#### RESOLUTION NO. 1990-70

# A RESOLUTION ADOPTING AND APPROVING A SERVICE POLICY FOR THE GREATER CLEVELAND REGIONAL TRANSIT AUTHORITY

WHEREAS, the Board of Trustees has been granted the power and authority, pursuant to Chapter 306 of the Ohio Revised Code, to manage and conduct the affairs of the Greater Cleveland Regional Transit Authority; and

WHEREAS, the efficient and effective management of transit service resources will be furthered by the establishment of guidelines and criteria for their allocation; and

WHEREAS, the establishment of a Service Policy will aid public understanding of the parameters guiding the provision of transit services.

NOW, THEREFORE, BE IT RESOLVED by the Board of Trustees of the Greater Cleveland Regional Transit Authority, Cuyahoga County, Ohio:

Section 1. That the Greater Cleveland Regional Transit Authority Service Policy, a copy of which is attached hereto and fully incorporated herein, is hereby adopted and approved by the Board of Trustees of the Greater Claveland Regional Transit Authority.

Section 2. That the General Manager/Secretary-Treasurer of the Authority is hereby authorized to undertake the necessary administrative actions to implement this Service Policy.

Section 3. That all prior resolutions and motions of the Board of Trustees which are in conflict with the provisions herein are hereby repealed.

1990

Section 4. That this Resolution shall become effective upon its adoption.

Adopted: April 17 Attest: General Manager/Secretary-Treasurer

# GREATER CLEVELAND REGIONAL TRANSIT AUTHORITY

#### SERVICE POLICY

#### EXECUTIVE SUMMARY

The Greater Cleveland Regional Transit Authority Service Policy is designed to guide the management of existing transit services, as well as the planning and implementation of new and modified transit services. The intent of the Service Policy is to establish consistent criteria for evaluating transit service performance. This will enable the Authority to allocate limited resources so as to maintain and improve service quality and productivity within an objective framework.

The document is divided into nine chapters and a glossary of terms. The first chapter describes the ourpose and scope of the policy. The legal and regulatory environment in which the Authority functions is outlined in Chapter Two. Chapter Three defines various existing and potential transit service categories or types. Chapter Four discusses the concepts behind service design, touching on the planning and development of route structures, schedules, and facilities. Chapter Five addresses service quality considerations by establishing criteria and quidelines designed to direct the Authority in improving service to existing and potential customers. Chapter Six involves service utilization, productivity and efficiency, related to the underlying policy objective of using limited resources to produce the maximum benefit possible while still complying with budgetary, legal and/or operational constraints. Chapters Seven and Eight deal with service management and service development/approval/implementation, respectively, relative to policy objectives regarding enhancing service quality and productivity. Chapter 9 specifies how the Service Policy may be revised or amended.

The service policy thus serves as a statement of guidelines and evaluation parameters for effective planning and management of GCRTA transit services in a directed, efficient and consistent fashion. It is envisioned as a "Living Document" that can be modified and examined as necessary to maintain its continuing utility as a planning and management tool for GCRTA decision-makers, while providing an effective basis from which to proceed in comprehensively addressing current and projected transit service demands.

# GCRTA SERVICE POLICY

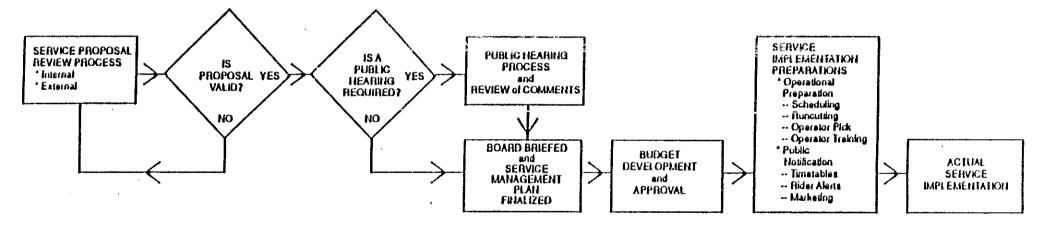
•

Table of Contents P	age
Service Change Procedure (Flow Chart)	1
1.0 Purpose/Scope	2
2.0 Legal and Regulatory Framework	3
3.0 Service Categories	4
4.0 Service Design	8
5.0 Service Quality Criteria and Guidelines	21
6.0 Service Utilization/Productivity/Efficiency	30
7.0 Service Management	34
8.0 Service Development/Approval/ Implementation Process	42
	47
10.0 Glossary	48
Chart A	51

# GREATER CLEVELAND REGIONAL TRANSIT AUTHORITY SERVICE CHANGE PROCEDURE

.

.



2

Ē

.

,

#### SERVICE POLICY

#### 0 PURPOSE/SCOPE

- 1.1 The purpose of this policy is to establish goals, objectives, measures, standards and procedures for both the management of existing GCRTA transit services as well as the planning and implementation of new transit services. It is also intended to provide direction for GCRTA staff as well as to provide elected officials and the general public with a clearer understanding of how transit services are managed, both existing services and new services.
- 1.2 It is intended that this policy will accomplish the following:
  - Provide consistent criteria for evaluating, maintaining and improving the quality and productivity of existing transit services.
  - o Provide guidelines for planning and developing new transit services.
  - o Provide an objective framework for the allocation of limited service resources among existing services and new services.

#### 2.0 LEGAL AND REGULATORY FRAMEWORK

There are four categories of legal restrictions which affect the provision of transit services: Federal regulations, the Ohio Revised Code, the labor agreement between the Amalgamated Transit Union, Local 268, and the GCRTA, and service agreements between the GCRTA and the Cities of Maple Heights and North Olmsted.

2.1 Federal Regulations

- 2.1.1 Requirements for the holding of public hearings relative to service and/or fare changes are in 49 CFR (Code of Federal Regulations) part 635.
- 2.1.2 School bus service restrictions are in 49 CFR part 605.
- 2.1.3 Charter service restrictions are in 49 CFR part 6C4.
- 2.1.4 Requirements for service to senior citizens and/or persons with disabilities are established in 49 CFP Part 27.
- 2.1.5 Service equity requirements for minority populations are established in UMTA Circular 1160.1
- 2.1.6 Privatization requirements are established in UMTA Circular 7005.1.
- 2.2 Ohio Revised Code
  - 2.2.1 The legal authority to establish policies for the provision of service is established in ORC 306.35 governing the "powers and duties" of regional transit authorities.
  - 2.2.2 The legal authority to install passenger shelters can be found in ORC 306.34, 306.35, and 306.36 governing the construction of public transportation facilities in Ohio. Any and all applicable local ordinances and legal constraints not conflicting with the ORC will be complied with.
- 2.3 GCRTA-ATU Labor Agreement

The Conditions of Employment agreed to by ATU Local 268 and the GCRTA establishes working conditions for bus and rail operations and maintenance personnel which impacts the provision of transit services.

2.4 Agreements with North Olmsted and Maple Heights

The service agreements between GCRTA and the Cities of Maple Heights and North Olmsted govern the provision of service by their municipal bus lines.

#### 3.0 SERVICE CATEGORIES

- 3.1 This portion of the policy describes the categories of service which GCRTA currently operates or may choose to operate in the future. These categories are based on the type of vehicle utilized and the type of routing/schedule operated. Currently, the basic service categories are bus services, paratransit services, rail services, special services, and charter services. As it becomes desirable to do so in order to penetrate new transit markets, GCRTA may establish new service categories.
- 3.2 Bus services are currently operated using full-size buses operating fixed schedules over fixed routes. There are four categories of existing bus services: local/radial, express, crosstown/feeder, and circulator. Another category of bus service under consideration for the future is subscription bus.
  - 3.2.1 Local radial bus service is used to collect and distribute high-turnover traffic along developed corridors radiating to and from major trip generators such as the Cleveland CBD or a shopping mall. It is characterized by frequent stops, shorter passenger trips, a higher level of base or off-peak patronage, and slower bus speeds due to passenger boarding/alighting and traffic conditions.
  - 3.2.2 Express service is used to provide fast line-haul service to major trip attractors under high peak-period ridership conditions. It generally serves suburban areas and/or park-n-ride facilities. This service is characterized by longer passenger trips, reduced levels of patron turnover, and fewer passengers per mile. There are three kinds of express bus services: regular express, freeway flyer, and exclusive park-n-ride flyer.
    - Regular express routes (denoted by an "X") travel over regular arterial roads bypassing selected marked bus stops which are served by local service.
    - Freeway flyer routes (denoted by an "F") operate their express segment on freeways rather than parallel arterial roads.
    - Exclusive park-n-ride flyer routes collect the majority of their riders at designated park-n-ride lots and then operate via freeway to the CBD.

4

3.2.3 Crosstown/feeder is used to link routes or route segments. This type of service provides travel opportunities for patrons with dispersed trip origins and destinations. This service is characterized by patrons boarding throughout a large area and frequently transferring to another bus or to the rail to complete their trip.

