial takes for residential, commercial, and others | | | |
| | - measure relocation resources available | | | |

| TASK | ACTIVITIES DESCRIPTION | LINK B E | DURATIO |
|--------------|---|-------------|---------|
| 7.3 Con't | <ul style="list-style-type: none"> * Prepare a general statement on <u>community</u> services, long-range and construction impacts, including police, fire, traffic access, schools recreation and medical * Prepare a general statement on the <u>economic</u> impacts, including order-of-magnitude estimate of property values, net measurable changes to system users and non-users, change in transit accessibility, increased construction and permanent employment, business generation and construction disruption * Prepare a general statement of <u>transportation and access</u> impacts, including <u>existing and proposed</u> traffic circulation, pedestrian flow, parking demands and transit usage * Conduct a visual survey within the DPM corridor for user and non-user effects and prepare a list of visually sensitive areas * Evaluate DPM structures and stations for aesthetic appeal and visual impact * Identify <u>historic</u> and <u>archeological</u> resources within the project area which are eligible for the Nation Register of Historic Places using 36 CFR Section 800.8 * Prepare a general statement of historic and archeological impacts of DPM and their Section 106 mitigation * Identify and describe general eco-systems within the project area * Identify <u>natural resources</u> that will be adversely affected by DPM implementation * Describe the general ambient water quality of the project area * Assess the <u>water resources</u> impact on the surface water hydrology and water quality, especially near the St. Johns River and tributaries - Assess water quality degradation from the DPM and its construction and its possible mitigation - Prepare a general statement on the <u>geological</u> impacts | | |

| TASK | ACTIVITIES DESCRIPTION | LINK | | DURATIC |
|--------------|---|------|---|---------|
| | | B | E | |
| 7.3 Con't | * Describe the ambient <u>air quality</u> in the DPM service run | | | |
| | * Evaluate the proposed change in auto trips | | | |
| | * Measure order-of-magnitude parking demands and concentrations | | | |
| | * List air quality degradation and mitigation methods during construction | | | |
| | * Prepare a general statement on the effects of the DPM on future air quality in the service area | | | |
| | * Describe the <u>noise and vibration</u> impact of the DPM on adjacent land use and structures | | | |
| | * Determine the energy consumption for the DPM during a 24-hour weekday, peak hour, and off-peak periods for 1985 and 2005 | | | |
| | * Measure the petroleum consumption for the same periods as above for do-nothing, bus only and DPM alternatives | | | |
| | * Prepare a general statement on the <u>energy</u> impact | | | |
| | * Prepare a general statement on normal EIS Chapters V, VI, VII, and VIII | | | |
| | * Collate and rewrite generalized statements and data into a unified whole as a general preliminary environmental impact assessment | | | |
| | * Submit draft to JTA staff, DPM Task Force, and CAC for review and approval | 3 | 4 | 2.0 |
| | * Revise and edit final draft of EIA as Technical Report No. 5 | 4 | 5 | 2.0 |
| | * Print Technical Report No. 5 | 5 | 6 | 1.0 |

| TASK | ACTIVITIES DESCRIPTION | LINK | | DURATIO |
|------|--|------|---|---------|
| | | B | E | |
| 8.1 | Reference DPM System | | | |
| | * Evaluate and correlate recommended DPM system with other system for compatability | 0 | 1 | 1.0 |
| | * Prepare a list of specific DPM system including vehicle, command and control systems, propulsion and electrification systems, maintenance requirements, guideway, safety features and station interfaces | 1 | 3 | 3.0 |
| | * Prepare unit costs for all elements of DPM system | 2 | 4 | 2.0 |
| | * Input to Task 12.3 | 3 | 5 | 1.0 |
| 8.2 | Typical Structures | | | |
| | * Correlate guideway to system | 0 | 3 | 0.6 |
| | * Prepare special structural requirements for river crossing | 2 | 5 | 1.0 |
| | * Identify and define special foundation conditions | 1 | 4 | 1.0 |
| | * Design typical guideway and foundation | 3 | 8 | 3.0 |
| | * Prepare unit costs for typical structure | 6 | 7 | 2.0 |
| | * Input to Task 12.3 | 8 | 9 | 1.0 |
| 8.3 | Prototypical Station Design | | | |
| | * Review station locations selected | 0 | 2 | 1.0 |
| | * Assisgn each station categories | 1 | 3 | 1.0 |
| | * Develop a prototypical functional layout for each category of station | 3 | 5 | 2.0 |
| | * Obtain selection of two prototypical stations with JTA staff and transit committee | 4 | 6 | 0.4 |
| | * Develop architectural program for stations | 5 | 7 | 1.0 |
| | * Prepare sketch plans and section for two prototypical stations | 7 | 8 | 2.0 |
| | * Discuss design with JTA staff for comments | 8 | 9 | 1.0 |

| TASK | ACTIVITIES DESCRIPTION | LINK | | DURATIO |
|-------|--------------------------|------|----|---------|
| | | B | E | |
| 8.3 | * Finish station design | 9 | 14 | 2.0 |
| Con't | * Prepare unit cost data | 10 | 12 | 1.0 |
| | * Present station design | 11 | 13 | 0.6 |

| TASK | ACTIVITIES DESCRIPTION | LINK | | DURATI |
|------|---|------|---|--------|
| | | B | E | |
| 9.1 | Route Alignment Plan | | | |
| | * Prepare unit costs | 1 | 3 | 2.0 |
| | * Prepare plan and profiles for the recommend- ed system alignment | 0 | 2 | 6.0 |
| | * Prepare plan and profiles for recommended system alignment | 2 | 5 | 3.0 |
| | * Delineate on above plans station platforms and ground level sit plan from Task 8.3 and other sources | 4 | 6 | 2.0 |
| | * Delineate parking areas by type, right-of-way, station area access, surrounding streets with necessary modifications, and station appur- tenances | 5 | 7 | 2.0 |
| | * JTA review | 7 | 8 | 1.0 |
| 9.2 | Station Site Plans | | | |
| | * Prepare sit plans for six stations selected under Task 8.3 showing station ground floor plan, bus and inter-modal transfer points, pedestrian circulation, parking facilities, station appurtenances surround existing or proposed land uses station access and surrounding streets | 0 | 3 | 3.0 |
| | * Present to JTA | 3 | 4 | 1.0 |
| | * Prepare unit cost estimate | 1 | 2 | 1.0 |
| 9.3 | Architectural Sketches, Renderings and Models | | | |
| | * Select appropriate line sections or stations and method of depiction for formal renderings and consult with JTA staff on the selection | 0 | 1 | 1.0 |
| | * Prepare renderings | 1 | 2 | 4.0 |
| | * Present renderings | 2 | 5 | 1.0 |
| 9.4 | Support Facilities | | | |
| | * Define and describe spatial and functional needs for recommended system, maintenance, substation, vehicle storage and command/ control facilities | 0 | 1 | 2.0 |

| TASK | ACTIVITIES DESCRIPTION | LINK | | DURATIO |
|--------------|--|------|---|---------|
| | | B | E | |
| 9.4 Con't | * Prepare functional program | 1 | 2 | 1.0 |
| | * Discuss with JTA | 2 | 4 | 1.0 |
| | * Prepare a combination sketch building and site plan for these facilities | 4 | 6 | 1.0 |
| | * Prepare unit cost estimates | 3 | 5 | 1.0 |
| | * Prepare text and graphics for Final Comprehensive Report | 6 | 7 | 1.0 |
| 9.5 | Operational Plan | | | |
| | * Prepare an operational plan for weekday peak hour, off-peak hour and weekend day including length of revenue service, headways, dwell times, average trip speed and train consists | 0 | 3 | 2.0 |
| | * Prepare a generalized proforma maintenance schedule for assumed 1985-2005 revenue service | 1 | 2 | 1.0 |
| | * Prepare a generalized proforma personnel schedule for assumed 1985-2005 revenue service | 3 | 4 | 1.0 |
| | * Discuss above with JTA staff for comments | 4 | 5 | 1.0 |
| 9.6 | Intermodal Travel Improvements | | | |
| | * Analyze new auto, bus and pedestrian access as relates to DPM system | 0 | 2 | 1.0 |
| | * Determine those trips that can reasonably be accomodated at DPM stations | 1 | 3 | 1.0 |
| | * Describe and delineate intermodal transfer requirements for use in Task 8.3 | 3 | 5 | 1.0 |
| | * List any street or related changes to be made | 2 | 4 | 1.0 |
| | * Delineate general bus routes to serve DPM | 5 | 6 | 2.0 |
| | * Present to JTA staff for review | 6 | 7 | 1.0 |
| | * Prepare copy-ready text and graphics for use in Task 12.3 | 7 | 8 | 1.0 |
| 9.7 | Capital Cost Estimates | | | |
| | * Assemble and analyze available cost data and unit costs developed elsewhere in study | 2 | 4 | 0.6 |

