Technical Memorandum Number 3

Task 1.3

Review of Previous Transit and Transportation Studies

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GRTA

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1.0 INTRODUCTION

Since 1990, a number of transit and transportation studies have been completed or are currently underway in the Atlanta region. In whole or in part, results of these studies may be relevant to development of the Regional Transit Action Plan (RTAP). As an RTAP building block, the following sections of this report summarize significant findings and recommendations from recent Atlanta-area transit and transportation studies. The summaries are organized into three sections:

- State and Regional,
- County and Local, and
- Other.

2.0 STATE AND REGIONAL

Northwest Connectivity Study
Lead Agency: Georgia Regional Transportation Authority
Year Began/Status: 2002/Estimated completion in 2004

The Northwest Connectivity Study examines what might be done to improve transportation connections among activity centers within a corridor that is centered on US 41, I-75 and the W&A (CSX) Railroad. Study area boundaries are roughly defined by Midtown Atlanta on the south, Powers Ferry Road on the northeast, Georgia 280 (Hamilton E. Holmes Drive/James Jackson Parkway/South Cobb Drive) on the southwest and Town Center on the north.

The study will include the planning process, environmental impact analysis, and public participation to determine the preferred route and the preferred transportation option. Options to be studied include highway solutions, including HOV lanes; express buses and bus rapid transit; commuter rail; monorail; light ail transit; and heavy rail transit. The study also will examine the impacts of distributor systems within the Cumberland/Galleria and Town Center areas.

HOV System Implementation Plan for the Atlanta Region (Interim Report)
Lead Agency: Georgia Department of Transportation
Year Began/Status: 2001/First phase completed January 2002

In June 2001, Governor Roy Barnes established the Governor's Transportation Choice Initiative to fast-track the implementation of many transportation projects, including high-occupancy vehicle (HOV) lanes, over the next five years. The Georgia Department of Transportation is developing strategic priorities for implementing the entire network of HOV facilities defined in the 2025 Regional Transportation Plan (RTP) plus some additional segments included in the Governor's Transportation Choice Initiative.

The interim HOV priority list contains 22 segments of the following facilities: I-85 North, SR 316, SR 400, I-20 West, I-75 South, I-20 East, US 78, I-85 South, I-575, and I-285.

The next phase of the study will refine the list of priorities and begin to define appropriate types of HOV facilities for each corridor. The final stage of the study will be to expand the study area past the borders of the 13-county RTP and begin to look at the "new" 21-county region developing as a result of new EPA Clean Air regulations.

The HOV System Implementation Plan study has been divided into three phases. The first phase was dedicated to the development of interim priorities for the 2025 RTP corridors based on constructability and planning criteria. The Interim Report documents the methodology used to determine constructability (e.g., relative ease or difficulty of construction) criteria ratings for six factors (available right-of-way, terrain, existing clear zone, urban setting, road network density and environmental impacts); criteria rating for bridge replacements; and planning criteria ratings for annual average daily traffic per lane, travel time savings per mile, connectivity to transportation network, and existence of transit / express bus service.

An interim priority list was developed through analysis of all data collected and through the ranking process of the planning and constructability factors. The list is the first of several iterations that will be presented throughout the study process and is intended only to provide an early idea of the feasibility of HOV implementation on the subject corridors as a guide for future phases of the study. Final rankings for each project were based on a team consensus for planning factor rank, constructability factor rank, improvements funded in the 2025 RTP, and how the corridor fits into a regional system of improvements.

Northern Sub-Area Study/Georgia 400 Corridor Analysis

Lead Agency: Georgia Regional Transportation Authority
Year Began/Status: 2000/Scheduled completion in mid-2003

The study defines the Northern Sub-Area as an area bounded by I-285 on the south, I-75 on the west, I-85 on the west, and three miles north of State Route 20 on the north. The Northern Sub-Area includes Georgia 400. The 22-month study is intended to evaluate transportation, land use and air quality issues and produce information about costs and benefits for short-term and long-term operational and infrastructure investments, including:

- A series of land use options,
- Air quality recommendations, and
- Transportation investment strategies.

Along with the comprehensive analysis and evaluation of these elements (fulfilling the requirements of the agreements from a lawsuit, Georgians for Transportation Alternatives (v. Shackelford), the study will provide recommendations for the 2004-2006 Transportation Improvement Program (TIP), and the 2030 Regional Transportation Plan and Regional Development Plan updates.

The short-term scenario is comprised of transportation/transit projects that are already in the adopted TIP and therefore can be fast-tracked. The major short-term transit element includes implementing express bus operations within the GA 400 corridor along the shoulders of the existing facility. Improvements of numerous pedestrian and arterial intersections along the GA 400 corridor are also a part of the short-term scenario.

While the GA 400 portion of the study looks at some quick fixes to improve conditions in that specific corridor, the Northern Sub-Area Study will include projects that can be completed further into the future. The study will evaluate long-term needs and recommend transportation choices that balance regional air quality and mobility demands.

Bicycle and Pedestrian Plan Update
Lead Agency: Atlanta Regional Commission
Status: Draft January 2002

In 1979, ARC published a technical memorandum titled *Bicycle Planning and Implementation in the Atlanta Region*, an evaluation of then-existing bicycle facilities. In 1993, ARC published its *Bicycle Transportation and Pedestrian Walkways Plan*, a compilation of local plans with little regional coordination or cross-jurisdictional coordination. In 1995, ARC updated the 1993 plan and included a bicycle and pedestrian section in the 2025 RTP.

The Plan is being updated now because of changing federal regulations, the regional transportation plan update, and current needs and priorities in the region. The update process includes coordination with ARC's Bicycle and Pedestrian Task Force, created in 1992, the RTP/RDP update, jurisdiction initiatives, and pedestrian/bicycle user groups. The regional plan also is being coordinated with the statewide Bicycle and Pedestrian Plan. In 1998, the Georgia Department of Transportation created a bicycle master plan that proposed a network of 14 named and numbered routes totaling 2,943 miles that are, or will be, particularly well suited for bicycle use. Six of the routes (265 miles) will pass through the ARC region. Signing of the network was expected to take five years. Sections of the bicycle routes will be upgraded concurrently with Georgia's normal road improvement projects. Upgrades will include wide curb lanes, bike lanes, paved shoulders and/or sidewalks. Improvements within the ARC region are already programmed in the TIP.

The Bicycle and Pedestrian Plan update has so far analyzed current trends; developed goals, objectives and performance measures; incorporated the regional Congestion Management System report; and drafted a strategic plan. Remaining steps are alternatives analysis (for horizon year of 2030) and a final report. The final report will incorporate in its recommendations the results of analysis of relevant problems identified in the Congestion Management System for specific bicycle/pedestrian corridors including heavy pedestrian volumes, too many driveways, poor signal timing coordination, poor intersection geometrics, and railroad crossings.