## 3.2.4 Circulator Services

- A. Circulator bus operations best serve areas which have the following characteristics:
- High employment and diversified activities within a well-defined area.
- High residential density with poor access to fixed-route service and/or diversified activity centers.
- B. Examples of circulator services are:
- o GCRTA Downtown Loop System
- o Neighborhood circulators
- 3.2.5 Subscription bus services (future service)
  - A. Subscription bus is a service in which routes and schedules are prearranged to meet the travel needs of riders who sign up for the service in advance. The level of service is generally higher than that of regular passenger service (fewer stops, shorter travel time, greater comfort).
  - B. These services are open to the general public.
  - C. These routes serve areas of low population density normally unable to support fixed-schedule, fixed-route local or express service.
  - D. Subscription bus fares are priced higher than line-haul bus service to reflect the higher cost of providing such service.
- 3.3 Paratransit Services are special transportation services designed to meet the needs of senior citizens and disabled persons. These services are operated using smaller vehicles and are generally operated on a demand-responsive schedule (i.e. the schedule and routing may vary from day to day depending on the origins and destinations of the trips that are requested). There are currently four paratransit programs being offered: Community Responsive Transit, Extra-Lift, Cross-Country Medical, and Kidney Dialysis Transportation.
  - 3.3.1 Community Responsive Transit is the basic paratransit service. It is offered in 18 service areas which cover all of Cuyahoga County. It provides senior citizens and disabled persons with door-to-door service within their service area on weekdays during non-rush hours and on Sundays.
  - 3.3.2 Extra-Lift is a subscription service for severely disabled persons who require door-to-door transportation to work, vocational training, or college classes on a regular basis. This is a weekday, rush-hour service that is operated throughout Cuyahoga County.

- 3.3.3 Cross-County Medical service provides door-to-door service for elderly and disabled persons traveling to and from medical appointments. This service is provided all day on weekdays only throughout Cuyahoga County. This service is provided on either a subscription basis (for radiation, chemotherapy, or non-stable dialysis treatment) or on a one or two-day advance call-in basis.
- 3.3.4 Kidney dialysis transportation is a service which GCRTA provides for the Cuyahoga County Department of Human Services. RTA is fully reimbursed by Human Services for the trips provided.
- 3.4 Rail Services

GCRTA's rail services consist of the heavy-rail Red Line and the light-rail Blue and Green Lines.

3.4.1 Heavy Rail (Red Line)

The Red Line operates over a fully grade-separated right of way from Windermere Station in East Cleveland to the Airport Station at Cleveland Hopkins International Airport. There are a total of 13 stations, 9 of which have parking facilities. Passengers board and alight at high platforms at all stations, at either below-grade or at-grade locations.

3.4.2 Light Rail (Blue and Green Lines)

The Blue and Green Lines originate at the Tower City Station in Cleveland and operate over a common trunk to a point just east of the Shaker Square Station, where they branch. The Blue Line terminates at Van Aken Blvd. and Warrensville Center Road; the Green Line terminates at Shaker Blvd. and Green Road. Each route is approximately 9.5 miles long. There are a total of 30 light rail Stations, 13 of which have parking facilities. Passengers board and alight at low platforms at all stations. From Shaker Square to the eastern terminals, both lines operate at grade with street crossings.

- 3.5 "Special" Bus or Rail Service
  - 3.5.1 "Special" bus or rail services are operated for a single event (such as Home and Flower Show) or for an ongoing seasonal series of events (i.e., the Cleveland Browns or Cavalier's home games).
  - 3.5.2 This category of service generally operates during, but is not limited to, midday, evening, or weekend periods.
  - 3.5.3 Such special service can be instituted by:
    - o an interested private party willing to compensate RTA for at least 25% of the cost of the service.

 RTA in order to prevent overcrowding on regularly scheduled services, to attract additional riders, or to meet a community need or interest.

# 3.6 Charter Service (Bus, Rail or Paratransit)

- 3.6.1 Operators receiving Federal assistance are prohibited from operating any charter service if there is at least one private charter operator willing and able to provide that service. (See 49CFR Part 604)
- 3.6.2 The two exceptions to the prohibition are:
  - o Incidental, direct charter service with non-profit social agencies to provide service for physically disabled persons under certain conditions.
  - Incidental charter service for which the UMTA recipient and local operators have reached an agreement as part of the "willing-and-able" determination allowing the UMTA recipient to provide the service.

## 4.0 SERVICE DESIGN

## 4.1 General

The Service design section of this policy addresses criteria and guidelines for the route network, individual route designs schedules, and route facilities of the GCRTA system. These criteria and guidelines ensure that:

- o new transit services are coordinated with the existing transit network;
- o new and existing services are aligned based on population densities;
- o locations of activity centers are taken into consideration;
- transit services provide the most direct and the fastest service possible given the travel needs of the customers utilizing the service;
- o service schedules are tailored to provide an attractive level of service to the target market; and
- o route facilities are located in a logical, orderly fashion which is at the same time responsive to the needs of customers.
- 4.2 Network design
  - 4.2.1 Fixed-route route coverage and spacing should be based on demonstrated need or potential demand.
  - 4.2.2 Line-haul bus service should utilize major arterials in densely-populated areas; in suburban areas, it should utilize those streets where traffic density warrants and street conditions permit.
  - 4.2.3 There should be one line-haul bus route per arterial except on approaches to CBD, concentrated activity centers, bus loops, and rapid stations.
  - 4.2.4 Opportunities for interfacing bus and rail service should be maximized with the goal of utilizing the rail system's greater capacity and potential operating efficiencies and minimizing service duplication between bus and rail.
- 4.3 Route design guidelines for line-haul bus service
  - 4.3.1 Route directness
    - A. To the extent possible, two-way service will be provided on the same street.
    - B. Line-haul bus service should be routed in the most direct fashion possible.

- C. Deviations from the basic route alignment to serve activity centers will be made only when they have the potential to attract enough new ridership to generate at least 25% of the additional cost of the route deviation.
- D. Additional time to operate route deviations should not exceed five (5) minutes one-way or 10% of one-way running time, whichever is less.
- E. Through routing of two routes with a common terminal should be considered when at least 20% of the riders transfer between the two routes as long as schedule adherence can be maintained and no additional vehicles are required.
- 4.3.2 Route length should be such that round trip running time does not exceed 3 hours.
- 4.3.3 Route extensions
  - A. Extension of a route will be considered when such an extension will serve a concentration of residential development, a major activity center, or a major employment center.
  - B. A route extension should initially have the potential to generate enough ridership to satisfy the 25% Operating Revenue/Operating Expense requirement. (See 6.4.1)
- 4.3.4 Express bus service should be operated under the following conditions:
  - o The travel corridor has high current level of local service.
  - o A large proportion of trips in the travel corridor have the CBD or a high employment location as their destination.
  - o The ridership potential exists to generate seated bus loads within the local, all-stop portion of the route.
  - o The travel time savings in the express zone using the express service should be greater than parallel local service.
  - o There is access to either a freeway or a multilane arterial road over which the buses can operate in freely flowing traffic conditions to the CBD.

# 4.4 Schedule design for fixed-route bus service and rail service

## 4.4.1 Days of service

A. New bus service

- o New local/radial, crosstown/feeder and/or circulator bus service shall be instituted on those days of the week which meet the needs of the target market, typically Monday through Friday.
- New express bus service shall be instituted on a weekday-only basis.
- B. Existing bus service

When requests for weekend bus service are made for a route where currently there is none, such requests will be evaluated according to the route's current ridership performance relative to its route group as well as the potential ridership demand for the proposed service period. If the existing service is performing at or above the average for the route group and a strong ridership demand for the additional days of service exists, the request will be considered.

- C. Rail Service
  - All light and heavy rail services shall operate 7 days a week.
- 4.4.2 Minimum daily service span
  - A. Minimum service spans for new fixed-route bus service should typically be:

		Weekday	Saturday	Sunday
0	Local bus	5am-8pm	6am-7pm	8am-6pm
0	Express bus	6ат-9ат Зрт-брт		

- B. Existing fixed-route bus service
  - When requests are made for earlier or later service on an existing fixed route, load factors for existing service periods shall be examined. If the load factors for early and/or late trips are approaching 100%, extensions to the service span will be considered.

# C. Rail service

		Weekday	Saturday	Sunday
o	Red Line	4:30am- 1:00am EB	4:30am- 1:00am EB	4:30am- 1:00am EB
		3:45am- 12:00am WB	4:15am- 12:00amWB	4:15am- 12:00am WB
0	Blue Line	4:30am- 1:00am WB	4:30am- 1:00am WB	4:30am- 1:00am WB
		4:45am- 12:00am	5:00am- EB12:00am	5:00am- EB12:00am EB
0	GreenLine	6:00am- 11:00pm WB	6:00am- 11:00pm WB	7:00am- 11:00pm WB
	-	5:45am- 11:30pm	6:50am- EB11:30pm	6:30am- EB11:30pm EB

Approximate hours of rail service operation should be\*:

- \* Due to construction projects on the rail lines, these service spans may be abbreviated and the service replaced by bus shuttle service.
- 4.4.3 Policy headways
  - A. Fixed-route bus service should be scheduled to insure that:
    - o Minimum 60-minute service along the trunk segment of a route is maintained.
    - o To the maximum extent possible, route branches will have equal headways and there will be a uniform headway along the trunk segment.