| TASK | ACTIVITIES DESCRIPTION | LINK | | DURATI |
|--------------|--|------|---|--------|
| | | B | E | |
| 9.7 Con't | * Prepare capital cost presentation format | 0 | 1 | 1.0 |
| | * JTA staff review and comment | 1 | 3 | 1.0 |
| | * Prepare capital cost estimates stratified by system components, ROW, utilities and agencies in order-of-magnitude detail | 3 | 6 | 1.0 |
| | * JTA review and approval | 6 | 8 | 1.0 |
| | * Prepare final text and graphics for Task 12.3 | 5 | 7 | 1.0 |
| 9.8 | Maintenance/Operations Cost Estimates | | | |
| | * Prepare a proforma M & O cost estimate including at least, administrative, security, maintenance, operations, energy and labor costs at order-of-magnitude levels for revenue years: | | | |
| | - 1985 | 0 | 3 | 2.0 |
| | - 2005 | 1 | 2 | 1.4 |
| | * Present to JTA for review and comment | 3 | 5 | 1.0 |
| | * Prepare text and graphics for Task 12.3 | 4 | 6 | 1.0 |
| 9.9 | Revenue Estimates | | | |
| | * Prepare patronage forecasts for 1985 and 2005 | 0 | 1 | 2.0 |
| | * Prepare a proforma revenue estimate including, at least, fare box collections at significant fare and ridership levels, rentals, concessions fees and value capture for revenue years: | | | |
| | - 1985 | 1 | 4 | 3.0 |
| | - 2005 | 2 | 3 | 2.0 |
| | * Present to JTA staff for review | 4 | 5 | 1.0 |
| 9.10 | Net Revenue Estimates | | | |
| | * Prepare net revenue matrix showing significant combinations of fare levels, revenues, ridership, costs and subsidies, if required | 0 | 1 | 1.0 |
| | * Prepare net revenue estimates | 1 | 2 | 1.0 |
| | * Present matrix and revenue recommendations to JTA | 2 | 3 | 1.0 |

| TASK | ACTIVITIES DESCRIPTION | LINK | | DURATI |
|------|---|------|----|--------|
| | | B | E | |
| 10.1 | Urban Development and Design Opportunities | | | |
| | * Make a field examination of CBD and potential DPM service areas to gain an understanding of major areas of development potential | 2 | 5 | 1.0 |
| | * Examine all relevant economic and development plans and studies | 1 | 4 | 1.0 |
| | * Interview DDA, C of C, local citizens, planning officials, agencies and elected officials | 0 | 3 | 1.0 |
| | * Prepare evaluation criteria to be used in Task 4.2 | 4 | 6 | 1.0 |
| | * Identify major areas of development potential | 5 | 7 | 1.0 |
| | * Assist in selection of route alternatives | 8 | 9 | 2.0 |
| | * Assist in determining degree and location of likely development | 9 | 10 | 1.0 |
| | * Prepare text for Technical Report No. 6 | 10 | 11 | 1.0 |
| 10.2 | Joint Development | | | |
| | * Review potential joint use of system ROW including private use, recreation or parking facilities, connections with major generators | 0 | 3 | 1.0 |
| | * Identify specific joint development used | 3 | 6 | 1.0 |
| | * Measure equivalent return if used by public interest | 1 | 4 | 0.4 |
| | * Consult with local planning and elected officials on joint development potential | 6 | 7 | 1.0 |
| | * Make preliminary assessment of legal requirements and required agreements | 2 | 6 | 0.4 |
| | * Prepare final text and graphics for Technical Report No. 6 | 7 | 8 | 1.0 |
| 10.3 | Value Capture Analysis | | | |
| | * Choose value capture sites | 0 | 4 | 0.6 |
| | * Measure value capture potential and method of return appropriate to each chosen site | 1 | 5 | 0.6 |

| TASK | ACTIVITIES DESCRIPTION | LINK | | DURATION |
|------|---|------|----|----------|
| | | B | E | |
| 10.3 | * Identify, analyze and recommend remedial measures on the legal and institutional constraints and opportunities for development implementation | 2 | 6 | 0.6 |
| | * Consult with private interests and citizen of value capture | 3 | 7 | 1.0 |
| | * Identify significant specific value capture developments | 4 | 8 | 1.0 |
| | * Prepare an economic order-of-magnitude estimate of potential development for the DPM service area and subdivide totals into contiguous station impact areas and stratified by type and sponsorship of development | 8 | 9 | 1.0 |
| | * Prepare final text and graphics for inclusion in Technical Report No. 6 | 9 | 10 | 1.0 |
| | * Submit draft of Technical Report No. 6 to JTA for review | 10 | 11 | 1.0 |
| | * Revise and edit draft | 11 | 12 | 1.0 |
| | * Print report and submit for distribution | 12 | 13 | 1.0 |

| TASK | ACTIVITIES DESCRIPTION | LINK | | DURATIC |
|------|--|------|----|---------|
| | | B | E | |
| 11.1 | Capital Cost Funding | | | |
| * | Assemble and evaluate capital cost estimates prepared in Task 9.7 | 0 | 1 | 1.0 |
| * | Add to estimates all project related cost for implementation | 1 | 5 | 1.0 |
| * | Evaluate construction phasing | 3 | 4 | 0.6 |
| * | Expand estimates to day-of-expenditure costs using construction phasing | 4 | 7 | 1.0 |
| * | Evaluate and estimate capital funds availability from all reasonable sources | 2 | 6 | 1.0 |
| * | Prepare a preliminary proforma funding plan with several variables | 5 | 8 | 1.0 |
| * | Prepare a cash flow analysis | 6 | 9 | 1.0 |
| * | Present to JTA staff for review and comment | 8 | 10 | 1.0 |
| 11.2 | Annual Cost Funding | | | |
| * | Assemble, evaluate and summarize all costs from Task 9.10, including annualized capital costs and/or equivalent debt service | 0 | 3 | 1.0 |
| * | Revise net revenue estimate | 1 | 4 | 1.0 |
| * | Prepare estimate of subsidy sources | 2 | 5 | 1.0 |
| * | Prepare financial matrix | 4 | 6 | 1.0 |
| * | JTA review and comment | 6 | 7 | 1.0 |
| * | Recommend financial and prepare text and graphics for Task 12.3 | 7 | 8 | 1.0 |
| * | Print Technical Report No. 7 | 8 | 9 | 1.0 |

| TASK | ACTIVITIES DESCRIPTION | LINK | | DURATIO |
|------|---|------|----|---------|
| | | B | E | |
| 12.2 | Recommended Alternative Report | | | |
| * | Prepare RAR outline | 0 | 1 | 1.0 |
| * | Obtain JTA approval | 1 | 2 | 1.0 |
| * | Prepare RAR draft and graphics of alternative process | 2 | 3 | 2.0 |
| * | Prepare RAR text for Alternative Selection | 3 | 4 | 2.0 |
| * | JTA review of alternative process | 4 | 5 | 2.0 |
| * | Edit text and graphics | 4 | 6 | 1.0 |
| * | JTA review of alternative selection text | 5 | 7 | 1.0 |
| * | Edit text | 6 | 8 | 1.0 |
| * | Print RAR report | 8 | 9 | 2.0 |
| 12.3 | Comprehensive Final Report | | | |
| * | Prepare report outline | 0 | 1 | 2.0 |
| * | JTA staff approval | 1 | 3 | 2.0 |
| * | Prepare draft of final report and graphics | 2 | 4 | 2.0 |
| * | Prepare draft of final report and graphics | 4 | 6 | 1.0 |
| * | JTA review and comment | 5 | 7 | 2.0 |
| * | JTA review and comment | 7 | 9 | 1.0 |
| * | Continue preparation of final report and graphics | 6 | 8 | 1.0 |
| * | Edit and revise report text | 8 | 10 | 1.0 |
| * | Edit and revise report text | 10 | 11 | 1.0 |
| * | Print Final Comprehensive Report | 11 | 12 | 2.0 |
| * | Present final report to JTA Board for approval | 12 | 13 | 2.0 |
| 12.4 | Summary Report | | | |
| * | Prepare summary report outline and mockup | 0 | 1 | 2.0 |
| * | Submit to JTA for comment and approval | 1 | 2 | 2.0 |
| * | Prepare text and assemble graphics | 2 | 4 | 6.0 |

| TASK | ACTIVITIES DESCRIPTION | LINK | | DURATI |
|---------------|--|------|---|--------|
| | | B | E | |
| 12.4 Con't | * Submit to JTA for comment and approval | 3 | 5 | 2.0 |
| | * Edit copy | 4 | 6 | 2.0 |
| | * Print summary report | 6 | 7 | 2.0 |