Marietta-Lawrenceville Transportation Study (MLTS)
Lead Agency: Atlanta Regional Commission
Year Began/Status: 1999/Completed in 2001

I-285 Corridor Transit Feasibility Study

Lead Agency: Atlanta Regional Commission
Status: Completed 2002

The MLTS was conducted to address east-west travel needs and mobility opportunities across the northern metropolitan Atlanta area. The study identified a package of transportation strategies across a broad study area encompassing portions of east Cobb, north Fulton, DeKalb, and central Gwinnett counties. Among the strategies identified was a high priority for developing a transit corridor along I-285 between Doraville and Cumberland. The I-285 transit concept considers light rail transit (LRT) and bus rapid transit (BRT) for implementation within the corridor. The MLTS study employed sufficient analyses, assessments, and illustrations to inform regional decision-makers and set the stage for adoption and funding of the project into the update of the Regional Transportation Plan.

Key findings include:

Environment: An assessment of projected impacts to physical, cultural and social resources and to environmental justice populations found in general that minimal negative effects are expected due to the highly developed nature of the corridor. However, care to minimize impacts should be taken at the Chattahoochee River and Chattahoochee National Park area.

Land Use: Transit stations proposed along the corridor are located in areas that are moderately or highly developed with either commercial or residential uses. In addition, there is potential at some stations for additional new development or redevelopment of existing adjacent uses.

Travel Demand and Mobility: Light rail on the alignment is projected to serve approximately 35,000 riders per day in the year 2025, while bus rapid transit is projected to serve approximately 40,000 riders per day.

Cost: The estimated cost of construction for transit along the corridor is between $35 million and $57 million per mile. This translates into a total cost per rider of $2.80 for BRT and $5.20 for LRT.

Georgia Rail Passenger Program, Finding of No Significant Impact
Macon to Atlanta Corridor Environmental Assessment
Lead Agency: Georgia Department of Transportation
Status: Completed in 2001

In November 1999, the Georgia Rail Passenger Program Team (PMT) identified the Macon to Atlanta Corridor as one of the first priorities for passenger rail service. After comprehensive alternatives analysis, including a general analysis of environmental impacts, the PMT selected a commuter rail alternative on the existing Norfolk Southern "S"-line, complemented by express bus service on I-75, between Henry County and Atlanta, as the preferred alternative. The project includes rehabilitation of the existing railroad, construction of passing siding tracks, and other support facilities, and service at up to twelve rail and four express bus stations. The project will traverse seven counties along an approximately 85-mile corridor.

Macon to Atlanta commuter rail operations would consist of six trains each weekday peak period. Two trains would originate and terminate in Macon and four of the trains would originate and terminate in Griffin. All trains would stop at all stations along their route. Morning peak period trains would arrive at the Atlanta Multi-Modal Passenger Terminal (MMPT) between 5:45 and 8:45 a.m. and afternoon peak trains would depart from the MMPT between 4:15 and 6:15 p.m. Trains would arrive and depart the MMPT at 20 to 30-minute intervals during peak periods. Maximum train speed would be 79 mph, although the alignment has many three-degree curves that would restrict maximum speed to 60 mph.

Commuter rail stations are assumed in Macon, Bolingbroke, Forsyth, Barnesville, Griffin, Hampton, Lovejoy, Jonesboro, Morrow, Forest Park, Aviation Boulevard, East Point, and the Atlanta MMPT. New express bus stations are assumed in Locust Grove, McDonough, Eagles Landing and Stockbridge. Buses also would serve Hartsfield Atlanta International Airport and terminate at the MMPT.

Various levels of fares were tested for impact on revenues and ridership and a level similar to that of commuter systems in the northeastern U.S. was adopted for forecasting, which is somewhat higher than the national average. This choice produced less ridership but also more efficient service, a higher revenue-to-cost ration, less capital investment required and lower operating assistance needed. One-way, distance-based commuter rail fare assumptions to the MMPT ranged between $11.90 (from Macon) to $6.30 (from Forest Park).

Year 2025 commuter rail boardings and passenger revenue were forecast to be 2.6 million and $13.8 million (in $2000), respectively.

Year 2025 commuter rail capital costs were estimated (in $2000) at $325.8 million. This total included rolling stock, track, signal, grade crossing, structures, road work, maintenance and fueling facilities, stations and parking. Year 2025 commuter rail operating costs were estimated (in $2000) at $6.4 million annually.

The MMPT is being planned under a separate NEPA process.

Three-Corridors Feasibility Study
Lead Agency: MARTA
Status: Completed in 2001

The Metropolitan Atlanta Rapid Transit Authority conducted a study to evaluate three potential rail extensions: to the north, west, and a potential southern rail line spur to Hapeville. The north rail line concept originally was developed in 1990 as part of the North Line Environmental Impact Study. Portions of the West and Hapeville extensions were included in MARTA's Referendum System in 1971. MARTA also studied the West Line and Hapeville Branch extensions in 1991.

The purpose of the current feasibility study was to determine the need for improved rail transit connections throughout the MARTA service area. A variety of issues, such as mobility need, environmental impacts, economic effectiveness, and educational/cultural needs were used as tools to evaluate future transit expansion.

The study identified the North Line Extension as along Georgia 400 north to Windward Parkway, the West Line Extension from Hamilton E. Holmes Station to Fulton Industrial Boulevard, and the Hapeville Branch as extending from the East Point Station to the City of Hapeville.

The report concluded that the most cost-effective build alternative is the West Line Extension, which has an incremental cost per new rider above the No-Build alternative of $12.33, placing this alternative near the mean for other new starts projects across the country. The North Line Extension options ranged from $19.68 to $21.02 per new rider, also well within the range of other new start transit projects nationally. With a net cost per new rider of over $108, the Hapeville Branch alternative does not compare as favorably with the other alternatives studied.

Hartsfield Atlanta International Airport Master Plan
Lead Agency: Hartsfield Atlanta International Airport (HAIA)
Status: Recommended May 2000

The Hartsfield we see today is the result of a 1966 airport master plan. Given the combination of completion of that plan and the growth of the airport in recent years, a new master plan was developed as a blueprint to guide Hartsfield into the 21st century.

The master plan process was completed in four phases over four years: Study Design, Vision and Policy Document, Technical Studies, and Adoption. The recommended plan is still being studied in detail and the final design of the facilities, their specific locations and access may differ from the information available on the website atlmasterplan.com. Recommended projects are listed in several main categories, briefly summarized below.

Extended Fifth Runway. The approved commuter runway is recommended for extension to an air carrier length of 9,000 feet, have a full-length parallel taxiway and dual north/south taxiways to connect to the existing airfield. Bridges over I-285 will be required.

Consolidated Rental Car Facilities. The Master Plan recommends consolidating all rental car companies operating at the airport on a 90-100 acre site south of Camp Creek Parkway, west of I-85. The facility would include 9,000-10,000 rental car ready and return spaces, customer service centers, storage and maintenance areas, wash lanes, and fueling positions. Customers would be transported to and from the rental car facility, existing terminal, and eventually the south terminal, by an automated people mover. Bus shuttles would be used to access the east international terminal.

Existing Terminal Modifications. To accommodate demand until future projects are complete, the existing terminal would undergo modifications to maintain and improve the capacity of ticketing, baggage claim, curb front, ground transportation system, public parking and access roadways, the people mover system, and the concourses.

Concourse E (International Terminal) Expansion and Landside Access. The Master Plan recommends immediate expansion of Concourse E to include four additional gates, international ticketing and concessions. Aviation Boulevard would be upgraded from I-75. The Master Plan includes right-of-way for access to the proposed Southern Crescent Regional Transportation Center.