B. Rail services will have the following maximum headways:

	Red Line	<u>Blue Line</u>	<u>Green Line</u>
Weekday Peak (generally 6-9 a.m.,3-6 p	15 m.)	15	15
Weekday Midday	20	20	20
Weekday Nights	20	30	30
Saturday Midday	15	20	20
Saturday Nights	30	30	30
Sunday Midday	20	50	50
Sunday Nights	30	50 .	50

# 4.4.4 Schedule Coordination

- A. To the extent possible, fixed-route bus and rail schedules will be coordinated to facilitate transfers.
- B. The priority of connections between various GCRTA fixed-route services will be as follows:
  - o Connections during evening and weekend periods when service is less frequent
  - o Peak-period, peak-direction connections
  - o Peak-period, non-peak direction (reverse commute)
  - o All other connections
- C. A long-term goal will be to establish transit center facilities to which various bus and rail services operate on timed-transfer schedules.
- 4.4.5 Clockface headways, utilizing even divisions of an hour, (e.g., 5, 10, 15, 20, 30) shall be utilized at major boarding locations, such as the CBD, rail stations, etc. to the maximum extent practical.
- 4.5 Paratransit Schedule Design

Paratransit routings and schedules are based on the specific origin-destination and schedule requirements of the patrons.

- 4.6 Route Facilities Design
  - 4.6.1 Bus Stop Location
    - A. General Location Guidelines
      - Bus stops should be located in proximity to known passenger activity centers (e.g. apartments, office buildings, hospitals, etc.) and on the basis of general spacing <u>guidelines</u> rather than required fixed spacing distances.
      - For any given route, the following stop spacing <u>guidelines</u> shall apply, except where lack of sidewalks or other physical constraints warrant the use of "flag stops" at which buses stop upon passenger request.

- o Stops will be 500 feet apart, with few exceptions.
- Stops in residential areas may be provided to a maximum of eight (8) within any given mile if development warrants.
- Stops in commercial areas may be provided to a maximum of ten (10) within any given mile if development warrants.
- Nearside stop locations at intersections are preferred, except when a designated "right-turn only" lane exists or other physical considerations prohibit use of a nearside location.
- B. Guidelines for stop location for new routes:
  - Bus stops shall be initially located on an average of 4-6 stops per route mile along local residential collection/distribution segments of a new route.
  - Additional stops may be added if warranted but shall not exceed the basic stop spacing guidelines of eight (8) stops per mile and/or not two stops within 500 feet of one another.
- C. Guidelines for modification of stops along existing routes:
  - New bus stops may be added to service an existing route provided the addition does not result in exceeding the basic maximum stop spacing guidelines or result in two stops being located within 500 feet of one another.
  - A bus stop shall be evaluated for possible relocation or removal if it is determined that <u>any</u> of the following conditions apply:
    - o A safety or security problem exists.
    - o The stop generates less than five (5) passenger boardings/alightings per day and the stop is located within 500 feet of another stop.
    - o The basic stop spacing guidelines are exceeded.
    - •• A stop can be made accessible to wheelchair/lift users by its relocation.
    - A change in ridership generating pattern has occurred to warrant relocation or removal of a stop.
    - o GCRTA receives a request from an interested party, such as a rider or adjacent property owner who is negatively impacted by an existing stop location.

3. In the event that GCRTA must remove or relocate a bus stop, due to construction or out of request of the local jurisdiction, every effort shall be made to insure that the resulting distance between the two flanking stops is, or can made to be, less than 1000 feet.

## 4.6.2 Passenger Shelters

- A. General Policies
  - 1. The GCRTA will provide passenger shelters throughout the service area to protect waiting passengers from inclement weather conditions. Shelters may be installed outside the boundaries of Cuyahoga County provided that the site meets the criteria for the placement of a shelter. However, first priority will be given to sites within the County.
  - 2. The goal of the shelter program is to provide new glass shelters at all bus stops which meet the criteria set forth in this policy.
  - 3. Existing corrugated metal shelters will be left in place as long as they remain in serviceable condition. When these shelters are damaged or become badly deteriorated, they will be replaced with new glass shelters as long as the site meets established criteria for installation of a new shelter. If it does not, then it will be removed and not replaced.
  - 4. Shelters will be installed at bus stops where (1) the daily passenger volume is sufficient to justify the expense of buying, installing and maintaining the shelter and (2) the shelter can be installed without creating a safety hazard.
  - 5. The GCRTA will buy new shelters which are a mixture of sizes/types in order to be able to respond to different site circumstances and requirements. All GCRTA passenger shelters will be of a consistent design to minimize both initial and ongoing expense. The design will be durable, easy to maintain, and provide a safe and secure environment for the Authority's customers. Passenger shelters will be free of advertising but will contain schedule information on the routes serving the shelter.
  - 6. New passenger shelters will be bought on a regular basis to insure that requests for new shelter locations can be responded to in a reasonable period of time and that badly damaged shelters can be replaced expeditiously.
  - 7. All passenger shelters will be cleaned on a regular basis and repairs will be made as quickly as possible to insure customer satisfaction and community acceptance.

#### B. Program Guidelines

The program guidelines set forth herein will insure that passenger shelters are installed and/or replaced on an on-going basis in a consistent and uniform pattern.

1. Data Base

Staff will develop a complete data base and establish a stop file listing of every stop in the system and the location of each existing shelter, whether new glass or old corrugated metal style.

2. Site Selection

Potential shelter sites may come from a variety of sources including but not limited to:

- a. GCRTA's route facilities section
- b. Other RTA employees
- c. Members of the Board of Trustees
- d. RTA customers
- e. Local officials
- f. Community groups

#### 3. Site Evaluation

As they are received by the Service Planning Department, all potential sites will be evaluated to insure that they meet the established criteria. Passenger counts will be conducted. The Bus Transportation Department will inspect sites for operational considerations. The Construction Management & Engineering Department will conduct site surveys and produce drawings of viable sites. The Authority will obtain permits and easements as required.

#### 4. Shelter Acquisition

A new phase of the shelter program will occur every two years beginning in 1991. Each purchase will include a sufficient quantity of shelters to satisfy the requirements for shelters at approved sites. It is estimated that 120-140 new shelters every two years will meet this requirement. This will include new installations as well as replacement of metal shelters.

Shelters of varying sizes will be purchased to insure that shelter installations can be tailored to suit physical circumstances (i.e. sidewalk width, sight distances) and differing passenger volumes. The mix of shelter sizes will generally be as follows:

Large	0-5%
Medium	10-15%
Small/Extra Sm	all 85-90%

- 5. Criteria for shelter Placement
  - a. Factors in identifying possible shelter sites will include:
    - 1) Number of passenger boardings per 24-hour period.
      - Minimum 50 boardings per day for densely populated urban areas, older inner-ring suburbs.
      - o At least one shelter per route mile will be installed in less densely populated suburban areas regardless of passenger volume.
      - o The level of boarding activity will also determine the size of shelter to be used.
    - Concentrations of senior citizens and/or physically disabled patrons utilizing stop. Minimum passenger boardings per day will be relaxed for shelter locations near senior citizen apartment complexes, accessible apartment buildings, etc.
    - 3) Level of transfer activity between routes.
    - Proximity to major activity centers (medical facilities, retail shopping centers, apartment complexes, employment centers, and schools).
    - 5) Frequency of bus service at site.
    - 6) Proximity to an informal park-n-ride lot or a kiss-and-ride facility.
    - 7) Availability of alternate shelter at site, such as a building overhang or a storefront canopy.
    - 8) When a particular site does not meet the above criteria and an interested party would still like a GCRTA shelter installed, the Authority will entertain installation of a shelter when funding for the shelter and its installation and on-going maintenance is provided by the interested party or another outside source.
  - b. Factors used to determine feasibility of installing a shelter will include:
    - 1) Vehicle interface
      - o At farside stops, shelters will be located far enough from the intersection so that no part of the vehicle extends into the intersection.

- o The shelter should be positioned so that the front door of the bus can be positioned directly adjacent to the downstream doorway of the shelter to facilitate passenger movements.
- 2) Pedestrian access
  - o Shelters will be located between sidewalk and curb whenever possible.
  - Shelters will be placed on existing pavement; if not available or if unsuitable, such as in suburban areas where tree lawns exist, a minimum 3-foot wide paved access between sidewalk to shelter and from shelter to curb will be provided.
  - All new shelter installations are to be wheelchair accessible whenever possible.
- 3) Available space
  - Most desirable location is 3-5 feet from curb edge in treelawn area or between utility poles.
  - If shelter must be placed behind sidewalk, it will be located within public right-of-way whenever possible.
  - If part or all of shelter must be placed on private property, easements will be sought which will provide a minimum 3-foot access space around side, rear of shelter.
  - o So as not to constrict pedestrian movements along sidewalks, a minimum clear distance of five feet will be maintained for the sidewalk or pedestrian pathway.
  - No part of a shelter will be placed closer than three feet to an existing building.
  - o New shelters will be positioned in the best manner to minimize the effects of inclement weather conditions, unless there is an overriding physical constraint (i.e., insufficient space between a building and the shelter or minimum required clearances for wheelchair accessibility).

- 4) Lighting
  - o Shelters will not be provided with internal lighting.
  - Whenever possible shelters will be located to take maximum advantage of lighting from existing street lights.
- 5) GCRTA will comply with all necessary legal requirements, such as obtaining legal permits and licenses, adhering to building codes, and obtaining prior approval by necessary municipal agencies prior to installing a shelter.
- 6) As a minimum, GCRTA will provide the following at any shelter site:
  - o A concrete pad for the base of the shelter.
  - o A shelter.
  - o A walkway from the sidewalk to the shelter and from the shelter to the curb.