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APPENDIX B

**DOWNTOWN PEOPLE MOVER
TECHNICAL STUDY PHASE**

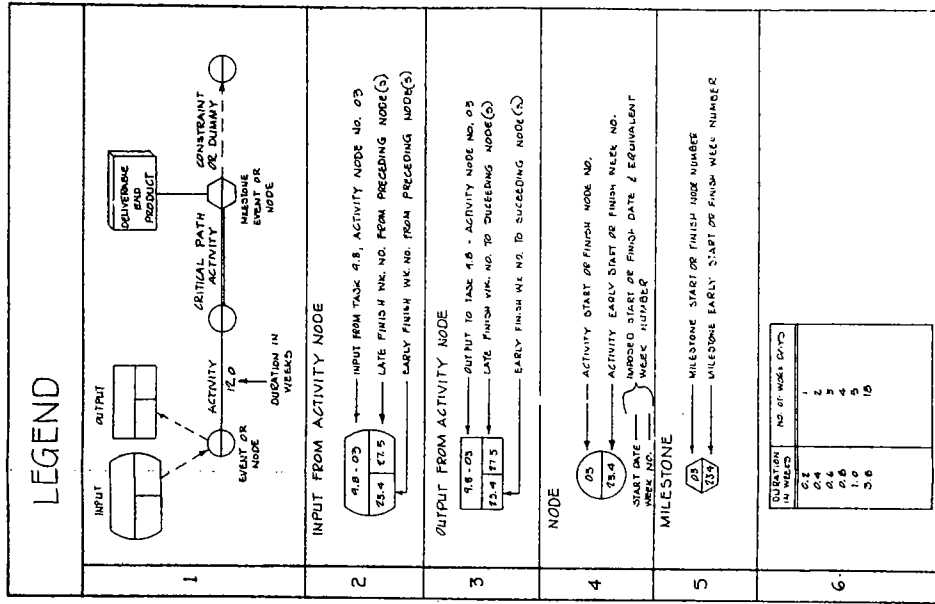
**WORK PROGRAMMING FOR TECHNICAL STUDIES
& IMPACT ASSESSMENT**

Prepared For
JACKSONVILLE TRANSPORTATION AUTHORITY
Prepared By
PARSONS, BRINCKERHOFF/FLOOD & ASSOCIATES

JULY, 1978

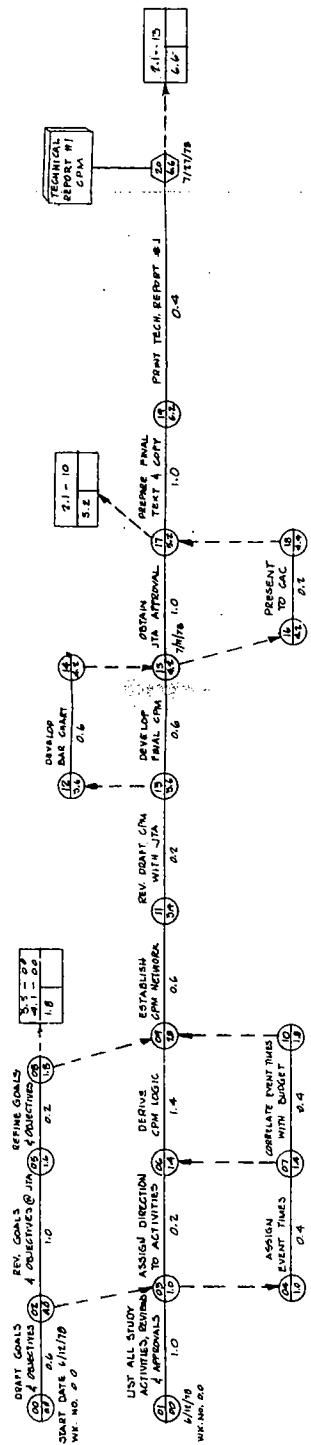
| TABLE OF CONTENTS | |
|-------------------|---|
| DWG. NO. | TASK NO. DESCRIPTION |
| 1 | TABLE OF CONTENTS, LEGEND, CALENDAR |
| 2 | DPM DEVELOPMENT PROGRAMMING |
| 3 | PUBLIC INVOLVEMENT PROGRAM |
| 4 | DATA COLLECTION & ANALYSIS |
| 5 | SYSTEM PLANNING BASES |
| 6 | DEVELOPMENT OF CANDIDATE ALTERNATIVES |
| 7 | TESTING OF ALTERNATIVES |
| 8 | ENVIRONMENTAL IMPACT ASSESSMENT |
| 9 | RECOMMENDED SYSTEM |
| 10 | URBAN DEVELOPMENT STRATEGIES & BENEFITS |
| 11 | FINANCIAL PLAN DEVELOPMENT |
| 12 | REPORT |
| 13 | SUMMARY SCHEDULE |

| CALENDAR - WORK WEEK | | |
|----------------------|---------|---------|
| 1978 | | 1979 |
| DATE | WK. NO. | DATE |
| JUNE 12 | 0 | JAN 1 |
| JUNE 19 | 1 | JAN 8 |
| JUNE 26 | 2 | JAN 15 |
| JULY 3 | 3 | JAN 22 |
| JULY 10 | 4 | JAN 29 |
| JULY 17 | 5 | FEB 5 |
| JULY 24 | 6 | FEB 12 |
| JULY 31 | 7 | FEB 19 |
| AUG 7 | 8 | FEB 26 |
| AUG 14 | 9 | MAR 5 |
| AUG 21 | 10 | MAR 12 |
| AUG 28 | 11 | MAR 19 |
| SEP 4 | 12 | MAR 26 |
| SEP 11 | 13 | APR 2 |
| SEP 18 | 14 | APR 9 |
| SEP 25 | 15 | APR 16 |
| OCT 2 | 16 | APR 23 |
| OCT 9 | 17 | APR 30 |
| OCT 16 | 18 | MAY 7 |
| OCT 23 | 19 | MAY 14 |
| OCT 30 | 20 | MAY 21 |
| NOV 6 | 21 | MAY 28 |
| NOV 13 | 22 | JUNE 4 |
| NOV 20 | 23 | JUNE 11 |
| NOV 27 | 24 | JUNE 18 |
| DEC 4 | 25 | JUNE 25 |
| DEC 11 | 26 | JULY 2 |
| DEC 18 | 27 | JULY 9 |
| DEC 25 | 28 | JULY 16 |

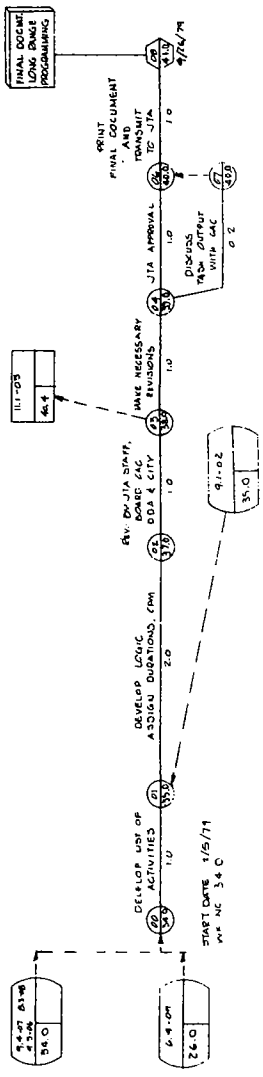


| JACKSONVILLE TRANSPORTATION AUTHORITY | |
|---------------------------------------|------------|
| PREPARED BY: | D. P. SHAM |
| APPROVED BY: | D. SHAM |
| DATE: | 7-14-78 |
| REVISION: | 1 |
| TABLE OF CONTENTS, CALENDAR, LEGEND. | |
| JACKSONVILLE TRANSPORTATION AUTHORITY | |