Other Airfield Improvements. The Master Plan proposes extending Runway 9L-27R, both east and west, to bring its total length to 13,300 feet and constructing various connector taxiways.

South Terminal. The Plan includes an additional domestic terminal proposed to be located south of the existing airfield.

Support Facilities. Future demand may support the need for additional flight kitchens, ground service equipment, maintenance facilities, airport support facilities, aircraft maintenance, and cargo facilities.

Transportation Solutions for a New Century:
Volume I, 2025 Regional Transportation Plan (RTP)
Volume II, 2001-2003 Transportation Improvement Program (TIP)

Lead Agency: Atlanta Regional Commission
Status: Adopted by ARC Board of Directors on March 22, 2000

The RTP includes an overview of the Atlanta region's RTP planning process, regional trends and needs, goals and objectives, a system-wide assessment of plan elements in attaining RTP goals, and a financial plan. The RTP concludes with a discussion of the impact of transportation strategies on 13 major transportation corridors.

Components of the plan itself include a Roadway Mobility Strategy (expanded capacity on existing roads, new roadway construction, intersection and interchange improvements, bridge projects, roadway system maintenance, major freight movement projects); Transit Mobility Strategy (passenger rail network development, new and expanded regional bus service, secondary circulator systems/people movers, park and ride lots); HOV Strategy; Intelligent Transportation Systems Strategy; Bicycle and Pedestrian Strategy (pedestrian facilities, bicycle facilities, multi-use pathways); TDM Strategy (regional rideshare activities, TMA activities, education and marketing, alternative mode subsidies, and other initiatives); Emissions Control Strategy (alternative fuel and vehicle programs, public education and outreach); Land Use Planning Strategies; and Strategies to Expand Access for Low Income and Minority Populations.

All the transportation strategies in the 2025 RTP represent a $36 billion investment in the region's infrastructure. A significant part (55%) of the total investment is for the creation of a region-wide transit system. Major transit projects include construction of the Northwest rail line, extension of MARTA's West, North and South lines, and bus expansion.

Regional Development Plan
Lead Agency: Atlanta Regional Commission
Status: Updated in May 1999

The RDP forms the foundation for examining future water supply and water quality issues, provides insight into population growth and the implications for delivery of human services programs, and outlines the future regional requirements for job skills training and economic development programs. The 1999 RDP update includes 14 newly revised policies to better manage land consumption while encouraging continued quality growth and development. The policies represent a fundamentally new approach to public and private development and investment decisions that, if undertaken now, could help secure a healthy, sustainable pattern of growth for the Atlanta region.

The RDP also sets out a series of "best practices" for land use, transportation, environmental and housing.

Atlanta Regional Intelligent Transportation Systems (ITS) Regional Architecture and Regional ITS System Plan Deployment
Lead Agency: Atlanta Regional Commission
Year Began/Status: 1999/Study is still in planning stage

"Conformance with National ITS Architecture" is interpreted to mean the use of the national architecture to develop a regional ITS architecture, consistent with the statewide and metropolitan transportation planning process. Once a regional ITS architecture is developed, it is intended that all local ITS projects adhere to it. The following elements have been proposed as starting components of the Atlanta Regional ITS Architecture and System Plan:

- Develop an inventory of ITS technology already implemented in the region,
- Develop extensive public involvement strategies for the project,
- Determine whether existing ITS systems provide the necessary functionality and interoperability, and,
- Assess existing travel conditions to identify ITS priorities for operations and equipment.

ARC has identified and organized a committee of stakeholders, who will meet in March 2002 to help finalize the direction the study will take.

Atlanta Region Congestion Management System (CMS) Report

Lead Agency: Atlanta Regional Commission
Year Began/Status: 1995/Current CMS report is dated 2000

As federally required under ISTEA and TEA-21, the Atlanta Regional Commission completes a CMS report biennially. The development of the CMS began in 1995 with the most recent update installment to be completed in 2003.

The vision of the Atlanta regional CMS is based on an on-going process that provides a collective identification of severely congested locations throughout the region, as well as problems surrounding these locations that may be the cause of congestion. The process also identifies appropriate congestion mitigation strategies to improve transportation system efficiency and provide mode choice alternatives to single-occupant vehicle travel. Therefore, it will be important to consider the CMS corridors and mitigation strategies as part of defining regional needs and developing concept system alternatives for the RTAP.

Specific areas and causes of congestion were determined after completing initial research tasks in 1996. This baseline information has led to the development of a series of refinements to the CMS methodology. In 1997 the CMS work element included eleven tasks. Four of the more in depth strategies included:

- Defining regional travel corridors,
- Refining CMS performance measures,
- Defining CMS analysis of the congested locations, and
- Producing the first biennial congestion report.

These refinements in methodology provided a matrix of congestion mitigation strategies sorted by the source or cause of the congestion problem. The potential impact of the CMS strategy on relieving congestion was also documented. ARC recently began a conceptual design of a GIS-Transportation component for the CMS process. The GIS-T will serve as the database platform for system monitoring and usage. The plan for the GIS-T will be to act as the mapping interface, spatial analysis system and controller of information inputs and outputs between model components (such as travel demand and air quality).

The next CMS update report is expected in 2003. The focus of the update will be to re-examine the Congestion Monitoring Network, which includes congested facilities throughout the region and major activity centers. In addition, ARC is planning to include additional data collection efforts to heighten the validity of CMS performance measures.

Atlanta-Chattanooga MagLev Deployment Study

Lead Agency: Atlanta Regional Commission
Year Began/Status: 1999/Completed 2000
Continuation Study: Scheduled for completion in 2002

The U.S. Congress approved the study of multiple transportation corridors across the country for possible construction of a magnetic levitation demonstration project. Proposed demonstration segments were to be approximately 40 miles long. The Atlanta-Chattanooga corridor was one of seven selected to compete for two-thirds federal funding for the project and the Atlanta Regional Commission was designated as the grantee for the study.

The study completed for the June 2000 competition described a transportation corridor between Hartsfield Atlanta International Airport to Lovell Field in Chattanooga, with a first stage between Hartsfield Atlanta and Town Center in Cobb County. Passenger stations would be provided at four locations along the 32-mile alignment: the proposed Southern Crescent Transportation Service Center/Hartsfield Atlanta International Airport, the Vine City (MARTA) Station near the Georgia Dome, Cumberland/Galleria in Cobb County, and in the Town Center area of Cobb County.

The project description detailed specific features of the service, included a draft environmental assessment, and program of public/private partnership that would be the cornerstone of the effort required to move the project from study to operation.

Although not selected in the competition, ARC has received additional funding from the Federal Railroad Administration, matched by the Georgia Department of Transportation, to continue the study and to position the Atlanta-Chattanooga corridor for some type of high-speed rail in the future. The new funding is being used to study the northern segment of the corridor from Town Center to Chattanooga. The continuation study, scheduled for completion in March 2002, is focused on feasible alignment and technology options.

A Common Sense Approach to Transportation In the Atlanta Region

Agency: Georgia Public Policy Foundation
Status: Completed 2000

A basic premise of the Georgia Public Policy Foundation (GPPF) is: "It is likely that the Atlanta region's continued growth and position in the global economy will, to an important degree, be dependent upon improving its transportation." To describe the current situation, the report documents Atlanta's extraordinary population and employment growth, reliance on highways, roadway system difficulties, and heavy investment in transit.