Any additional improvements beyond the above would require funding from another source, such as the municipality in which the shelter is being installed or from the adjacent property owner.

#### 4.6.3 Park-n-Ride Lots

#### A. General Policies

- 1. Park-n-ride lots should be located in heavily used travel corridors where residential densities do not permit an effective fixed-route collection system.
- 2. Park-n-ride lots should be considered for locations expected to be used by at least 50 people per day.
- Park-n-ride locations should recognize and take into consideration local zoning, adopted street plans, long-range community plans, future regional transportation plans, and anticipation growth areas.
- 4. Park-n-ride lots should be geographically distributed so that they do not compete with one another.
- B. Development Cost Considerations
  - GCRTA-owned park-n-ride lots should be located where land is inexpensive relative to the development costs. Site selection should give priority to the following land categories in this order:
    - a. Land currently in parking use
    - b. Publicly-owned, unused or underdeveloped land
    - c. Underdeveloped private land
    - d. Developed private land
  - 2. The Authority will pursue joint development projects with private-sector entities in order to offset the costs of park-n-ride development whenever possible.
  - 3. When land cannot be obtained for exclusive park-n-ride lots, GCRTA will attempt to lease parking spaces from the owners of existing lots.
- C. Site Criteria
  - 1. A park-n-ride lot should be immediately adjacent to at least one major line-haul route with frequent service to a major activity center.
  - 2. The land should be flat and reasonably well drained to minimize the cost of grading, drainage, and paving.
  - 3. The lot should be large enough for proper traffic circulation and pedestrian safety and convenience.

- D. Interface to highways
  - 1. There must be safe, convenient access for autos and buses between park-n-ride lots and major roads and highways.
  - 2. The park-n-ride facility should be clearly visible from major approach roads. To the extent possible, signage shall be provided to direct patrons to these facilities from freeways and major arterials.
- E. A long-term policy objective will be to establish a series of exclusive park-n-ride lots near freeway interchanges in the outer regions of the GCRTA service area with the goal of providing express bus service from these lots to the CBD, rail stations and/or other major activity centers.

# 5.0 SERVICE QUALITY CRITERIA AND GUIDELINES

# 5.1 General Considerations

- 5.1.1 This section of the service policy is intended to address characteristics of system services which may influence a customer's actual or potential use of GCRTA services. The criteria and guidelines associated with those characteristics are intended to establish a direction in which the system should be oriented and facilitate an assessment of how well the system is progressing in that direction. They will assist in identifying areas where remedial actions are needed to improve service quality to GCRTA customers.
- 5.1.2 The following service quality criteria and guidelines are intended to apply to transit services contracted in the future by GCRTA as well as to those directly operated by GCRTA. Failure to reasonably adhere to these criteria and guidelines will be considered grounds for contract termination and the contractor will be considered "non-responsible" for future contracts.

### 5.2 Schedule Adherence

- 5.2.1 A vehicle is considered "on time" when its arrival is from 0 to 5 minutes after the scheduled time. A vehicle is considered "late" when it arrives more than 5 minutes after the scheduled time. There will be no tolerance for vehicles arriving before the scheduled time, or "early."
- 5.2.2 The goals for the percentage of trips operating "on-time" (0-5 minutes late) during the service period indicated are as follows:

	Bus	Rail
(e	xcluding Paratrans	sit)
Weekday AM/PM Peak Period	: 90%	95%
Weekday Midday Period:	95%	98%
Weekday Night Period:	95%	98%
Saturday/Sunday Holiday:	95%	98%

5.2.3 Routes and/or individual trips identified as not meeting the above goals shall be subject to review, with remedial action (e.g., schedule and/or run modification if needed, improved on-street supervision etc.) taken at the earliest opportunity.

- 5.2.4 It is virtually impossible to achieve and maintain 100% on-time performance due to varying traffic, inclement weather conditions, and service scheduling limitations. However, annual objectives for improving systemwide "on-time" performance shall be established in accord with past system performance. The purpose here is to focus attention on continually improving on-time performance over time in an effort to achieve the schedule adherence goals established.
- 5.2.5 A sampling procedure will be established to select a statistically representative sample of RTA trips for schedule adherence monitoring.
- 5.2.6 While every effort will be made to operate on-time at all designated time points, greater emphasis will be given to ensuring timely operation under certain circumstances than others. The order of priority will be as follows:
  - a. Leave times from route terminals (both bus and rail)
  - b. Arrive and leave times at rapid transit stations (both bus and rail)
  - c. Arrive and leave times at bus loops where multiple routes terminate
  - d. Mid-route transfer points on cross-town bus lines with long headways
  - e. All other time points
- 5.3 Overcapacity Situations
  - 5.3.1 Vehicle overloads
    - A. Load factor is defined as the ratio of passengers on board a vehicle to the available seats. This is typically measured through traffic checks taken at the point on the route where the majority of trips are carrying their greatest load (maximum load point).
    - B. Average load factors are to be calculated for 30-minute intervals in peak time periods and 60-minute intervals for all other time periods.
    - C. Load factors which exceed the following thresholds constitute an overload:

	Local Bus Regular Express Bus	Freeway Flyer Bus Park-n-Ride Flyer Bus	Rail
Weekday Peak Hour		1.00	1.50
Weekday Peak Period		1.00	1.25
Weekday Midday, Evening:		1.00	1.00
Saturday, Sunday/Holiday		1.00	1.00

- D. Once identified, appropriate service adjustments should be made in order to alleviate the overload situation. Overload situations should receive priority treatment as follows:
  - 1. Peak-hour overloads
  - 2. Peak-period overloads before or after the peak-hour
  - 3. Overloads during all other periods
- E. Specific overload criteria and priorities do not apply when overload criteria are exceeded for five (5) minutes or less.
- F. When a route displays a consistent growth in ridership, the "target" load factors may be relaxed and extra service and capacity may be considered so as to encourage further growth in ridership.
- 5.3.2 System Parking Facility Overcapacity

Conditions at park-and-ride lots which are consistently at greater than 90% of vehicle capacity shall be cause for review and remedial action to minimize the potential for an overcapacity situation developing. Remedial action may include, but not be limited to: site expansion, acquisition of an additional interim park-and-ride lot, establishing and enforcing parking restrictions, the planning of a new or additional parking facility, increased feeder bus services, etc.

## 5.4 Revenue Vehicle Dependability

5.4.1 Vehicle Availability

The number of vehicles in the active fleet which are out of service at any time due to mechanical causes shall not exceed annually established percentage objectives according to fleet types. The goal is to minimize the number of vehicles out of service due to mechanical problems.

5.4.2 Vehicle reliability

The active fleet shall average an annually established number of miles between "service calls" and "road calls" according to fleet type. The goal is to continually increase the number of miles between service disruptions due to mechanical problems.

- 5.4.3 Pull-out ratio
  - A. The pull-out ratio is defined as the ratio of vehicles actually leaving the district divided by the number of vehicles scheduled to leave the district.
  - B. Annual objectives shall be set to improve system pull-out ratio performance over time. The goal is to achieve at least a 99.8% ratio (1 out of 500 pullouts missed).

- C. If a cancellation of one or more coach assignments appears unavoidable and a choice between assignments exists, priority shall be given to filling the following types of coach assignments in the order indicated:
  - trips that represent the last or the only transit service to or from a community or for a group of riders that day
  - trips where service is infrequent (30 minutes or more between trips)
  - 3. trips which minimize the number of people inconvenienced by a cancellation (when ridership information is available)
- 5.4.4 Replacement of Delayed Vehicles

Replacement vehicles may be provided for vehicles which have fallen 30 minutes or more behind schedule or have become disabled provided that appropriate vehicle types can operate at least 30 minutes ahead of the next schedule trip without becoming subject to the same delay while in service. Replacement vehicles may not be required if scheduled service can be essentially re-established by other scheduling or equipment utilization means.

- 5.4.5 Percentage of trips operated
  - A. Percentage of trips operated is defined as the ratio of trips actually operated divided by the scheduled number of trips.
  - B. Annual objectives shall be established to improve this performance over time. The goal is to achieve at least 99.5% of scheduled trips (1 out of 200 trips missed).

5.4.6 Lift Service Reliability

- A. Every effort shall be made to assign lift-equipped coaches with properly functioning equipment to designated lift-equipped trips.
- B. Every effort shall be made to reduce the annual rate of lift malfunctions (relative to total lift uses), which result in the inability to accommodate a prospective lift user, to a level below that of the preceding year.
- C. A lift malfunction rate which exceeds the average rate of the two preceding years shall be cause for review and remedial action as necessary.

D. In the event of a lift malfunction or a breakdown of a lift-equipped coach assigned to accessible service, every effort shall be made to minimize the time of operation in a non-accessible mode (subject to available coaches, operators, or schedule considerations).