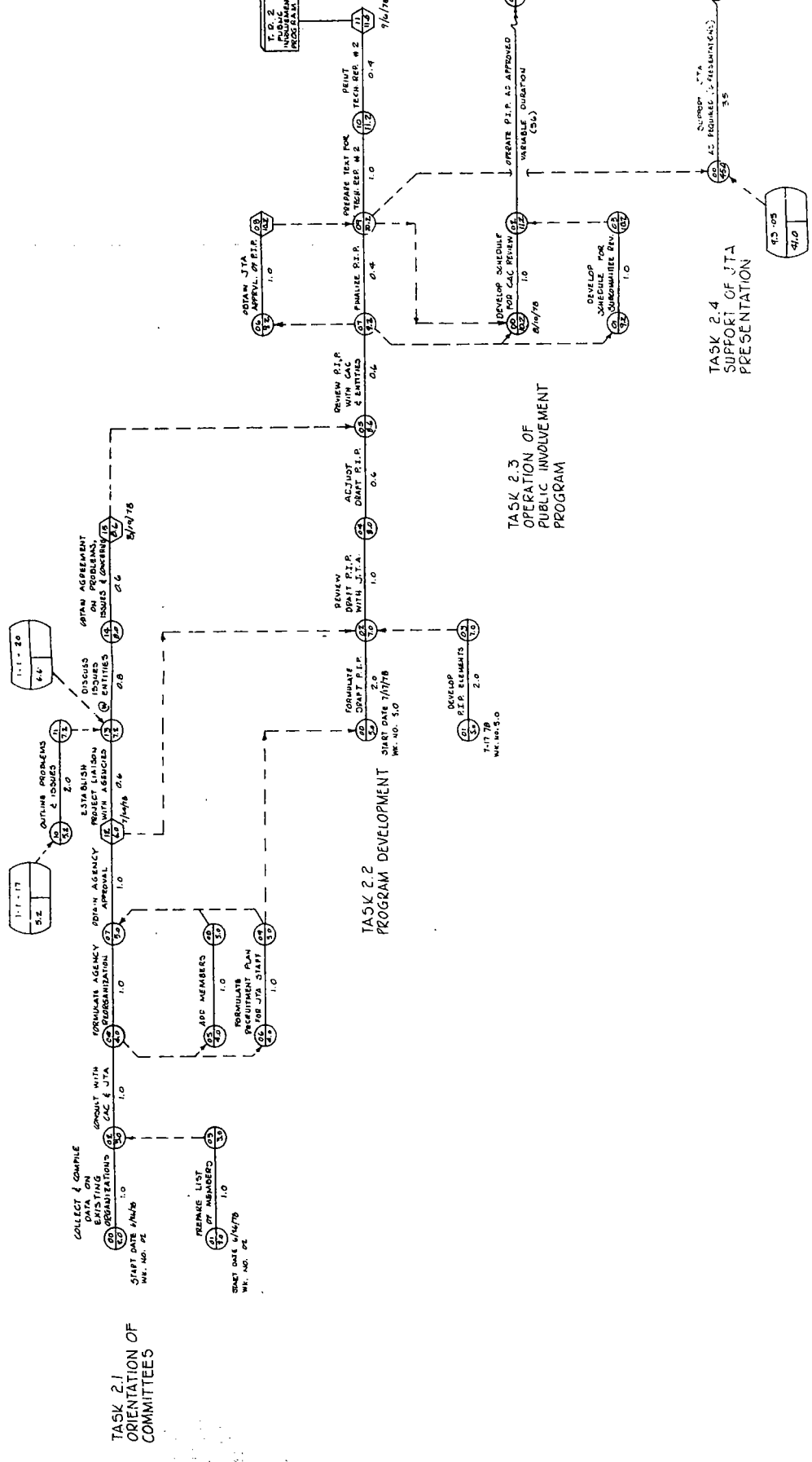
**TASK 1.1
TECHNICAL
STUDIES &
IMPACT ASSESSMENT
PROGRAMMING**



**TASK 1.2
LONG RANGE
PROGRAMMING**



| | | |
|---------------------------|---|-------------------|
| APPROVED BY C. F. SHAH | JACKSONVILLE TRANSPORTATION AUTHORITY | SCALE NONE |
| APPROVED BY D. E. ... | Domestic Program Manager, Technical Study Phase | CONTRACT |
| DATE 7/15/78 | TASK 1.0 DPM DEVELOPMENT PROGRAMMING | CONTRACT NO. |
| REVISION DATE | ISSUES PARCEL/REVISED 7/1/00 & 8/20/01 | CONTRACT NO. 2 |



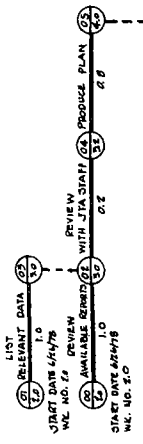
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|---------------------------|--|
| 1. PROJECT NO. | 410 |
| 2. PROJECT TITLE | TASK 2.4 SUPPORT OF J.T.A. PRESENTATION |
| 3. PROJECT LOCATION | |
| 4. PROJECT START DATE | 7-14-78 |
| 5. PROJECT END DATE | |
| 6. PROJECT STATUS | |
| 7. PROJECT TYPE | |
| 8. PROJECT CLASSIFICATION | |
| 9. PROJECT PHASE | |
| 10. PROJECT DESCRIPTION | |
| 11. PROJECT AUTHORITY | JACKSONVILLE TRANSPORTATION AUTHORITY |
| 12. PROJECT FUNDING | Domestic Program - Technical Study Phase |
| 13. PROJECT CONTRACT | |
| 14. PROJECT NUMBER | 3 |

| | |
|----------------|------------|
| 1. PREPARED BY | C. P. SHAW |
| 2. APPROVED BY | |
| 3. DRAWN BY | C. SHAW |
| 4. CHECKED BY | |
| 5. DATE | 7-14-78 |
| 6. REVISION | |

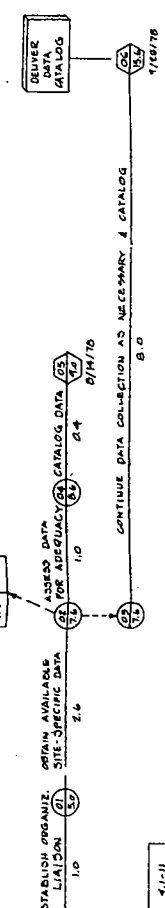
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| 1. PROJECT NO. | 410 |
| 2. PROJECT TITLE | TASK 2.0 PUBLIC INVOLVEMENT PROGRAM |
| 3. PROJECT LOCATION | |
| 4. PROJECT START DATE | |
| 5. PROJECT END DATE | |
| 6. PROJECT STATUS | |
| 7. PROJECT TYPE | |
| 8. PROJECT CLASSIFICATION | |
| 9. PROJECT PHASE | |
| 10. PROJECT DESCRIPTION | |
| 11. PROJECT AUTHORITY | JACKSONVILLE TRANSPORTATION AUTHORITY |
| 12. PROJECT FUNDING | Domestic Program - Technical Study Phase |
| 13. PROJECT CONTRACT | |
| 14. PROJECT NUMBER | 3 |

| | |
|---------------------------|--|
| 1. PROJECT NO. | 410 |
| 2. PROJECT TITLE | TASK 2.0 PUBLIC INVOLVEMENT PROGRAM |
| 3. PROJECT LOCATION | |
| 4. PROJECT START DATE | |
| 5. PROJECT END DATE | |
| 6. PROJECT STATUS | |
| 7. PROJECT TYPE | |
| 8. PROJECT CLASSIFICATION | |
| 9. PROJECT PHASE | |
| 10. PROJECT DESCRIPTION | |
| 11. PROJECT AUTHORITY | JACKSONVILLE TRANSPORTATION AUTHORITY |
| 12. PROJECT FUNDING | Domestic Program - Technical Study Phase |
| 13. PROJECT CONTRACT | |
| 14. PROJECT NUMBER | 3 |