GPPF asserts that the Regional Transportation Plan is flawed for the following reasons: Atlanta's growth is projected to continue, roadways will be expanded at a greatly reduced rate, transit investments will be substantial, low-income access to jobs will be little improved, the transit improvements are not cost effective, transit expenditures could be even higher than projected, land use strategies could increase traffic congestion and air pollution, and the RTP benefits a few at the expense of most Atlantans.

GPPF proposes a new framework or vision for regional transportation:

- Local authorities must become more realistic,
- A "New Vision" should seek to improve mobility and access,
- New roadway capacity is required,
- Existing roadways should be made more effective,
- Short-term improvements should be implemented,
- More efficient and effective transit service should be provided,
- A transition to electronic road pricing should begin,
- Roadway provision should be de-politicized,
- Market developments assist in controlling travel demand, and
- Objective and realistic choices should be presented to the region's residents.

Athens-Atlanta Transportation Corridor Major Investment Study
Lead Agency: Georgia Rail Passenger Authority
Status: Completed 1999

Georgia Rail Passenger Program Preferred Alternative

Lead Agency: Georgia Rail Passenger Authority
Status: Adopted December 2001

The Georgia Rail Passenger Authority (GRPA) commissioned this Major Investment Study (MIS) to examine options for improving travel within the Athens-Atlanta corridor. Prior studies in various portions of the corridor have suggested the need for widening existing highways, for increasing HOV lanes, and for enhancing / introducing transit services. The Georgia Department of Transportation's 1995 Commuter Rail Plan identifies the Athens to Atlanta rail line as one of the initial routes for implementation.

The MIS describes the 68-mile corridor's physical, social and economic character. It defines traffic considerations, the jobs/housing imbalance, the MIS process, study goals and objectives. The initial screening of alternatives identified five -- No Build, Highway Improvements, Express Commuter Bus on Exclusive Road, Express Commuter Bus on Existing Road, and Commuter Rail on CSX Lines.

Three alternatives emerged from the initial screening – No Build, TSM Commuter Bus, and Commuter Rail. For these alternatives more detailed evaluation was done including assessment of environmental impacts, costs, and financing aspects. The study concluded that the No Build and Commuter Bus are the least cost alternatives but offer very little relief in terms of reasonable commuter transportation alternatives.

In 2001, GRPA adopted commuter rail as the Locally Preferred Alternative. There would be 11 stations: Athens (Clarke County), Bogart (Oconee County), Winder (Barrow County), Cedars Road, Lawrenceville, Reagan Parkway, Lilburn, Tucker, Emory, Atlantic Station and the Atlanta Multi-Modal Passenger Terminal. Weekday mornings, two peak trains would operate inbound from Athens and four would operate from Cedars Road, near Dacula. The trains would operate in the reverse direction during afternoon peak periods.

Forecasted year 2025 system statistics include annual boardings of 2.3 million and revenues of $12 million, in current year dollars. Also in 2002 dollars, the estimated annual operating cost is $16.8 million and annualized capital cost is $10.5 million.

South DeKalb-Lindbergh Corridor Major Investment Study (MIS)
Lead Agency: MARTA
Study Began/Status: 1997/Completed 2000

The overall study purpose was to assess the feasibility of transit improvements within the South DeKalb-Lindbergh corridor that would accommodate current and future mobility needs, as well as continued growth and economic development. The study was completed in two phases. The first phase produced a corridor level feasibility analysis, using a set of evaluation criteria adopted by MARTA's Board of Directors, to assess the comparative merits of the various alternatives. The MARTA Board expanded the first phase of the study to include an additional concept designated "I-20/Turner Hill". In the second phase of the MIS, more comprehensive review and expansion of the earlier work was undertaken to meet Federal requirements for major investment studies.

The MIS concluded that there was no strong, broad-based support for any of the expansion alternatives from the businesses, elected officials or the affected communities. The only strong support for the rail concepts was from the institutions and stakeholders along Clifton Road and from business groups in the South DeKalb area – and their endorsement was strongly opposed by residents of the communities through which the rail alignment would pass. While many residents of those areas support the need for more transit opportunities, they do not want their communities to be divided by a new rail line.

Based in part on this report, rather than proceed with planning a rail extension to South DeKalb, MARTA's Board of Directors has instructed MARTA staff to determine the most appropriate transit service extension and improvements to this area. MARTA recently began a new study of the I-20 East Corridor.

Southern Crescent Transportation Service Center Feasibility Study
Lead Agency: Clayton County, Transportation and Development Department
Status: Completed in 1998

Clayton County conducted a feasibility analysis for a multi-modal facility in the northern portion of the county. Study objectives included identifying the most appropriate role the facility could play in the regional transportation system; ensuring mobility needs to, from and within the study area will be met well into the next century; and stimulating redevelopment activities. Study tasks consisted of reviewing data and previous plans, defining the facility's role and operating characteristics, estimating demand, determining benefits and costs, and preparing final documentation.

The proposed location is along a rail corridor and is convenient to the east side of Hartsfield Atlanta International Airport. Proximity to these facilities will become increasingly important once commuter rail service commences and a new East Terminal for international passengers is constructed. Access to the regional highway system is outstanding since the area is bordered by I-75 and I-285. Three interchanges provide convenient movement between these routes and the local street network, and another interchange is being considered for Conley Road at I-285. Sufficient vacant land, much of it already controlled by Clayton County or the City of Atlanta, is available for construction and operation of a multi-modal facility. Long-range development plans support this type of land use in Mountain View, and an Intermodal facility could help achieve broader objectives of transforming the area into a vibrant district with a mix of businesses and services. Freight cargo operations are not a beneficial role for the transportation service center to provide, based on operating methods in the area and the ability of current and previously planned facilities to meet rail, truck and air cargo needs for the foreseeable future.

The study recommended phasing the development of alternate modes at the transportation service center. Alternative modes assumed by 2020 were MARTA rail, express bus (Clayton, Fayette and Henry counties), local bus, local circulator, airport shuttle, intercity bus, commuter/intercity rail and park-and-ride.

A number of integration challenges were identified, each of which must be considered and addressed in detail before a multi-modal terminal in north Clayton County can be successful. The challenges include: connections between modes are as seamless as possible; service frequencies are convenient with limited transfer requirements; potential users are made aware of congestion avoidance, cost savings and regional air quality benefits; the facility has good access to the regional highway network; sufficient land is available to support all required functions envisioned for the facility and any potential expansions; services are compatible with Hartsfield operations and facilities; and transportation agencies are willing and able to modify other planned and existing services to support integrated operations at the Southern Crescent Transportation Service Center.

The study concluded with a number of recommended follow-up actions and to establish dialogue among the agencies that would be responsible for implementation.

Georgia Rail Passenger Plan
Lead Agency: Georgia Department of Transportation
Year Began/Status: 1993/Completed 1997

The Georgia Rail Passenger Plan combines the results of two studies, the 1995 Commuter Rail Plan and the 1997 Intercity Rail Plan, on specific corridors.