## 5.5 Safety

5.5.1 Operational safety

- A. Route design
  - 1. All route changes or new service proposals shall be reviewed and field-inspected to identify and resolve any safety-related issues prior to implementation.
    - 2. The GCRTA will cooperate with local jurisdictions and/or private parties to reduce safety problems on routes where transit operations already exist or are desirable.
- B. Equipment
  - 1. All statutory requirements pertaining to vehicle safety shall be met.
  - Vehicle inspections shall be performed at specified mileage intervals in accord with annually established objectives by fleet type.
  - 3. Operator pre-operation checks of assigned vehicles shall be performed to determine the functional status of equipment and emergency devices affecting the safety of riders and the safe operation of the vehicle.
  - 4. Any vehicle that develops a mechanical problem with potential safety implications while in service shall, at the earliest opportunity, have a "service call" or a vehicle replacement effected before being allowed to continue in passenger service.
- C. Facilities
  - The placement and design of bus stops, shelters, park-n-ride lots and other transit facilities shall be made giving consideration to the safety of passengers, general traffic, pedestrian activity, the safe operation of coaches and the safety of employees.
  - 2. Any identified condition which exposes riders, employees, or the general public to a hazard within GCRTA's area of control/responsibility or ability to respond shall be cause for a response to correct or minimize the hazardous condition at the earliest opportunity.

- D. Vehicle operation
  - Operators shall abide by those operating rules, regulations and/or directives established by GCRTA affecting the safe operation of their equipment, and/or the safety of passengers, pedestrians, and other vehicles or property. Infractions shall be reviewed and appropriate action taken.
  - 2. All accidents involving a GCRTA vehicle or passenger shall be investigated for probable cause to identify trends, opportunities for prompt preventive action, and to aid in establishing future courses of accident prevention.
  - 3. Annual objectives shall be established so as to progressively reduce the number of "passenger related accidents" and "traffic collision" accidents per 100,000 miles of service.
- E. Security

To ensure the safety of RTA riders and employees, and to ensure the preservation of RTA property, the following guidelines and criteria shall be in effect:

- o All security incidents involving RTA riders, employees, or property shall be investigated for probable cause to identify trends, opportunities for prompt preventive action, and to aid in establishing a future course of preventive action.
- Annual objectives shall be established so as to progressively reduce the number of "security incidents" per 100,000 miles.

## 5.6 Cleanliness/Comfort

- 5.6.1 Vehicles
  - A. Annual objectives shall be established for interior/exterior cleaning of GCRTA vehicles and cleaning schedules will be in accord with these objectives.
  - B. Annual objectives shall be established for the maintenance of vehicle heating/air conditioning systems and maintenance schedules will be in accord with these objectives.
  - C. The interior/exterior appearance and climate control systems of contract paratransit vehicles shall be assessed, during periodic maintenance inspections.

#### 5.6.2 Customer Facilities

- A. The state of repair and cleanliness of all customer facilities associated with GCRTA transportation services shall be assessed periodically and maintained on a systematic basis in accordance with preventative maintance schedules established for bus stops, shelters, park-and-ride lots, and other transit facilities.
- B. Repairs to customer facilities shall be made in as timely a manner as possible; circumstances which pose a hazard to customers or the general public, however, shall be cause for resolution at the first available opportunity.

## 5.7 Information Availability

- 5.7.1 General Information
  - A. Information programs and procedures shall be in effect which promote and maintain continuous public awareness of the range of available GCRTA transportation services.
  - B. All informational materials concerning GCRTA transportation services shall be periodically assessed for accuracy, completeness, and understandability, and shall be modified as needed in as timely a manner as possible.
  - C. Where appropriate and feasible, information services and/or materials associated with a specific transportation service or program will include reference to other available GCRTA services suitable to individual transportation needs and how to obtain information about those other services.
  - D. Every effort shall be made to accommodate the information needs of all individuals, including those who may require special assistance due to language or physical limitations or disabilities.
- 5.7.2 Telephone Information Services
  - A. Telephone information services shall be available for transit services, either through information clerks or taped schedule information.
  - B. Annual objectives shall be established for the percent of "calls answered", for the average number of "calls handled per operator", and for the average time a customer waits before his/her call is answered. All these indicators are monitored through the telephone system.
- 5.7.3 Route Timetable Information
  - A. Timetables shall be updated and available to the public at least one week prior to schedule changes.

- B. The duration and frequency of "out-of-stock" occurrences shall be minimized throughout the timetable distribution network.
- 5.7.4 On-street Information Signage
  - A. All bus stops shall identify the routes serving that stop.
  - B. All user facilities shall be clearly marked so as to alert the public as to their presence and intended use (e.g., bus stop, park-and-ride, etc.). To the extent practical, information concerning additional RTA services shall be provided as appropriate to circumstances.
  - C. A long-term policy objective will to be provide schedule and service information at customer facilities. The order of priority for implementation will be as follows:
    - 1. rail stations
    - 2. transfer points
    - 3. bus passenger facilities (e.g., shelters)
    - 4. all other stops
- 5.7.5 Vehicle Information Signage
  - A. All GCRTA Revenue vehicles shall be clearly marked with the route number being served and with destination, routing. and service type information (e.g., express, shuttle, etc.) of benefit to passengers.
- 5.8 Accessibility to persons with disabilities
  - 5.8.1 All future bus purchases will be equipped with wheelchair lifts and securement systems designed to accommodate 90-95% of prospective disabled customers.
  - 5.8.2 An annual assessment of paratransit programs/subsidy levels will be undertaken to minimize duplication of services and ensure efficient allocation of resources.
  - 5.8.3 A final set of policy criteria and guidelines for full implementation of an accessible system will be developed with input received from the Citizen's Advisory Committee and advocacy groups representing persons with disabilities. Draft guidelines and criteria being proposed to ensure the progressive and efficient development of a system are as follows:
    - A. All statutory and GCRTA policy requirements pertaining to the accessibility of transit services to disabled persons shall be met or exceeded.

- B. Every reasonable effort shall be made to eliminate existing physical and psychological barriers which impede the use of GCRTA's regular transit services by disabled persons.
- C. All new GCRTA user facilities shall be purchased/designed to permit access by disabled persons.
- D. A program of special transportation services shall be maintained to supplement yet not duplicate GCRTA's regular transit services.
- E. All routes designated as "accessible" shall be provided a minimum frequency of hourly accessible service when the overall service frequency of a route permits.
- F. Routes not designated as "accessible" shall be prioritized for the receipt of accessible service according to the following criteria:
  - Activity Center Coverage (priority given to routes which serve a variety of high-density residential, employment, social/recreational, medical, retail, and/or educational centers)
  - Transfer Connections (priority given to routes which connect with other accessible routes)
  - o Service Frequency (high before low) .
  - Diverse Geographic Coverage (diversity before duplication)
  - o Eus Stop Accessibility (more accessible before less)
- G. Specific and general operating procedures and guidelines for transit operators concerning lift services shall be described in the <u>GCRTA Operator's Manual for Accessible</u> Service and updated as needed.
- H. Appropriate training programs shall be conducted to familiarize operators with new equipment and procedures.
- I. A public outreach program to educate consumers regarding the availability and use of accessible service shall be developed in cooperation with the accessibility subcommittee of the Citizens' Advisory Committee.

# 6.0 SERVICE UTILIZATION/PRODUCTIVITY/EFFICIENCY

## 6.1 Purpose

This portion of the service policy deals with the following issues:

- how efficiently service resources (vehicles and manpower) are utilized to produce transit service;
- o how closely the service supply is being matched to the service demand; and
- what percentage of the costs of operating transit services is being recovered through passenger fares and related revenues.

The objectives are to insure that:

- service resources are being used to produce the greatest amount of service possible;
- o service is allocated among various routes based on demonstrated demand and
- individual routes are maximizing their cost recovery from passenger fares.
- 6.2 Operational Efficiency
  - 6.2.1 The policy objective is to insure that service hours are utilized to the maximum extent possible in a revenue producing mode within the available service budget while complying with GCRTA/A.T.U. contract provisions and maintaining schedule reliability.
  - 6.2.2 The following non-revenue components of total service hours shall be reviewed four times a year with the goal of minimizing them as much as practical:
    - o Layover/recovery time
    - o Pull-out, pull-in, and deadhead time
  - 6.2.3 An annual objective for the system ratio of revenue service hours to total service hours shall be established.
  - 6.2.4 Driver assignments shall be examined four times a year so as to minimize as much as practical non-productive components of pay time, with the objective of reducing the ratio of total pay time to platform time. Specific non-productive components of pay time to be examined include:
    - o Scheduled overtime
    - o Paid time between pieces of work
    - o Spread premium
    - o Bonus time to make 6 or 8 hours

# 6.3 Service utilization/ route productivity

- 6.3.1 The policy objective is to insure that service levels are correlated to demonstrated passenger demands for each route or service. The intent is to provide a level of service which is attractive to the rider, yet not wasteful of service resources, as well as insure a minimum level of ridership on all routes.
- 6.3.2 Procedure for Annual Route Performance Evaluaton
  - A. Each GCRTA service which has been in service for one year will be assigned to a service category (based on primary market served) as follows:
    - o Radial Local Bus
    - o Express Bus
    - o Crosstown/Feeder Bus Local Bus
    - o Circulator Bus
    - o Rail
    - o Paratransit
  - B. Using ridership for the previous 12-month period (a chart listing 1989 averages follows the Glossary Section), the following ridership indicators will be calculated for each route/service for weekdays, Saturdays, and Sunday/Holidays.
    - o boarding per trip
    - o boarding per vehicle mile
    - o boarding per vehicle hour
  - C. For each of the previously-mentioned service groups (see 6.3.2 A.), a systemwide average will be calculated for the previous 12-month period.
  - D. Any individual route/service having any indicators falling below the systemwide average for its service group/day of week will be analyzed for possible cases of poor ridership. Recommendations will be developed for remedial actions to be taken as part of the next year's Service Management Plan.