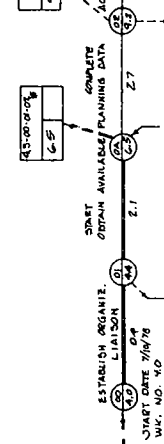
TASK 3.1
DATA COLLECTION
PLANNING



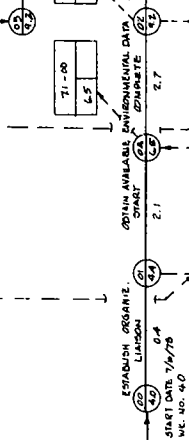
TASK 3.2
SITE SPECIFIC
DATA



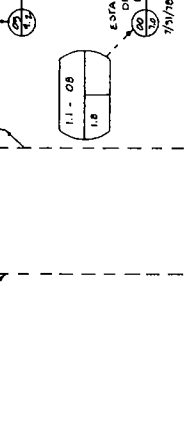
TASK 3.3
PLANNING
DATA



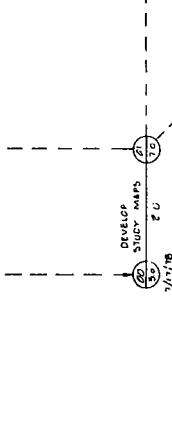
TASK 3.4
IMPACT DATA
BASE



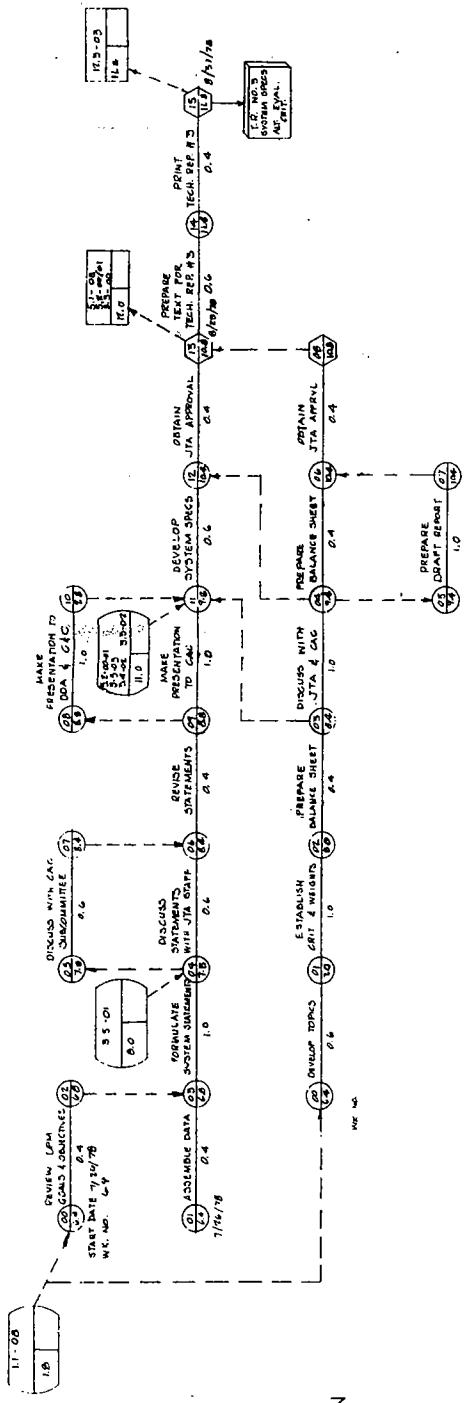
TASK 3.5
DPM TECHNOLOGICAL
DATA



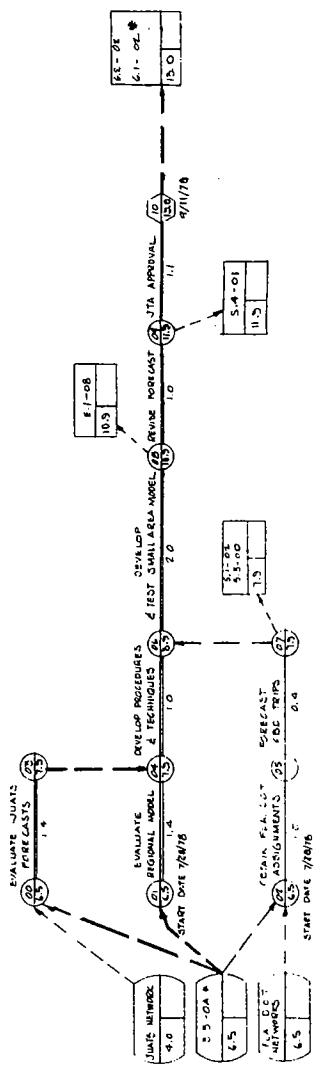
TASK 3.6
BASE MAP PREPARATION



| | | | | |
|---------------|----------------|---------------------------------------|----------|------|
| PREPARED BY | C. P. S. A. I. | JACKSONVILLE TRANSPORTATION AUTHORITY | HELP | NONE |
| PROJECT NO. | 7-14-78 | TASK 3.0 | CONTRACT | |
| DATE | 7-14-78 | DATA COLLECTION | | |
| REVISION DATE | 7-14-78 | AND ANALYSIS | | |
| REVISION | 4 | JACKSONVILLE TRANSPORTATION AUTHORITY | | |



TASK 4.1
SYSTEM
SPECIFICATION

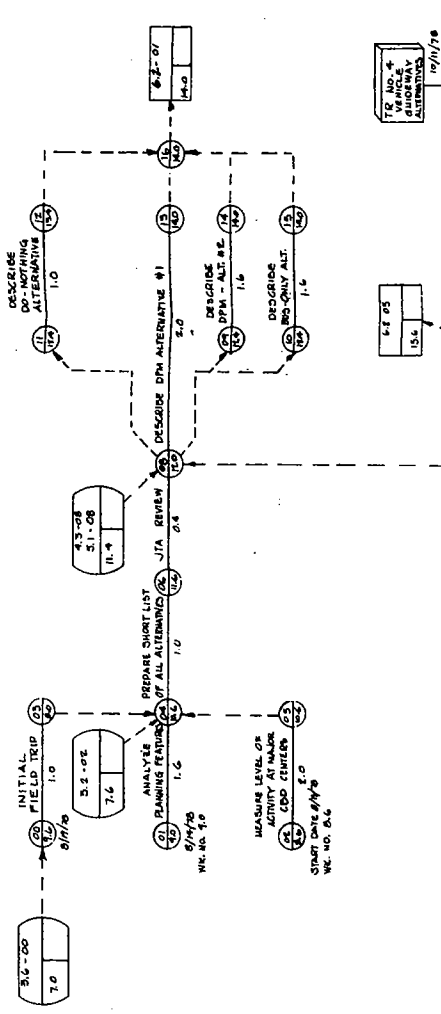


TASK 4.2
ALTERNATIVE EVALUATION
CRITERIA

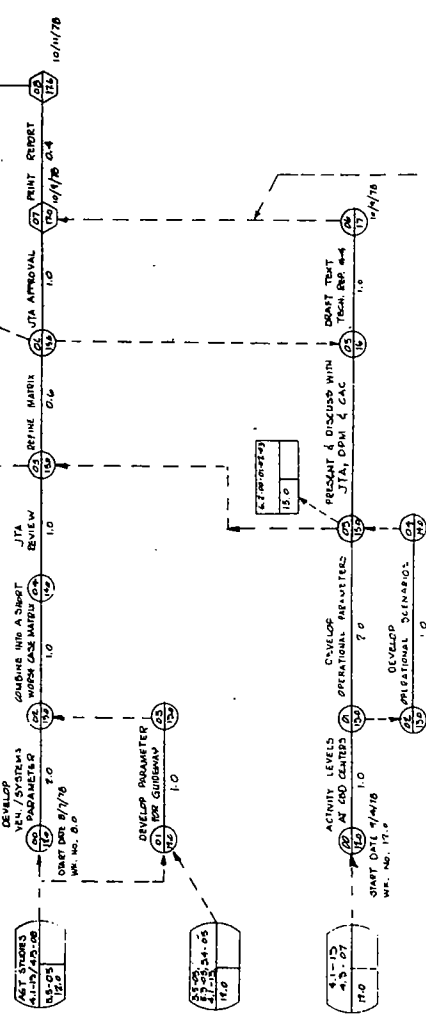


TASK 4.3
TRAVEL
ASSIGNMENT
BASES

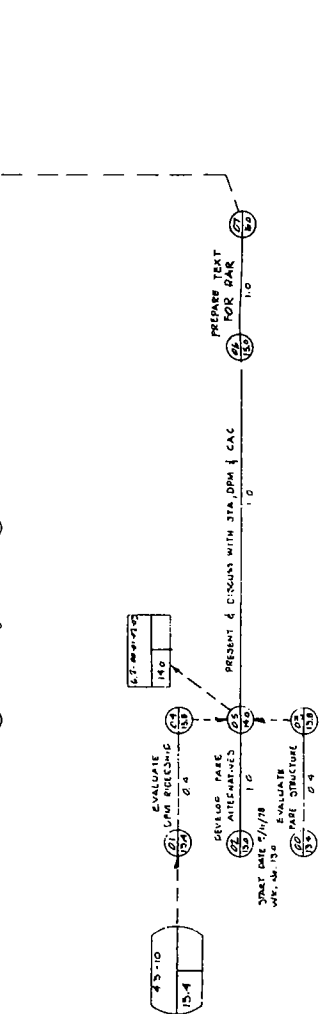
| | | | | |
|--------------|------------|--|-------------|------|
| PREPARED BY: | D. P. SHAH | JACKSONVILLE TRANSPORTATION AUTHORITY | SCALE: | NONE |
| APPROVED BY: | D. BLOOM | Division/Project Name: Technical Study Phase | CONTRACT: | |
| DATE: | 7-14-78 | TASK 4.0 | | |
| REVISION: | | SYSTEM PLANNING | | |
| | | BASES | | |
| | | PARSONS BRINCKERHOFF / FLOOD & ASSOCIATES | | |
| | | | PROJECT NO. | 5 |



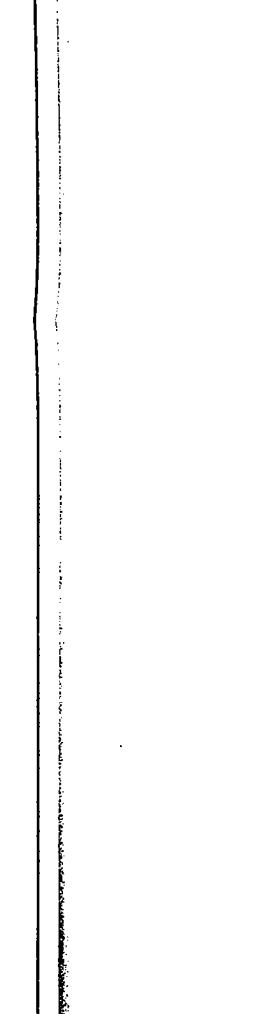
TASK 5.1
IDENTIFICATION OF
ROUTE
ALTERNATIVES