In 1993, the Georgia Department of Transportation (GDOT) initiated a detailed analysis of the potential for commuter rail in northern Georgia. The decision to consider commuter rail arose from a determination that a multi-modal approach to future transportation investments was the key to expanding mobility and helping to maintain the economic vitality of an expanding metropolitan region. Because typical commuter rail trip lengths average over 25 miles but rarely exceed an hour and a half in travel time, 50 counties around Atlanta were included in the overall study area. GDOT established 12 corridors to be analyzed for commuter rail feasibility. The study team was charged with a number of tasks including developing a detailed understanding of the travel behavior of the region's residents; gathering current and future socio-economic projections; developing analytical tools for assessing the impacts of commuter rail; estimating the capital improvements and operating costs; and recommending those lines that appear cost effective and feasible.

Commuter rail was found to be feasible in six of the corridors. Staged implementation was recommended with three lines in the first phase (service to Athens, Senoia and Bremen) and three lines in the second phase (service to Madison, Gainesville and Canton). Capital and annual operating costs of the first phase were estimated to be $243 million and $9 million, respectively. The second phase would require an additional $265 million for capital investment and $8 million annually for operations. Rolling stock would be diesel passenger locomotives and bi-level passenger cars providing three peak-period, peak-direction trips as well as midday and evening service for commuters with flexible schedules.

In 1994, GDOT initiated an assessment of the potential for serving longer distance rail passenger trips. The Intercity Rail study focused on trips defined as those greater than 60 miles long in Georgia and adjacent states. Study tasks included an evaluation of potential rail travel markets; assessment of existing rail lines; ridership and revenue forecasts; operating assumptions and cost estimates; capital improvements and cost estimates; benefits and costs of intercity rail service to the regional economy; assessment of individual routes and recommendations for a network. Recommendations included improving intercity rail corridors to allow passenger trains to operate at speeds of 125 mph or more; fare level of $0.22 per mile; and two phases of implementation for seven corridors. First-priority corridors were Atlanta-Macon via Griffin, Savannah-Jacksonville via Jessup, Macon-Savannah via either Vidalia or Eastman and Jessup, and Macon-Albany via Americus. Second-priority corridors were: Atlanta-Augusta via Madison, Atlanta-Columbus via Griffin, and Atlanta-Greenville via Gainesville and Toccoa. The study also recommended that GDOT take steps to protect the rights-of-way that would be used for intercity rail service especially from the threat of abandonment, where land often reverts to the prior owners or their successors because it is no longer used for railroads, or when the railroad sells off the land piecemeal, which opens it up to residential or commercial development that blocks future intercity service.

The Intercity study's Phase 4 Final Report (dated August 1997) is entitled *Georgia Rail Passenger Plan: Effects of Combining State-wide Intercity Services with Atlanta Area Commuter Services*. This report presents updated results for Georgia's 1995 commuter rail plan as well as the results of combining intercity and commuter rail services on specific corridors for more efficient operation. The recommended network includes commuter rail service only as far as Dacula on the Athens line, to Villa Rica on the Bremen line, and to Covington on the Madison line. The intercity rail service recommended to Augusta would provide service to Madison. Service continued to be recommended as far as Canton, Senoia and Gainesville on the other three lines in the Commuter Rail Plan. The intercity routes recommended in the May 1997 Plan remained unchanged.

Northwest Transit Corridor Refinement Study
Lead Agency: Atlanta Regional Commission
Status: Completed in 1992

The Northwest Transit Corridor Refinement Study built upon the results of ARC's 1989 Future Transit Corridors Study, which identified several potential rail transit corridors. This study encompassed the northwest radial corridor from Atlanta to Cobb County and the northwest circumferential corridor from Cumberland to Perimeter Center. The study's overall purpose was to make a more detailed assessment of the costs and benefits of the potential corridors, including an evaluation of whether new transit facilities in the corridors would meet cost-effectiveness guidelines established by the FTA.

The report concluded that "none of the lines studied meets FTA guidelines for federal funding. FTA required that a rail project must not exceed $10 per new rider to qualify for a federally-funded Alternative Analysis/DEIS Study, and have a cost per new rider of $6.00 or less to proceed into preliminary engineering. The cost per new rider of the alternative rail lines studied ranges between $30 and $40 per new rider, three to four times higher than the federal threshold. A complementary set of short- and long-range programs were recommended:

1. Bus solutions, including dedicating existing freeway lanes to buses and HOVs, are likely to be more cost effective than the new rail alternatives studied. HOV lanes should be complemented by additional park-and-ride lots and expanded bus service. The potential for additional HOV ramps on I-75 should be studied. The feasibility of HOV lanes on I-285 should also be studied.

2. Commuter rail is another potential solution that may be feasible in this corridor. Recent discussions have focused on double-tracking the Cartersville line. The commuter rail concept could also be expanded to include the abandoned CSX line through South Cobb to Dallas and Rockmart, and the branch line from Marietta to Canton. This approach should be evaluated, including analysis of travel times, potential ridership, and capital and operating costs.

3. Despite failing to meet FTA's guidelines, one or more of the new rail lines studied may be desirable as a matter of local policy. New rail construction may be less expensive and disruptive than the construction of equivalent new highway capacity. Greater emphasis on rail can also help achieve Clean Air Act goals. For these reasons, the most cost effective alignments in each corridor should be protected from encroachment by future development. This will entail the incorporation of these lines in ARC's long-range transportation plan.

ARC included the Northwest Rail Line in the 2025 Regional Transportation Plan. The southern terminus is at MARTA's Arts Center Station; the northern terminus is at Town Center Mall. Intermediate stations are generally along the railroad alignment south of I-285, then north along Cobb Parkway at: the "Atlantic Steel" site, Howell Mill, Moores Mill, Oakdale, Vinings, Cumberland/Galleria, Windy Hill, Delk Road, South Loop, "Big Chicken", and Elizabeth.

Twenty-Year Strategic Plan for ITS Deployment, 1999-2019

Lead Agency: Georgia Department of Transportation
Status: 1991 ITS Master Plan Study; Plan is reevaluated/extended every four years

Georgia Department of Transportation (GDOT) conducted an Intelligent Transportation System (ITS**)** Master Plan Study in 1991. This study was the predecessor to implementation of the existing ITS infrastructure constructed prior to the 1996 Olympic Games.

GDOT followed this early effort by developing a Twenty Year Strategic Plan for ITS Deployment, 1999-2019 for the entire state. The plan was subdivided into four major categories: surveillance and detection, incident management, traveler information, and traffic control strategies. This twenty-year plan depends upon local governments working cooperatively with the state to implement new ITS technologies and expand on Georgia's existing technology, which includes the NaviGAtor system, monitoring cameras, and the Highway Emergency Response Operators (HEROs).

Key elements in the Plan include:

- Integration of transit properties, regional airports, regional 911 centers, regional railroad facilities, and ports authority;
- Coordinated distribution of parking status with transit authorities,
- Enhanced traveler information on the Internet,
- Development of additional rideshare programs,
- Expansion of HERO,
- Installation of changeable message signs on arterials,
- Installation of surveillance and detection technology on all routes where needed,
- Expansion of HOV lanes, and
- Freeway communication hardware installation and expansion.