E. The systemwide averages calculated for each service group/day of week become the system standards against which route-level productivity is to be measured on an on-going basis until the next Annual Performance Evaluation is performed.

Below are progressions of remedial actions which may be taken to correct substandard ridership

1. Bus

- a. Targeted route promotions to increase ridership.
- b. Realign the route in order to:
  - o Eliminate non-productive route segments
  - o Reduce overall route mileage and/or increase speed
- c. Realign to insure that major activity centers are served
- d. Coordinate schedules with shift times at major employment centers.
- e. Short turn trips, reducing frequency on outlying route segments where ridership is low.
- f. Increase headways and/or shorten service spans.
- g. Eliminate service.
- 2. Rail

Continued emphasis shall be given to improving rail service and increasing rail ridership. Possible strategies include:

- o Maintaining schedule reliability during construction
- o Improving weekday midday headways
- Instituting express service options from outlying stations to the CBD
- o Improving bus-rail schedule coordination to facilitate transfers between the two modes.

### 6.4 Financial Productivity

6.4.1 Purpose

In accordance with the Financial Policies of the Authority, the policy objective is to maximize the Operating Revenue/Operating Expense Ratio, with the minimum acceptable level being 25%.

- 6.4.2 Procedure for Bus, Rail and Paratransit Services
  - A. Concurrent with the Annual Route Performance Review, fullyallocated operating costs will be calculated for each GCRTA route/service.
  - B. Using revenue and ridership reports, annual operating revenue will be calculated for each route.
  - C. Those routes/services with an OR/OE ratio of less than 25% will be identified. Such routes/services lower the overall systemwide OR/OE ratio and will be subject to analysis for possible causes. Remedial actions will be recommended as part of the Service Management Plan to improve the financial productivities of these routes/services.
- 6.4.3 Special Service

Special services, such as Football Specials, HoopLoops, Home and Flower Show Shuttles, etc. should recover a minimum of 25% of their fully-allocated cost from passenger revenues and subsidies. Fare levels for special services should be set at such a level to insure this minimum OR/OE ratio.

6.4.3 Charter Service

UMTA regulations prohibit GCRTA from operating anything but "incidental" charter service. The Authority should recover 100% of the incremental operating costs of operating any charter service, and the charter service rates should be set at such a level to guarantee 100% cost recovery.

## 7.0 SERVICE MANAGEMENT

# 7.1 Objectives

- 7.1.1 This portion of the Service Policy deals with the procedures by which existing services are monitored, evaluated, and modified when necessary to improve their performance, as well as the process by which service improvements and new services are conceived, evaluated and implemented.
- 7.1.2 The provisions of this portion of the Service Policy are intended to insure that:
  - a. Existing service is periodically monitored and evaluated in order to determine compliance with those provisions of the Service Policy regarding service quality and service productivity.
  - b. Existing services are monitored, evaluated, and modified as needed in order to increase their market share.
  - c. New services are planned and implemented in order to service new transit markets and increase transit's overall market share.

# 7.2 Management of Existing Services

- 7.2.1 Ongoing Service Monitoring
  - a. Ridership monitoring and headway adjustment:

Maximum-load point checks will be periodically conducted on the bus and rail routes in order to determine peak vehicle loadings. These point checks will then be analyzed and the loadings compared to the appropriate loading standards. When vehicle overloads occur, headways will be adjusted to reduce overloads. In the case of extreme overloading in which headway adjustments alone are not sufficient to alleviate the vehicle overloads, additional equipment will be added and headways reduced in order to bring loading within the standards. In the case of peak vehicle loadings which are below the appropriate loading standard, headway increases and equipment reductions will be considered so long as they do not result in any of the following situations:

- o Vehicle loads in excess of the appropriate load standard for the time period under consideration
- A reduction of more than 25% of the daily service hours or miles for that route (the UMTA requirement for public hearings)
- o Headways in excess of the policy headways
- Headways which do not permit convenient transfer between bus and rail modes.

b. Route efficiency monitoring/route segment analysis:

Comprehensive on-board checks of service will be conducted on each route in order to measure passenger boardings/ alightings along a route as well as running times. The checks will be analyzed to determine boarding and alighting activity by stop and route segment. This analysis will be used to determine how much service should be provided along various segments of a route.

c. Routine Trip Management Actions

In order to improve the performance of substandard routes. trip management actions may be performed to make minor adjustments to the service supply so that it more closely matches demonstrated ridership demand. Trip management actions, which may be implemented as soon as possible are considered an internal GCRTA management function and include:

- o minor route realignments
- o headway adjustments
- 7.2.2 Annual Route Performance Evaluation
  - a. An Annual Route Performance Evaluation will be conducted (See 6.3). All RTA services will be categorized by service category and day of operation (weekday, Saturday, Sunday/Holiday).
  - b. Using passenger data from the registering fare boxes, three service productivity measures (passengers per vehicle mile, passengers per vehicle hour, and passengers per trip) will be calculated on an annual basis for each route for weekday, Saturday, and Sunday Service.
  - c. Those routes with productivity measures falling below the system average for their service group/day of week will be targeted for examination of the probable causes of their poor performance, and a course of remedial action will be developed.
  - d. RTA services which are identified as not meeting performance criteria shall be prioritized for analysis and remedial action as follows:
    - a. 1st Priority: Substandard the previous year/has shown no improvement, or is in a worsened condition.

    - b. 2nd Priority: First-time deficiencyc. 3rd Priority: Substandard the previous year, still substandard but improved performance
    - d. 4th Priority: After those routes which are substandard have been dealt with, those routes which are not substandard but which have opportunities for improvement.

# 7.3 Evaluation of proposals and development of service plans

# 7.3.1 Sources for service proposals will include:

- A. Suggestions and/or recommendations from the following sources:
  - o GCRTA patrons
  - o GCRTA employees
  - o Civic leaders, elected officials
  - Studies carried out by GCRTA through consultant services and by outside agencies
- B. The Five-Year Transit Development Plan

This plan, developed to carry out the broader goals of the Long-Range Plan, specifies annual service management goals over a five-year period. These goals are basically expansionary (proposing new services) in nature. These annual goals do not specify the exact means by which a service change is to be implemented. The service proposals provide detailed plans of how the annual service objectives are to be achieved.

C. The Annual Route Performance Evaluation

This evaluation, described in Section 6.3 will be carried out early in the preliminary planning process, using ridership data from the previous year. Those lines which are identified as substandard in their ridership performance will be prioritized for analysis and remedial action based on their performance in the previous evaluation. Service proposals will be developed for these routes with the intent of improving their performance.

- 7.3.2 In addition to the above sources, the Service Planning Department will develop an inventory of community transportation profiles, each of which would be updated at least every five years. These community profiles would include demographic data, an inventory of major trip generators and an inventory of existing transportation services available in that community.
- 7.3.3 Developing a service plan
  - A. To correct service quality problems such as overloads and substandard schedule adherence, the service plan will propose "fine-tuning" the service through headway adjustments, running time adjustments, etc.

- B. Developing service plans for new service or to improve route productivity.
  - 1. Variables to consider:
    - Origin/destination patterns. For example, a large number of work trips made between a suburban community and CBD employment centers would indicate a need for a peak-hour express service (preferably via freeways if possible) between that community and the CBD.
    - o Density of people in collection/distribution areas.

For example, continous high levels of travel activity at various locations along a major arterial road would suggest a fixed-route bus line along that arterial. Sporadic, dispersed trips covering a wide geographic area may require a demand-response system.

- o Trip purpose. For example, a major office park may be served by express bus service in the peak periods in order to serve commuters making work trips. During the noon peak period, the same office park is served by a circulator van which shuttles people to a nearby area of retail stores and restaurants.
- o Availability of other transit modes. For examples, one suburban community, not near any rail station is served by an express bus line in the peak periods to satisfy CBD-based work trips. Another community on the other side of town, adjacent to a rapid transit station, is served during the peak periods by a feeder bus line which collects people in that community and takes them to the rail station, where they transfer to the rapid transit for the trip to the CBD.
- 2. Potential service applications based on an analysis of the above variables includes:
  - a. Local fixed-route service is the appropriate service application when there a high level of travel activity to/from multiple activity centers in a corridor.
  - b. Express fixed-route service is the appropriate service application when there is a high level of travel activity between the inner and outer ends of a corridor with little activity in between. This application is suitable for serving peak-period work trips that are focused on high-density employment centers such as the CBD. A variation of express service, exclusive park-n-ride express service, is suitable when near capacity vehicle loadings can be achieved in outlying suburban areas

for CBD based work trips, but residential densities or street configurations in the suburban area prevent any effective fixed route collection system.