TASK 5.2
IDENTIFICATION OF
VEHICLE
ALTERNATIVES



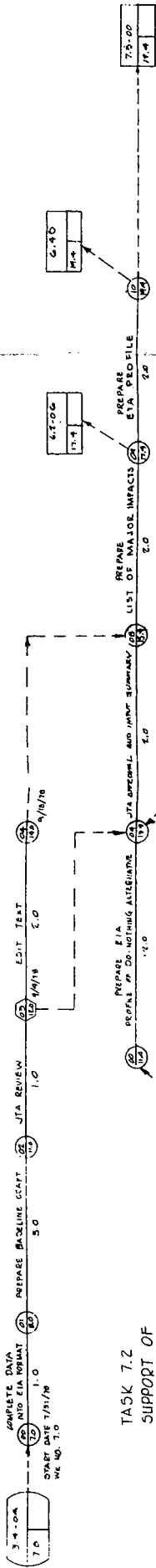
TASK 5.3
IDENTIFICATION OF
OPERATIONAL
ALTERNATIVES



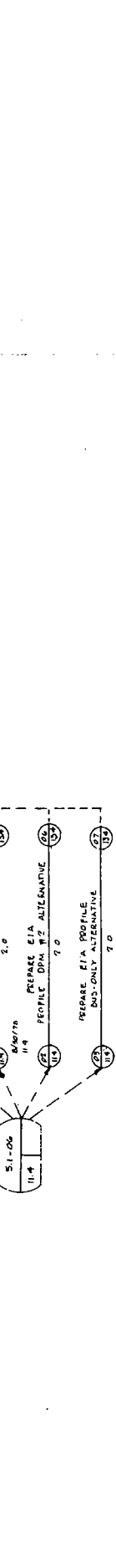
TASK 5.4
IDENTIFICATION OF
FACE
ALTERNATIVES

| | |
|--|--------------------------|
| JACKSONVILLE TRANSPORTATION AUTHORITY Chairman: People Move Technical Study Phase | |
| PREPARED BY: L. P. Shah | CHECKED BY: C. Boyles |
| DATE: 7/28/78 | DATE: 7-14-78 |
| TASK 5.0 DEVELOPMENT OF CANDIDATE ALTERNATIVES | |
| PERSONNEL: 71.000 & 233.022 | |
| PAGE NO. 6 | |

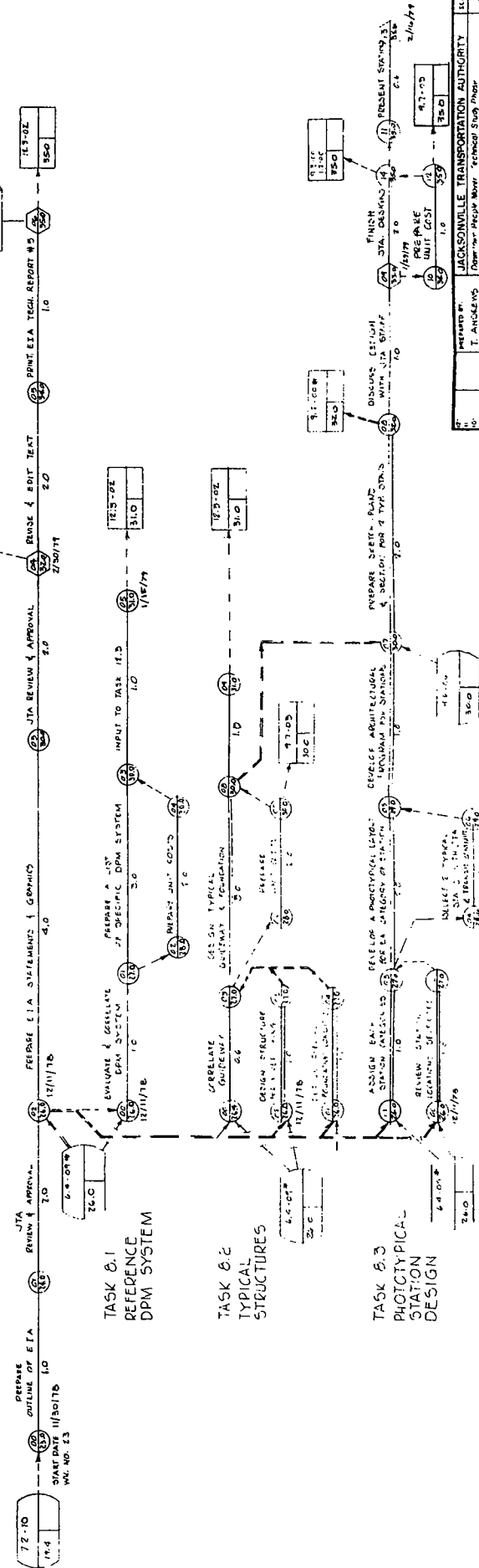
**TASK 7.1
ENVIRONMENTAL BASELINE SURVEY**



**TASK 7.2
SUPPORT OF
ALTERNATIVE
EVALUATIONS**

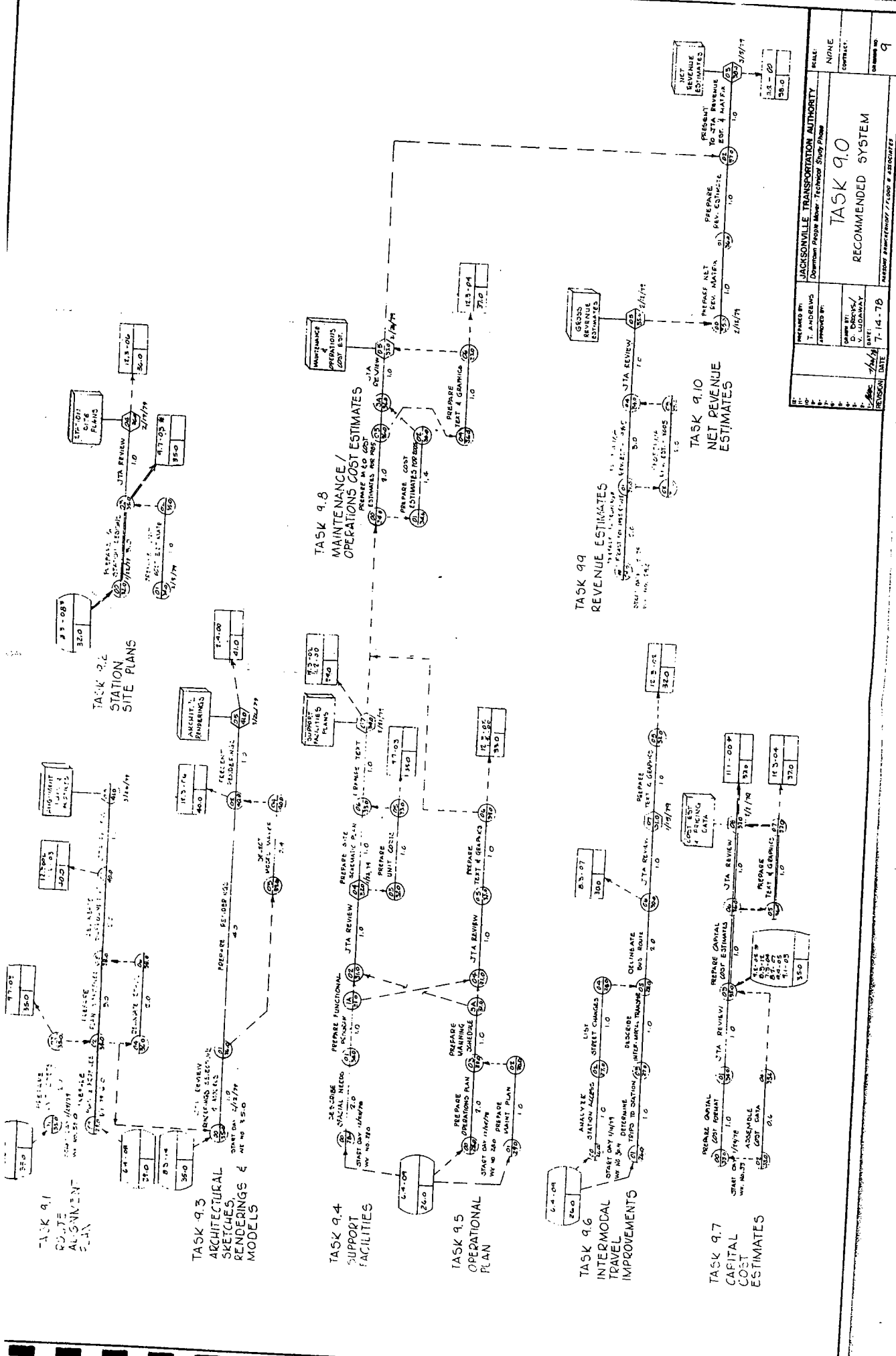


**TASK 7.3
IMPACT OF RECOMMENDED ALTERNATIVE**



| | |
|---|-------------------|
| JACKSONVILLE TRANSPORTATION AUTHORITY Form No. Project Master Technical Study Phase | |
| PREPARED BY: T. ANDREWS | DATE: 7/14/78 |
| APPROVED BY: (Signature) | PERSON: DATE: |
| CHECKED BY: (Signature) | PERSON: DATE: |
| DRAWN BY: (Signature) | PERSON: DATE: |
| CHECKED BY: (Signature) | PERSON: DATE: |
| SCALE: | SHEET NO.: |
| TOTAL SHEETS: | SHEET NO.: |
| PROJECT NO.: | PROJECT TITLE: |
| PROJECT NAME: | PROJECT LOCATION: |
| PROJECT NUMBER: | PROJECT DATE: |

| |
|--|
| TASK 7.0 ENVIRONMENTAL IMPACT ASSESSMENT |
| TASK 8.0 STRUCTURE & STATION DEVELOPMENT |



| | |
|---|---|
| PREPARED BY: T. ANDREWS | JACKSONVILLE TRANSPORTATION AUTHORITY Department of Public Works - Technical Study Phase |
| APPROVED BY: D. CROOKS V. LUDAWAY | DATE: 7-14-78 |
| TASK 9.0 RECOMMENDED SYSTEM | |
| SCALE: NONE | CONTRACT: 9 |