3.0 COUNTY AND LOCAL

Cumberland Area Transportation Study: Shuttle Operations Plan
For Cumberland Community Improvement District
Lead Agency: Cumberland Community Improvement District (CCID)
Year Began/Status: 2001/Projected completion in 2002

The study supports CCID's mission to promote the use of alternative modes of transportation in the Cumberland/Galleria area. The project reflects the intent of the Access Program of the Governor's Transportation Initiative in that it addresses regional goals to reduce the reliance on single occupancy vehicle travel, improve air quality, and protect the environment and the quality of life for metro Atlanta citizens.

Although the study is not yet completed, early findings indicate a need for weekday shuttle operations. Preliminary routes were designed and test driven during peak hours to evaluate the efficiency of the routes. One potential route was eliminated from consideration due to lack of development along the alignment; another route was modified to better serve a large office park. Several steps are needed in order to complete the route-planning phase for the Cumberland shuttle project. After completing these steps, ridership estimates for each route will be developed to determine the frequency and number of vehicles necessary to provide adequate service along the routes. Cost estimates and the financial plan are still pending the completion of the project. Implementation of the plan will require approval of the CCID Board of Directors.

Perimeter Connectivity Study
Lead Agency: Georgia Regional Transportation Authority
Year Began/Status: 2001/Projected completion in 2003

This study is evaluating fixed guideway and bus alternatives that will provide connecting links between MARTA and local trip generators. It coordinates with the I-285 Transit Feasibility Study, the Georgia 400/Northern Sub-Area Study, the Regional Transit Action Plan, and the Northwest Connectivity Study, all of which occur within or adjacent to the study area. This is the intermediate link between the soon-to-be-completed consolidated shuttle operations study and the post-GRTA study (preliminary engineering phase to develop the exact cost and proposed final funding options). The study comprises a detailed assessment of the alternatives and associated costs, comprehensive public input, and detailed environmental assessment of the selected alternatives. Should the results be satisfactory, all the steps to qualify for federal funding will have been completed.

Perimeter Center Area Transportation Study: Consolidated Shuttle Study and Implementation Plan for Perimeter Community Improvement District
Lead Agency: Perimeter Community Improvement District (PCID)
Year Began/Status: 2001/Projected completion in 2002

The study was designed to develop a detailed operations plan, including cost estimates and an implementation strategy, for consolidating the existing system of privately operated shuttle services in the Perimeter Center area. There are several year-round shuttles, a seasonal holiday shopper shuttle and MARTA bus and rail services operating within the study area. By consolidating the existing shuttles into a single system, the PCID intends to take advantage of scale economies, existing service types, such as route deviation, and new routing to provide a more cost effective service for current shuttle providers. Findings will include operations plans for fixed routes and services that introduce the proper vehicle type, fuel technology, routes, and cost. The project is part of the Governor's Transportation Initiative.

Although the study is not yet completed, early findings indicate that system alternatives must meet a daily ridership demand of 4,220 boardings in a way that balances cost effectiveness with level of service. Several service parameters, related to routing and technology, have been identified as key to developing a viable consolidated shuttle system. These will be used to refine the preliminary routes and develop a final operating plan. All recommendations will require approval by the PCID Board of Directors.

Perimeter Circulator Feasibility Study
Lead Agency: Perimeter Community Improvement District (PCID)
Year Began/Status: 2001/Completed 2002

Three alternative modes of public transportation were evaluated for use as the proposed Circulator technology in the study area: light rail transit (LRT), monorail and automated guideway transit (AGT). A number of alternative alignments were developed at the sketch-planning level to test a range of service options for the study area. The alternatives provided the basis for the general analysis of potential system configurations, operational scenarios and geographic coverage in response to existing and projected future travel needs. None of the alternatives in this study is intended to be the proposed alternative; they were developed as prototypes to test a range of service and technology options.

Development and travel trends indicate increasing demand for mobility options in the study area. Review of permitted land uses and development types shows potential for substantial increases in employment, residential and commercial uses in the area. Given the level and type of trip making, there is the potential to serve substantial ridership. Conceptual analyses demonstrated a number of potential Circulator alignments are feasible although additional rights-of-way would have to be purchased. A preliminary environmental evaluation indicated low to moderate impacts for social, cultural, natural and physical environments.

Funds have been programmed by the Georgia Regional Transportation Authority to conduct a more detailed Alternatives Analysis study of a potential Perimeter Circulator.

Town Center Area Transportation Study: Shuttle Operations Plan
For Town Center Community Improvement District
Lead Agency: Town Center Community Improvement District (TCCID)
Year Began/Status: 2001/Projected completion in 2002

The study supports TCCID's mission to promote the use of alternative modes of transportation in the Town Center area. The project reflects the intent of the Governor's Transportation Initiative in that it advocates regional goals of reducing reliance on single occupancy vehicle travel, improving air quality, and protecting the environment and the quality of life for metro Atlanta citizens.

Although the study is not yet completed, early findings indicate a need for mid-day shuttle services. Preliminary routes were designed and test driven to evaluate the efficiency of the routes. All routes were field verified. Several steps are needed in order to complete the route-planning phase for the Town Center shuttle project. After completing these steps, ridership estimates for each route will be developed to determine the frequency and number of vehicles necessary to provide adequate service along the routes. Cost estimates and the financial plan are still pending completion of the project. Implementation of the plan will require approval of the TCCID Board of Directors.

Clayton County Transit Service Implementation
Lead Agency: Georgia Regional Transportation Authority
Status: Completed in 2001

Significant elements of the Clayton County transit start-up included:

- Service Planning: establish final route alignments, bus stop and shelter locations; conduct final bus run times; develop service schedules and run cuts; create and install bus stop and rail station signage; print and distribute schedules and fare media.

- Revenue Equipment: sign contract with bus manufacturer; conduct required audits; oversight at manufacturing plant; acceptance testing; paint/decal buses with Clayton identification; install radio communications, fareboxes, surveillance systems.

- Finance: develop cost center, timesheets, etc.; incorporate Clayton into budget package; develop final annual budget estimate; approve MARTA invoice format; develop revenue/ performance reports and NTD reporting procedures: develop procedures to reconcile financial data.

- Other: execute contract with MARTA; establish fare policy, structure and transfer agreements; set up process to administer claims; obtain PSC operating certificate; submit FTA grant applications, certifications and assurances; add Clayton service to MARTA website; customer information training; develop policies/procedures to monitor service provision; set up vehicle maintenance reporting system.

Comprehensive Transportation Plan
Lead Agency: Fulton County
Status: Adopted January 2001

The CTP process included extensive public involvement, from which was developed a mission statement and plan objectives. Plan scenarios were developed, model-tested and evaluated to determine which combinations of improvements, modes, strategies and policies were most effective in meeting the short-, medium-, and long-range travel demands in Fulton County. Implicit in the modeled scenarios were varying assumptions about the multi-modal system (for example, pedestrian accessibility to transit, travel demand measures, and intelligent transportation system projects).

Four major scenarios were tested using the horizon year of 2020: existing plus committed projects (essentially the "do nothing" alternative"), a scenario based on ARC's adopted 2025 Regional Transportation Plan, a highway-oriented scenario based on continuing deficiencies in the roadway system after the RTP is implemented, and a transit-oriented scenario based on corridors that have reasonable potential as transit corridors.