- c. Demand-response service is an approprate service application when the service request involves serving spatially dispersed origins and destinations in low density areas which do not conform to any one corridor, and when the amount of travel activity and origin-destination patterns vary daily.
- d. Circulator bus service is suitable in areas which have:
  - o high employment and diversified activities
    within a well-defined area or
  - high residential density with poor access to fixed-route service and/or diversified activity centers.
- C. Comparative Review of Service Change Proposals
  - 1. On an annual basis, a comperative review of all service changes proposls will be performed. The purpose of this review is to select those proposals which will be recommended for incorporation into the Service Management Plan for implementation the following year.
  - 2. The comparative review will be driven primarily by budget considerations. For each service proposal, the cost of service must be calculated.
  - 3. When a net increase in annual budget is projected, service proposals will take the following order of priority:
    - a. Relief of existing overload situations
    - b. New service to unserved markets
    - c. Service modifications
  - 4. When a net budget decrease is required, service proposals will be prioritized as follows:
    - a. Proposals that do not adversely impact riders
    - b. Proposals impacting routes where service is duplicated to some degree
    - c. Proposals that impact areas where users have transportation alternatives

#### 7.4 Public Hearing Requirements

According to the Urban Mass Transportation Act of 1964, as amended, agencies such as GCRTA which receive Federal financial assistance may not change any fare or substantially change any service without first soliciting and considering public comment on proposed changes. UMTA requires that an agency develop its own local process for such solicitation and evaluation of public comments. GCRTA will conduct public hearings whenever the following changes are being considered for implementation:

- o a permanent change in any fare or price charged for a regular service
- o a realignment or reduction of 25% or more of the number of route miles of a route (i.e., 25% or more of the existing street miles covered by the route are either rerouted or eliminated)
- o a change of 25% or more of the service miles or service hours for a route for a given day of the week
- o a new route or service is established
- o in an emergency situation, any of the above service changes may be implemented without holding a public hearing. If the emergency service change meets the criteria for required public hearings and will be implemented for more than 180 days, then GCRTA will hold a public hearing to discuss the emergency changes.
- 7.5 Privatization of new/restructured routes, services, subsystems
  - 7.5.1 The Urban Mass Transportation Administration requires that recipients of federal funds must develop a process for the consideration of private enterprise in its programs.
  - 7.5.2 GCRTA has a privatization procedure to comply with the UMTA requirements. The salient features of this procedure are as follows:
    - A. Private operators are provided with an opportunity to comment on both the TIP and annual grant applications, after each has been reviewed and endorsed by the Board of Trustees.
    - B. On a triennial basis, GCRTA will perform a comprehensive examination of all routes and services (including identification of which services can be more costeffectively provided on a subscription basis or by another operator) using a fully-allocated cost formula to evaluate all routes and services for cost-effectiveness.

- C. "New" and "restructured" services plus "subsystems" are defined as follows:
  - "New" routes, services and subsystems are exactly that ones not currently provided by GCRTA.
  - o "Restructured" routes, services, and subsystems are those in which a change in route, frequency, span of service or other variable exceeds a given threshold, where change is measured by the change in vehicle miles or vehicle hours for the day of operation affected by the change. This variable threshold varies according to the frequency of the existing service. This threshold is needed due to the routine nature of many changes and the expense associated with preparing and administering a competitive tender.
  - "Subsystems" are defined as a legitimate differentiation of a particular portion of an operator's system on the basis of geographic concentration or type of service (e.g. out-of-county services, paratransit service).
- D. GCRTA has a fully-allocated cost formula for the calculation of the operating cost of a route/service. GCRTA will maintain the costing formula, and periodically update all input data so as to be able to compare its costs with those proposed by another operator through a public, competitive tender.
- E. Complaints about the public, competitive tender process are resolved through one of two methods:
  - Complaints based on procurement issues (including maintenance, marketing and management) will be resolved under existing state and federal procurement rules (Section 306 et seq of the Ohio Revised Code and OBM C4220.1A, respectively).
  - o Complaints based on competition issues (including service, operations, valuation criteria) will be filed with the GCRTA Legal Department. If disatisfied with the GCRTA's response, the complainant may appeal to an Appeals Committee composed of one person representing the complainant, GCRTA, and NOACA, the Metropolitan Planning Organization.
- 7.6 Trial periods of operation for new routes or major modifications to existing routes
  - 7.6.1 New routes or major modifications to existing service shall operate substantially as implemented for six months (two schedule changes), at which time they are to be evaluated for ridership productivity. (Passengers per vehicle mile, passengers per vehicle hour, passengers per trip)
  - 7.6.2 At this time, the following types of service adjustments can be made based upon ridership performance to date:

- Frequency changes warranted by load factors or customer comments
- Minor service reductions (less than 25% of service miles or service hours)
- o Minor route extensions or reroutes with the potential to improve overall ridership productivity for the route
- 7.6.3 If route performance is below the system average for its service group/day of week at the end of six months, then the route shall be targeted for special promotion.
- 7.6.4 After one year the route will become part of the annual route ridership performance review.

#### 8.0 SERVICE DEVELOPMENT/APPROVAL/IMPLEMENTATION PROCESS

## 8.1 Overview and Objectives

This chapter of the Service Policy describes the sequence of events in the Service Development Process. This process is integrally linked to the Authority's budgetary process. The Authority's estimated revenues will affect the service proposals which will be considered; conversely, service opportunities will determine budget requests. As a result, a major portion of the year's activities are in the development of the Service Management Plan, which will be a program element in the development of the annual budget.

In addition to describing the production of the Service Management Plan, this chapter establishes several internal support structures for the service management process; it also describes the interdepartmental cooperation which should occur during this process.

#### 8.2 Service Management Milestones

- A. Preliminary Planning (January March)
  - 1. Each January, a three-month preliminary service planning period will commence. During this period, initial service proposals will be developed for the following year by the Service Planning Department.
  - 2. Service Review Committee Recommendations

An internal Service Review Committee will be established, consisting of the following directors or their assignees:

- o Director of Service Planning (Chair)
- o Director of Marketing
- o Director of Communications
- o Director of Telecommunications
- o Director of Bus Transportation
- o Director of Rail Transportation
- o Director of Bus Equipment
- o Director of Schedules
- a. This Committee will have two objectives: (1) to monitor service quality performance and to identify specific problem areas requiring attention, and (2) to coordinate service planning efforts with operational requirements and constraints.

- b. The Service Review Committee will review customer complaints and suggestions, as well as suggestions generated by GCRTA employees. It will then recommend actions to improve overall service quality performance. These recommendations may deal with but are not limited to the following issues:
  - o Schedule Adherence
  - o Vehicle Overloads
  - o Vehicle Dependability
  - o Safety
  - o Route/Scheduling/Service Information
- 3. By the end of the 3-month preliminary planning period, detailed service proposals will be developed which include the following information:
  - o The objective of the service proposal
  - o A description of the proposed change including the geographical area impacted.
  - o Impacts on service delivery variables (peak vehicles, vehicle hours, vehicle miles, manpower requirements)
  - o Detailed route description and map
  - o Proposed service levels (type of service, service span headways)
  - o Estimate of ridership, impact of service change (+/-)
  - o Annual cost estimate
  - o Impacts on route facilities
  - Necessary changes for vehicle signage, both electronic and roller.
- B. Identifying "Major" Service Proposals Which Are Likely Candidates for Privatization (March)

As the initial service proposals are developed, it will become apparent that certain "major" service changes (a new or restructured route, service, or subsystem as defined in the Draft Privatization Statement) would be more appropriate for operation by a private operator. The reasons for this may be GCRTA does not currently have the appropriate equipment (small buses or vans) needed to operate a proposed service, the cost for a private operator to provide a service would be substantially less than for GCRTA to directly operate the service, etc.

Those proposals which will likely be operated by a private operator will be identified by the end of the 3-month preliminary planning period so that they can be incorporated into the annual Transit Improvement Plan (TIP) for circulation to private operators for their comments.

C. Internal Review of Service Proposals (April)

Service proposals will be circulated internally within GCRTA to ascertain if any special problems or concerns exist. For example, a proposal for the extension of a route into a residential area would be sent to Traffic for comments on the operational feasibility of the proposed routing. Proposals will be modified as necessary based on the comments received from other departments.

D. Presentation of Service Proposals to Municipal Governments, Community and Civic Organizations and the Citizen's Advisory Committee (May-June)

At the beginning of May, the Operations Committee of the Board of Trustees will be briefed on the service proposals. The detailed service proposals will then be distributed for comments to municipal governments, and civic and community groups in those municipalities impacted by each service proposal. A formal presentation to the Citizen's Advisory Committee will also be made in May. Public responses will be requested by mid-Juna. When requested, RTA staff will attend public meetings to further explain the service proposals. Further revisions to the service proposals will be made, if necessary.

E. Public Hearings for Those Service Changes Meeting the Requirements for Public Hearings (July-August)

In July, those service proposals which meet requirements for public hearings will be identified (see 7.4 for the thresholds for required public hearings). At least 30 days prior to the required public hearing, a notice will be published in local newspapers (and in informational flyers) listing the major service proposals, the date/time/location of the public hearing, and alternative ways of providing comment.

The public hearing is to be held in mid-August. Following the hearing, all citizen input received from the hearing and/or alternative methods of public comment will be reviewed by staff in preparing final revisions of the various service proposals.