INTERVIEW CDR
 ZEP C. GRIFFIN
 CIVIL ENGINEER
 (10) 11/10/78
 START DATE 8/1/78
 WK. NO. 10.0

TASK 10.1
 URBAN
 DEVELOPMENT
 & DESIGN
 OPPORTUNITIES

EXAMINE ORIENT
 PLANS & STUDIES
 (11) 8/1/78
 PREPARE
 EVAL. CRITERIA
 (12) 8/1/78
 MAKE FIELD
 EVAL. OF GEO
 POTENTIAL OPP. AREAS
 (13) 8/1/78
 IDENTIFY
 MAJOR AREAS
 OF DEVELOPMT
 (14) 8/1/78
 START DATE 8/1/78
 WK. NO. 10.0

IN ASSIST
 DETERMINING
 LOCATIONS
 & LOCATION
 (15) 8/1/78
 (16) 8/1/78
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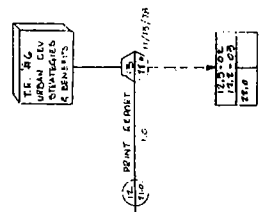
TASK 10.2
 JOINT
 DEVELOPMENT

REVIEW JOINT
 USE OF ROW
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 IDENTIFY SPECIFIC
 JOINT-RELATE
 LOCAL PRORALS
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 COORDINATE WITH
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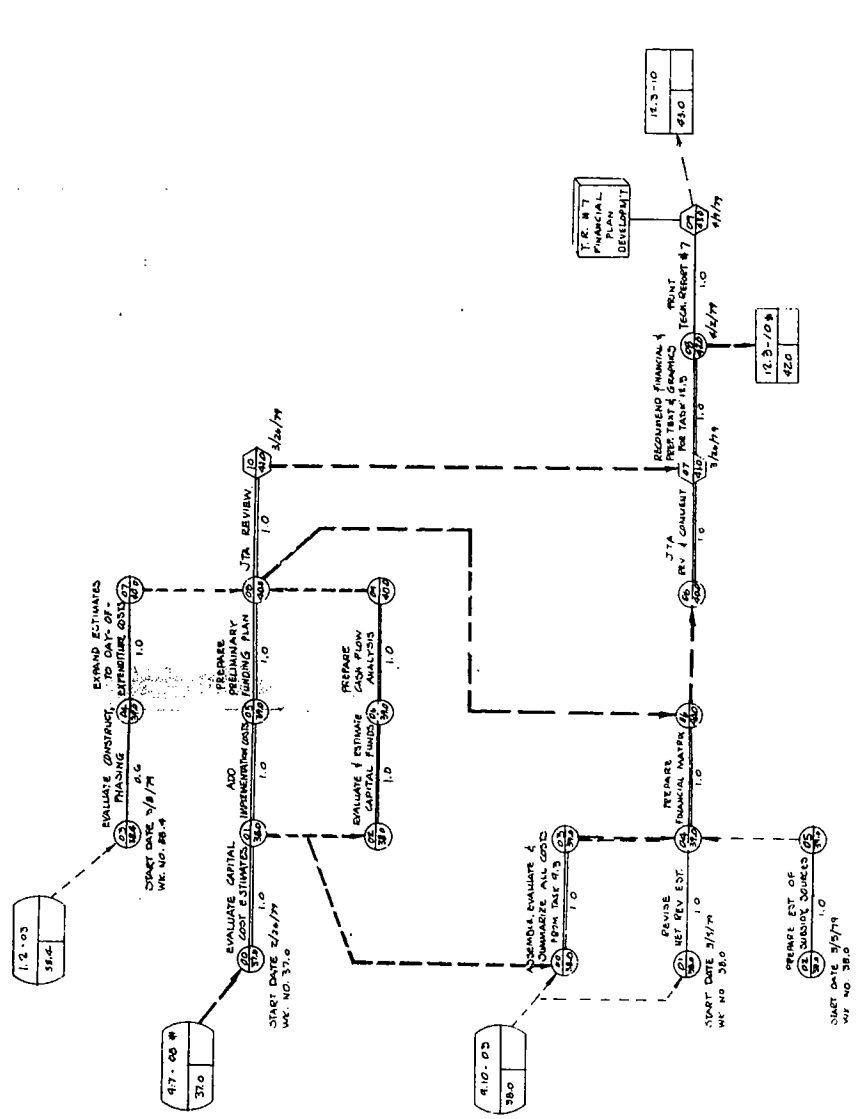
EXAMINE
 ECONOMIC & DEMO
 PLANS & STUDIES
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TASK 10.3
 VALUE CAPTURE
 ANALYSIS

ANALYZE & PLANNING
 LEGAL MEASURES
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TASK II.1
CAPITAL COST
FUNDING

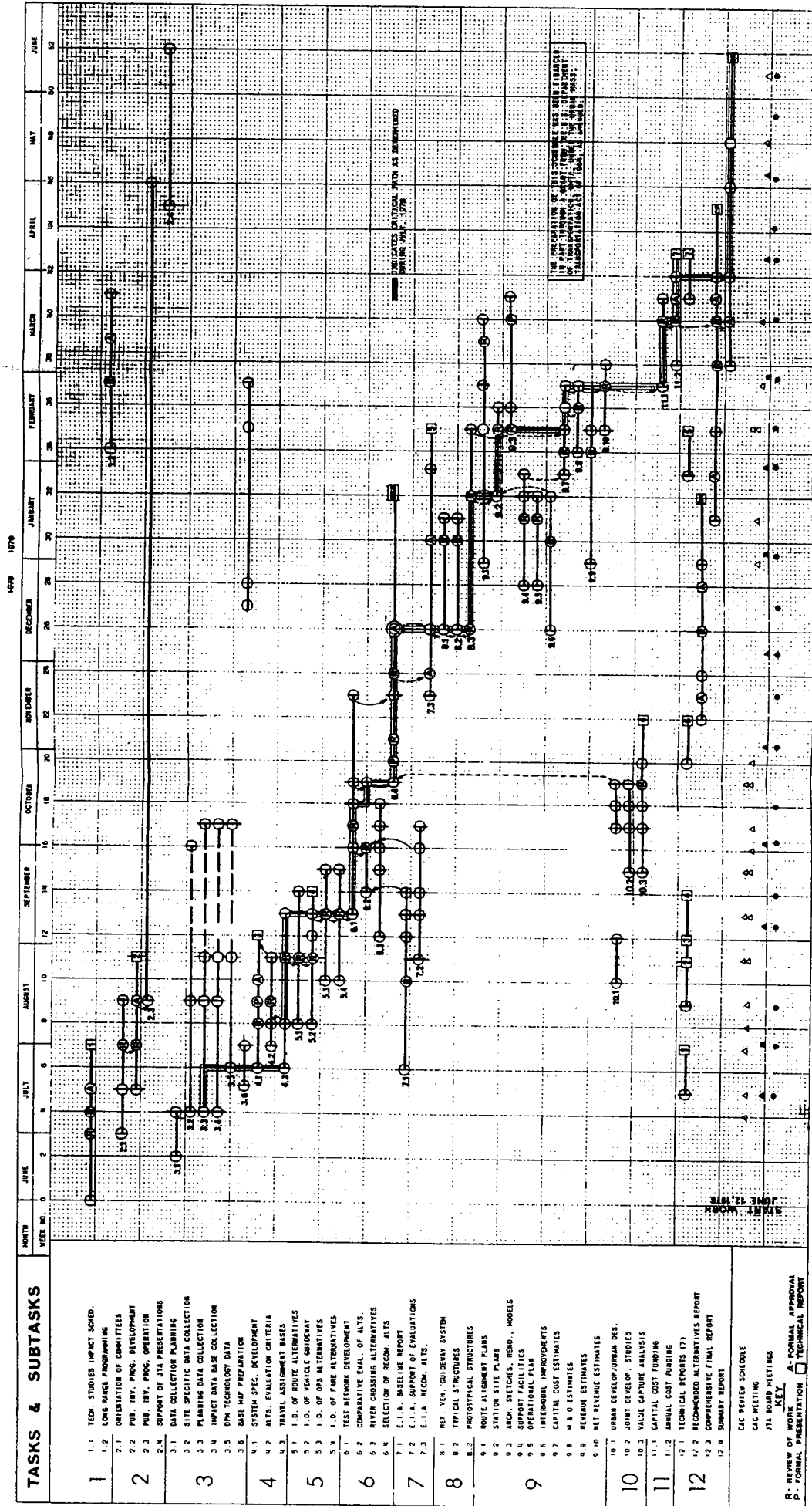
TASK II.2
ANNUAL COST
FUNDING

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| JACKSONVILLE TRANSPORTATION AUTHORITY Downtown People Mover - Technical Study Phase | | | | | | | | | | SCALE: NONE |
| T. ANDREWS PROJECT #1: | | | | | | | | | | TASK 11.0 FINANCIAL PLAN DEVELOPMENT |
| PREPARED BY: V. GUDAWAY | | | | | | | | | | |
| DATE: 7-14-70 | | | | | | | | | | PERSON: JAG |
| PERSON: DATE: | | | | | | | | | | 11 |