As potential highway, transit and other projects were identified and evaluated, it was concluded that transportation improvement projects alone would not be sufficient in meeting the county's transportation objectives. Transportation in Fulton County cannot improve significantly without changes in growth patterns and related activity. The Fulton County CTP combines program, policy, and project recommendations.

Transportation-related program recommendations concern safety, traffic calming and maintenance/preservation of existing infrastructure.

Policy recommendations relate to implementation and maintenance, project development, land use and development regulations, and safety.

Project recommendations encompass intersection improvements; grade separation; Advanced Transportation Management System (ATMS); bike, pedestrian and multi-use path projects; bridge, maintenance and dirt road projects; highway widening, new and reconstructed interchanges and roadway upgrades; transit and HOV projects, including bus, shuttle and rail recommendations; public involvement, funding options, and future updates of the CTP.

Plan recommendations related to transit include shuttle service for Sandy Springs; shuttle feasibility study for southwest Fulton; people mover system to link Sandy Springs and Perimeter Center; shuttle circulator system between Northpoint and Windward Parkway; additional local bus services in many parts of the county; MARTA rail extensions to Windward Parkway, Fulton Industrial Boulevard, and Hapeville.

CTP implementation is estimated to cost $20 million of local funds per year over the next 20 years. Approximately 52 percent of the cost is for transit and HOV projects; 5 percent is for bike, pedestrian and multi-use path projects.

Comprehensive Transportation Plan
Lead Agency: Gwinnett County
Status: Completed in 2000

The Gwinnett Board of Commissioners adopted the Comprehensive Transportation Plan (CTP) in September of 2001. The CTP provides a framework for guiding public transportation investment. The framework includes broad goals that articulate a long-term vision and also defines a set of investment principles that provide clear funding priorities, linking mobility needs, community preferences, and potential solutions.

Gwinnett's CTP is a series of 12 technical documents: Existing Conditions, Socioeconomic and Growth Analysis, Land Use and Transportation Relationships, Public Involvement Program, Traffic Demand and Simulation Modeling, ITS Assessment, Traffic Calming, Transit Technology Assessment, Transportation Demand Management, Database and Software Documentation, Road Safety and Alignment Improvements Evaluation, and Intersection Safety Improvement Evaluation.

The CTP includes over $1.6 billion in transportation strategies and projects over the next 20 years. These investments are diverse and wide-ranging, covering categories from roadway and bridge projects to pedestrian, bicycle and transit facilities, and incorporates Travel Demand Management (TDM) strategies and technology (intelligent transportation system elements). CTP programs and projects are organized into three implementation phases that are largely defined by matching the urgency of the need to the availability of funding. Short-term (2000-2005) are projects with minimal right-of-way needs or environmental impacts and solutions to increase safety and improve operations. Mid-term (2006-2010) includes major investment projects already planned and corridor-wide mobility solutions. Long-term (2011-2020) include major projects, system-wide mobility solutions and full CTP implementation.

Buckhead People Mover Study

Lead Agency: Atlanta Regional Commission
Status: Completed 1994

The purpose of the study was to assess the feasibility of establishing an automated people mover (APM) system to accommodate circulation needs among office, commercial and residential developments and two MARTA rail stations in the Buckhead area. The study process included an inventory of existing plans, studies and conditions; an overview of various bus and rail technologies; development of preliminary alternatives; and evaluation of alternatives. Evaluation criteria included ridership, capital and operating costs, cost effectiveness, urban design, impacts (traffic, building, visual), utilities, travel time, system capacity, frequency and service to future development. Among reasons for selecting the Busway as the preferred alternative were its ability to attract nearly the same ridership as the APM alternatives at one-seventh of the capital cost; lower annual assessment required of non-residential property to cover operation and capital costs; and limited state and federal funding for automated guideway systems. There is also the possibility that the Busway Alternative could be upgraded to incorporate APM technology in the future.

Study findings included the recommendation that for the Busway alternative to attract nearly as many riders as the APM alternatives, the Busway must be located in its own reserved right-of-way, bypassing congested roadway segments; include grade separated crossings or special signalization at major arterials; incorporate significant urban design treatments and passenger amenities at stop/station locations; use specially designed and marked vehicles for short trip, high volume operations; provide very frequent service and direction connections to the two MARTA rail stations and major developments in the area.

Douglas County Express Bus Feasibility Study
Lead Agency: Douglas County
Status: Completed in 2000

The study was structured to determine the extent and nature of transit markets, assess the travel patterns of potential users, and evaluate the feasibility of express bus service to/from major employment centers.

Douglas County transit service plan options were defined and evaluated following an assessment of socioeconomic data, work travel patterns, existing Douglas County transit services and planned transportation improvements, interviews with stakeholders and comments from public meetings, existing and planned express bus transit services in the Atlanta metropolitan region. The transit plan alternatives (Low, Medium A and B, and High Investment) focused on service improvements between Douglas County and major work destinations in the region.

The evaluation of alternative service plans was based on performance measures for service efficiency and effectiveness. Efficiency criteria measure how costly a transit system is in terms of dollars per unit of service provided. The Douglas County study used three efficiency criteria: annual operating cost per revenue vehicle-mile, annual operating cost per passenger trip, and farebox recovery ratio (passenger revenue divided by operating cost). Effectiveness criteria measure how well a transit system is used in terms of riders per unit of service provided. The Douglas County study used three effectiveness criteria: annual passengers per revenue bus-hour, annual passengers per peak vehicle, and annual passengers per vehicle trip.

The study also assessed federal, state, local and public/private sources of revenue that could be used to fund the operating and capital costs of potential rideshare and express bus services and identified innovative financing mechanisms.

The management structure used to implement additional public transit services is as important as the design of the services. That structure must be consistent with the laws and regulations that define the County's powers. It must balance County control of services with the assumption of risks that go with control. It must allow for effective management and for control of costs. The final aspect of the study was an examination of management options and implementation issues. The discussion of management options included legal issues, functional criteria and compatibility with alternative service plans. The discussion of implementation issues included planning tasks for operations, vehicle and equipment procurements, facility development, service procurement and marketing; service continuity, service phasing, and service monitoring.

Proposed Transportation Plan, from Comprehensive Plan 2020 Draft

Lead Agency: City of Roswell
Status: Dated May 2000

General findings include:

- Roswell's traffic conditions are largely the result of pass-through traffic,
- Previously recommended road widening projects have not been implemented and are generally no longer supported by the city's elected officials and citizens, and
- MARTA's rail service extension north of Perimeter Center will benefit Roswell's residents but is not expected to reduce congestion in Roswell.

The plan classifies roads by function, including principal arterial, major arterial, minor arterial, major collector, minor collector, and local road. Conditions are evaluated using a travel model derived from the Fulton County travel model for year 2000, 2005 and 2010.

The transportation plan incorporates an aggressive bicycle and pedestrian plan, and a series of policy statements that include next steps.

Transit Feasibility Study
Lead Agency: Gwinnett County
Status: Completed 1998

Transit System Implementation Planning Project
Lead Agency: Gwinnett County
Status: Phase 1 implemented in 2001

The first element of the feasibility study was assessing public transportation needs and public attitudes and perceptions in order to determine demand for a transit system. Using the information collected, Gwinnett County designed and evaluated alternative transit service plans. As the spectrum of potential transportation modes is wide, the county focused on modes that could be implemented within a few years, effective in reducing traffic congestion and air pollution, appropriate to the suburban development patterns of the county, and constructed and operated within the county's current funding capacity. The study produced a plan for an initial bus system comprised of seven local routes, four express routes and paratransit service, to be implemented in phases. The initial system was approved by the Board of Commissioners in September 1998.