F. Board of Trustees Approval of Major Service Proposals (September)

At the September Board of Trustees meeting, resolutions will be presented which contain the final versions of the major service proposals as well as an estimate of the budget impact. The Board may choose to approve all or part of the major service change proposals.

G. Final Service Management Plan (October)

Following the August Board of Trustee meeting, those major service proposals which are approved together with "minor" service proposals, are combined to produce the next year's Service Management Plan. This finalized Service Management Plan should contain the budgetary impacts of all the proposed service changes so that these can be incorporated into the next year's fiscal Budget.

H. Preparation of Invitations for Bids for Privatized Services Starting in March (October)

Starting in October, Invitations for Bids will be developed for those new or highly restructured services which will be offered to private contractors for bid. (For subsequent service changes, this work should begin at least 6 months prior to implementation.)

I. Preliminary Scheduling Work for Spring Service Change (December)

Work on new service headways, and vehicle requirements for Spring of the following year will begin. The Service Review Committee will review these tentative schedules to insure that they present no operational problems.

J. Board of Trustees Approval of Budget for Coming Fiscal Year (December)

At the December meeting of the Committee of the Whole, the proposed budget for the coming year is approved. Based on the final budget, it may become necessary to modify or delete certain elements of the Service Management Plan.

K. Public Information Preparation

Using schedule data updated passenger information materials such as timetables and on-street bus stop schedule information will be developed.

L. Vehicle Operator Assignments (Runcutting)

By provisions of the GCRTA/ATU Labor Agreement, RTA transit operators select their work assignments four times a year. Schedule changes are typically coordinated with this selection of assignments. To achieve this, the service schedules are divided into driver assignments by operating district and by day-of-week. This complex process called "runcutting" takes into consideration vehicle running time, driver relief point times, layover and deadhead time, all of which must be in accord with the Conditions of Employment. If necessary, operator assignments may be changed when additional efficiencies are identified. The runcutting process is very important in that the efficiencies achieved directly impact the cost of providing services. Driver requirements by district are also determined at this point.

M. Bus/Rail Operator Assignment Selection

Approximately two (2) weeks before the changes in service begin, all operators select their new work assignments. Called the "Pick", full-time operators select on the basis of seniority.

N. Bus/Rail Operator Training

Once operators have selected their new assignments, the Training Services Department insures that operators are instructed concerning new routes and or service modifications.

0. Field Preparations

At a point beginning several months in advance of the start of a new service change, GCRTA personnel begin coordinating to ensure that bus stops are properly located and marked, and that shelters, signs, etc. are in place.

P. Public Notification/Timetable Distribution

At least one month prior to the start of a service change, the public is notified of all service changes through on-vehicle informational "Rider Alerts" and media announcements. New timetables are made available through normal distribution outlets and on transit coaches at least one week prior to their effective date.

Q. Other Preparations

To ensure that new services operate as well as possible, many other activities occur which are too numerous to mention in any detail. However, a few include the training of telephone information clerks to ensure that the public will know how to use the new or existing services, and the preparation of Radio control Supervisors, and Transportation Supervisors to handle vehicle operator questions or operational problems.

R. Implementation

With all preparations made, the new service change begins on Sunday at the beginning of a pay period. All personnel are alerted to any problems which may develop during the early stages of each service change and take the necessary actions to resolve them.

## 9.0 REVISIONS AND AMENDMENTS

- 9.1 The service policies delineated herein shall be subject to review and revision by the Board of Trustees on an as-needed basis.
- 9.2 Amendments or revisions to these service policies can be initiated or proposed by any member of the Board of Trustees or by the General Manager of the Authority.
- 9.3 Proposed amendments or revisions to these service policies shall be subject to review and study by the Operations Committee of the Board of Trustees. The Operations Committee will make recommendations on any proposed amendment or revision to the Board of Trustees. The Board of Trustees must approve any amendment or revision by majority vote, as defined in the By-Laws before said amendment or revision will become official policy of the Authority.

# 10.0 GLOSSARY

- accessible bus: a standard, line-haul bus equipped with a wheelchair lift and securement system
- alignment: the streets, highways, and reserved rights-of-way that a vehicle route follows

bonus to make 6 or 8 hours: bonus time paid to an operator work assignment to raise the pay time to 8 hours for regular runs and to 6 hours for trippers

- Central Business District (CBD): the downtown retail trade area of a city or an area of very high land valuation, or traffic flow, and concentration of retail business offices, theatres, hotels, and service
- charter service: public transportation service on an exclusive basis, rendered in a vehicle which is licensed to render that service and engaged at a single price for the trip or period of time agreed on by the operating licensee, its agent, or the chauffeur and the charter
- clockface headway: headways in which the intervals between vehicles are easily remembered increments correspondings to the divisions on a clockface, i.e., 5,10,15,30,60 minutes
- commuter rail: a passenger railroad operation that carries passengers within urban areas but that differs from rail rapid transit in that the passenger cars are heavier, the average trip lengths are longer.
- crosstown route: a bus route which does not terminate in the CBD and which links several radial routes
- **deadhead:** to move a revenue vehicle without passengers on board to and from a garage or from the end of one revenue trip to the beginning of another
- **fixed route:** a bus route which is scheduled to always to operate over the same alignment
- headway: the time interval between the front ends of vehicles moving along the same lane or track in the same direction
- heavy rail rapid transit: a transit system that uses high-speed passenger cars operating singly or in trains on fixed rails in exclusive right-of-way in underground tunnels, on elevated structures, in open cuts, or at surface level with very few if any grade crossings (at which rail traffic has the right-of-way) and that generally serves one contiguous urban area

high-occupancy vehicle lanes: an exclusive roadway or lane designed specifically for buses, vans, and carpools

- **kiss-n-ride:** the procedures whereby a transit or commuter passenger is driven to his or her first transit terminal point in a private vehicle by another person who then drives the vehicle from the terminal to another destination
- layover/recovery time: the time allowed at a stop between arrival and departure for the purpose of turning vehicles, recovery of delays and preparing for the return trip
- light rail: an urban transportation system that uses electrically powered rail cars operating singly or in short trains on fixed duo-rail guideways; may be grade-separated and loads passenger from low height platforms
- line-haul bus: bus service which is designed to provide travel between various origins and destinations along a travel corridor.
- maximum load point: the location along a transit line where the greatest vehicle load factors occur.
- mode: a classification of transit service defined by the kind of right-of way it operates on, the technology used to operate it, and the type of service operated
- overtime: straight time hours of work in excess of 40 hours for a 5-day work week. Straight time includes platform time, pull-out time. time between pieces, travel time.
- paid time between pieces: any interval of less than 60 minutes between scheduled pieces of work
- paratransit: forms of public transportation services that are more flexible and personalized than conventional fixed-route, fixed-scheduled service but not including exclusory services such as charter bus and exclusive-ride taxi; vehicles are usually available to the public on demand by subscription or on a shared ride basis
- park-n-ride: a procedure that permits a patron to drive a private automobile to a transit station, park in the area provided for that purpose and ride the transit system to his or her destination
- pay time: the number of hours that are paid for a vehicle operator's work assignment
- peak-period: the hours, generally 6-9 a.m. and 3-6 p.m. during which the demand for transportation is greatest

- point check: a record of actual time and passenger travel on all trips
  that pass a specific location
- privatization: the process by which private enterprises are given the opportunity to competitively bid to provide services to a public agency; these services may formerly have been performed in-house or they may be totally new.
- pull-off time: The scheduled time required for a vehicle to travel from the end terminal of its last revenue trip back to its garage or yard
- pull-on time: the scheduled time required for a vehicle to travel from its
   garage or yard to the origin of its first scheduled revenue
   trip
- radial route: a fixed bus route which extends outward from the CBD or a concentrated activity center along a main arterial road
- riding check: a record, taken by an on-board monitor, of the number and location of passengers boarding and alighting from a vehicle; running time and traffic conditions may also be monitored
- road call: a mechanical vehicle failure which requires a vehicle
   replacement to continue service
- route deviation: a scheduled exception to the normal fixed-route of a bus line in order to serve a specific activity center
- schedule adherence: a measurement of the degree to which actual vehicle operations correspond to the published schedules
- security incident: any response by Transit Police to any call received concerning an occurrence regardless of contact with either the victim or perpetrator
- service call: a non-mechanical vehicle failure which requires the services
  of road supervisor, a zone person, or the mobile repair
  unit, after which the vehicle continues in service
- spread premium: a bonus paid to operators when the time elapsed between
  the start of their work day and the end of their work day
  (the "spread") exceeds a standard number of hours defined
  in the GCRTA/ATU labor agreement
- timetables: printed bus and rail schedules for public use which include a route map and trip times
- total service time: the time elapsed between the time a vehicle departs the garage or yard to go into service and the time it returns; also called platform time

# GREATER CLEVELAND REGIONAL TRANSIT AUTHORITY SERVICE PRODUCTIVITY INDICATORS (Based on 1989 Ridership & Service Data)

MODE	PASSENGER PER TRIP	PASSENGER PER VEHICLE HOUR	PASSENGER PER VEHICLE MILE	
BUS	26	32	2.4	
RED LINE	34	46	2.0	
<b>BLUE/GREEN LINE</b>	26	50	3.0	
PARATRANSIT	N/A	4	0.3	

CHART A

Ъ