APPENDIX C

JACKSONVILLE DPM STUDY GENERAL SCHEDULE

JACKSONVILLE TRANSPORTATION AUTHORITY



PARSONS BRINCKERHOFF/FLOOD AND ASSOCIATES

JULY 1978

APPENDIX D

July 26, 1978

Jacksonville Downtown People Mover
Technical Study Phase
Goals & Objectives

Goals

1. Revitalize the downtown area as a multi-use activity center by:
 - a. Encouraging new public-private joint development opportunities through a process of capturing private value added, thus
 - b. Reducing the public development cost
 - c. Conserving energy, reducing pollution, and minimizing other environmental impacts
 - d. Promoting increased use of downtown area as the cultural, educational and recreational center of the region
 - e. Strengthening middle and upper-income residential development
2. Improve downtown area access and mobility by:
 - a. Providing safe, convenient, efficient and pleasurable travel
 - b. Encouraging the separation of pedestrian and vehicular traffic
 - c. Promoting increased transit ridership
 - d. Providing a greater mobility for all persons, especially low income, the elderly, and handicapped
3. Create a financially and operationally viable DPM system.
 - a. Inspire a high level of citizens' participation, thereby promoting a response to changes in community goals and objectives.

Objectives

1. Create a DPM system that will help implement the Downtown Development Plan, including such elements as:
 - a. Linking the downtown area major activity centers and promoting an interconnection among such centers

Objectives Con't

- b. Providing a second-level walkway concept
- c. Stimulating the development of a system of peripheral parking centers and providing access to and from major downtown area facilities
2. Encourage joint development and value capture opportunities to reduce public investment and integrate the DPM with new developments.
3. Provide a quiet, stable, clean and energy-efficient mode of DPM which will:
 - a. Provide support to the evenings and week-end use of the downtown area by providing easy, safe, convenient and rapid transit
 - b. Help promote hotel, restaurant and convention use of the downtown area
 - c. Promote commercial activity by making shopping faster, all-weather controlled, more convenient and more fun
4. Insure viable DPM system operation and capability of expansion with a minimum of disruption during construction which will:
 - a. Minimize traffic disruption and real estate relocations
 - b. Control construction noise, air pollution and service disruption to an acceptable level
5. Design contemporary and efficient DPM system that will:
 - a. Complement the present and future urban landscape
 - b. Be designed with a minimum of visual intrusion
 - c. Use existing public right-of-way to the maximum extent possible
 - d. Provide barrier-free access to the system for the elderly and handicapped at all major points
 - e. Provide tested and simplified DPM systems to reduce capital investment and subsequent operations and maintenance costs
6. Set up an effective Public Involvement Program.

Objectives Con't

- a. Define the intergovernmental requirements, laws, regulations, and financial commitments needed to implement the DPM
7. Provide complementary, rapid, low-fare transit system which is safe, clean, reliable, convenient; which will result in easy movement throughout the downtown area including:
 - a. Provide complete inter-modal transportation facilities
 - b. Concentrate bus transit to inter-modal facilities on the downtown area periphery
 - c. Reduce quantity of buses in downtown area circulation so they might serve other areas in the region

July 19, 1978

Jacksonville Downtown People Mover
Technical Study Phase
Goals and Objectives

Goals

Support the proper use of land and promote a cohesive pattern of control and development.

- * Revitalize the CBD as a multi-use, activity center.
 - * Encourage new joint development opportunities and reduce the need for total public investment.
 - ** Promote value capture opportunities.
- Conserve energy, reduce air and noise pollution, and minimize other environmental impacts.
- Improve downtown area access and mobility.
- Provide safe, convenient, efficient and pleasurable travel within the region's central core.
- Encourage the separation of pedestrian and vehicular traffic.
- Promote increased transit ridership.
- Provide a greater mobility for the elderly and handicapped.
- Realize a high level of citizen's participation, thereby promoting a response to changes in community goals and objectives.
- Complement adjacent development and provide a distinctly aesthetic identity.
- Promote increased use of CBD as the cultural, educational and recreational center of the region.
- ** Insure a financially and operationally viable DPM system.

* Revised by CAC, July 13, 1978

** Added by CAC, July 13, 1978

Objectives

Serve the downtown area's principal major activity centers and promote reinforcement and interconnection among such centers.

Stimulate the development of a system of remote parking centers and provide access to and from major CBD facilities.

Support and promote the CBD comprehensive plan, and second-story walkway concept.

Encourage joint development and value capture opportunities to reduce public investment and integrate the DPM with new developments.

Provide support to the evenings, and week-end use of the CBD by providing easy, safe, convenient transit.

Help promote hotel, restaurant and convention use of the CBD.

Promote commercial activity by making shopping faster, all-weather controlled, more convenient and more fun.

Insure viable system operation and capability of expansion with a minimum of disruption.

Provide rapid, safe, clean, reliable, convenient, low-fare transit resulting in easy movement throughout the downtown area.

Provide complete inter-modal transportation facilities.

Concentrate bus transit to inter-modal facilities on the CBD periphery.

Reduce quantity of buses in CBD circulation so they might serve other areas in the region.

Reduce auto congestion and travel times in the CBD.

Provide non-polluting transit to serve a majority of intra-CBD movements and reduce vehicle emissions.

Provide a quiet, stable, clean and energy-efficient mode of DPM.

Connect major public service centers with each other and other regional transportation modes.

Minimize traffic disruption and real estate relocations.

Control construction noise, air pollution and service disruption to an acceptable level.

Objectives Con't

Provide tested and simplified DPM systems to reduce capital investment and subsequent operations and maintenance costs.

Define the intergovernmental requirements, laws, regulations, and investments needed to implement the DPM.

Provide barrier-free access to the system for the elderly and handicapped at all major points.

Restructure the Citizens' Advisory Committee to focus its abilities and attention on specific DPM issues and topics.

Set up an effective Public Involvement Program.

Design contemporary and efficient system facilities that will complement the present and future urban landscape.

Reduce visual intrusion.

Use existing public right-of-way to the maximum extent possible.

July 10, 1978

Jacksonville Downtown People Mover
Goals and Objectives

Goals

1. Support the proper use of land and promote a cohesive pattern of control and development.
2. Revitalize the CBD as a multi-use, all day activity center.
3. Encourage new development opportunities and reduce the total need for new public investment.
4. Conserve energy, reduce air and noise pollution, and minimize other environmental impacts.
5. Improve downtown area access and mobility.
6. Provide safe, convenient, efficient and pleasurable travel within the region's central core.
7. Encourage the separation of pedestrian and vehicular traffic.
8. Promote increased transit ridership.
9. Provide a greater mobility for the elderly and handicapped.
10. Realize a high level of citizens' participation thereby promoting a response to changes in community goals and objectives.
11. Complement adjacent development and provide a distinctly aesthetic identity.
12. Promote increased use of CBD as a cultural, educational, and recreational center of the region.

Objectives

1. Serve the downtown area's principal major activity centers and promote reinforcement and interconnection among such centers.
2. Stimulate the development of a system of remote parking centers and provide access to and from major CBD facilities.
3. Support and promote the CBD comprehensive plan, and second-story walkway concept.
4. Encourage joint development and value capture opportunities to reduce public investment and integrate the DPM with new developments.
5. Provide support the the evening and week-end use of the CBD by providing easy, safe, and convenient transit.
6. Help promote hotel, restaurant, and convention use of the CBD.
7. Promote commercial activity by making shopping faster, all-weather controlled, more convenient and more fun.
8. Insure viable operation and capability of expansion with a minimum of disruption.
9. Provide rapid, safe, clean, reliable, convenient, low-fare transit resulting in easy movement throughout the downtown area.
10. Provide complete inter-modal transportation facilities.
11. Concentrate bus transit to inter-modal facilities on the CBD periphery.
12. Free buses from CBD circulation so they might serve other areas in the region.
13. Reduce auto congestion and travel times in the CBD.
14. Provide non-polluting transit to serve a majority of intra-CBD movements and reduce vehicle emissions.
15. Provide a quiet, stable, clean and energy-efficient mode of DPM.
16. Connect major public service centers with each other and other regional transportation modes.
17. Minimize traffic disruption and real estate relocations.

Objectives Con't

18. Control construction, noise, air pollution and service disruption to an acceptable level.
19. Provide tested and simplified DPM systems to reduce capital investment and subsequent operations and maintenance costs.
20. Define the intergovernmental requirements, laws, regulations, and investments needed to implement the DPM.
21. Provide barrier-free access to the system for the elderly and handicapped at all major points.
22. Restructure the Citizens' Advisory Committee to focus its abilities and attention on specific DPM issues and topics.
23. Set up an effective Public Involvement Program.
24. Design contemporary and efficient appearing system facilities that will complement the present and future urban landscape.
25. Reduce visual intrusion.
26. Use existing public right-of-way to the maximum extent possible.