Implementing the first phase of the transit system required a series of work tasks including: establish start-up committees and files; develop the county's transit staffing plan and procedures; establish fare policy; coordinate with other agencies; funding and grants management; procurement of vehicles and equipment (e.g., establish procurement program, develop specifications, performance acceptance testing); produce service contract RFP; evaluate, award and negotiate service contract; monitor contractor start-up activities; develop paratransit service policies, procedures and service contract RFP; refine fixed-route service plan; prepare paratransit service plan; coordinate implementation of passenger facilities; oversee development of schedules; prepare a conceptual marketing plan; produce marketing services RFP; and prepare program management plan for facilities development.

Phase 1 (three express routes) started up on November 5, 2001.

Clayton County Transit Feasibility Study

Lead Agency: Atlanta Regional Commission
Status: Completed 1992

The Clayton County Board of Commissioners examined transportation improvements, including public transit, needed to meet future travel demands in Clayton County. The study report documents transit need analysis, potential transit demand, transit service alternatives, transit development plan, and implementation program.

The recommended implementation timeframe was five years, beginning with a rideshare program in year 1; local and express bus and vanpool service start-up in year 2, and expanded bus service in year 5.

4.0 OTHER

Bus Access Study for Multi-Modal Passenger Terminal
Lead Agencies: Georgia Department of Transportation
Georgia Regional Transportation Authority
Georgia Regional Passenger Authority
Status: Completed 2002

This report provides a limited traffic assessment of the anticipated bus routes to the proposed Multi-Modal Passenger Terminal (MMPT), assumed to be MMPT "Concept 6". The proposed location of MMPT facilities under Concept 6 is between Centennial Olympic Park Drive and Forsyth Street; bounded to the south by Martin Luther King, Jr. Drive, to the north by the building site of The Atlanta Journal/Constitution, thus providing direct access to MARTA's Five Points Station. The Concept 6 location includes three potential sites for the MMPT. The study:

- Examined morning and evening traffic patterns associated with existing roadway access to each of these sites,
- Estimated projected background traffic, including transit vehicles, at final build-out, and
- Assessed roadway improvements necessary for MMPT area accessibility.

The study concluded that two intersections would require improvement to accommodate morning peak hour transit routes to and from the MMPT. The intersections are Spring Street at Martin Luther King, Jr. Drive and Spring Street at Mitchell Street. The study also includes specific recommended street improvements.

Livable Centers Initiative
Lead Agency: Atlanta Regional Commission
Year Began/Status: 1999/On-going for five years

To help foster greater livability in the region's towns and employment centers, ARC developed the Livable Centers Initiative (LCI). LCI provides seed money to communities that are working to enhance livability and mobility for their residents, using the infrastructure already in place instead of building anew.

In May of 1999, ARC adopted policies in the 25-year Regional Transportation Plan that provide $1 million per year for five years for LCI planning grants to regional communities and employment centers. These studies specifically explore linking different types of land uses with the most appropriate transportation investments. In 2003, LCI will begin to make available an additional $350 million for implementing the transportation, land use and community design ideas generated from these plans. Although the completed LCI studies show a range of ideas and ways to achieve livability, all demonstrate the fundamental concepts of:

- Connecting homes, shops and offices;
- Enhancing streetscapes and sidewalks;
- Emphasizing the pedestrian;
- Improving access to transit and other transportation alternatives; and
- Expanding housing options.

ARC funded 22 planning studies in the first two years of the program. Recipients include the cities of Acworth, Atlanta, Canton, Chamblee, Conyers, Douglasville, Duluth, Forest Park, Hapeville, Marietta, Morrow, Norcross, Peachtree City, Sandy Springs and Stockbridge. Other LCI funding recipients include Buckhead TMA, Cumberland/Galleria Area, Gwinnett County, Northlake Mall Area, and Perimeter Center.

Many of the completed studies are posted on ARC's website.

Comprehensive Fare Study
Lead Agency: MARTA
Status: Completed in 1999

The purpose of the study was to identify potential fare strategies to position MARTA for future fare changes and equipment to replace the existing fare collection system. It is intended that the future fare strategy should provide necessary passenger revenue to maintain operations and minimize ridership losses, if not actually increasing ridership. Fare study alternatives encompassed a variety of strategies, collection systems, media and pricing structures.

- Fare strategies evaluated were flat fares, peak/off-peak differential fares, distance-based fares (bus and rail, rail only), and transfer charges (bus to bus, bus to rail, rail to bus).

- Fare collection systems evaluated were open system (with proof of payment) options, entry control/open exit options, entry and exit control (closed system) options. The evaluation included limitations of each fare collection system on potential fare strategies.

- Fare payment media evaluated were cash/tokens, time-based passes (weekly and monthly), paper tickets/transfers, and stored-value cards (magnetic and smart cards).

- Pricing structures evaluated were pay per ride (no discount), pre-payment discounts (time-based passes, multiple ride cards and tickets, stored value cards), and special fares (e.g., tourist, conventions, weekends).

Recommended fare collection system was proof of payment, to reduce equipment investment.

Fare media recommendations were eliminate tokens, introduce smart cards, drop magnetic media from further consideration, and do not plan for hybrid media.

Pricing recommendations were to price cash fare high to encourage 90-95% pre-payment; replace TransCards with stored value smart cards; discount smart cards deeply to maximize use; eliminate convention, visitors and similar passes; for occasional riders provide unlimited-use single day passes – they could choose Central Zone or Full System.

Fare Program Analysis
Lead Agency: Cobb Community Transit
Completed 1991 and 1993

In 1991, CCT conducted a fare program analysis prior to implementing a fare increase to achieve its fare recovery goal of 25 percent. The analysis first examined CCT's then-existing fare structure, ridership and revenue. Next, CCT staff and the Transit Advisory Board evaluated a preliminary list of possible fare structures that could increase revenues by 10 to 30 percent and determined the alternatives for further analysis.

Following analysis of the options, including application of elasticity factors, ridership and revenue estimates and a comparison of effectiveness (an index that expresses the amount of additional revenue per lost passenger), and an estimate of the farebox recovery ratio for each alternative, the forecasted results for each alternative were calculated.

Additional, special issues considered were elderly and handicapped fares and fare collection procedures.

At the time of the follow-up (1993) study, CCT's fare recovery ratio was 41 percent. However, the additional significant costs of planned implementation of complementary paratransit service and additional fixed route service would dramatically reduce that farebox recovery. CCT examined its ridership by route and fare payment type, the fare structures of other suburban bus systems, and developed alternative fare structures. The analysis methodology estimated ridership and revenue for each alternative using three sets of elasticity factors based on (1) CCT's prior rate increase, (2) other local experience (MARTA), and (3) national transit industry experience.

Results of the analysis indicated a similar level of efficiency for the alternatives (i.e., the same ratio of revenue raised to ridership lost) and also assessed equity issues that would adversely impact low-income riders.