A white Gold Coast Transit bus is shown in motion, slightly blurred, with the number 3506 on its side. The bus has 'Gold Coast TRANSIT' written on its side in yellow and blue. The background shows trees and a clear sky.

## **Fixed-Route Service Planning Guidelines & Evaluation Policy**

Adopted by  
Gold Coast Transit  
Board of Directors  
February 5, 2014

REVISED WITH UPDATED GRAPHICS & FORMATTING

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## 1. INTRODUCTION & PURPOSE

The mission of the Gold Coast Transit (GCT) District is to provide safe, responsive, convenient, efficient, and environmentally responsible public transportation that serves the diverse needs of our community.

GCT continually receives requests for changes to existing service and for new service in growing areas of the District. With increasing demand for transit services, it is necessary to optimize the use of the District's resources.

Accordingly, this Policy is established for service planning and service evaluation and provides the Board of Directors with information needed to establish priorities in the allocation of District resources.

**The purpose of this document is to establish Guidelines for service planning and service evaluation of proposed and existing transit services, and provides a way to ensure they are evaluated for effectiveness on a regular basis.**

## 2. OVERVIEW OF SERVICE PLANNING CYCLE

The following outlines the typical steps undertaken during the service planning cycle.

### Step 1: Define Study Area & Collect Data

- Apply planning & scheduling guidelines
- Collect Qualitative Input
  - ✓ Public Feedback
  - ✓ Employees Ideas
  - ✓ Member Cities & County of Ventura
  - ✓ Ventura County Transportation Commission (VCTC)
  - ✓ Other agencies (e.g., Schools, SBMTD, METRO, other cities)
- Collect Quantitative Data
  - ✓ Ridership performance data
  - ✓ On-Time Performance
  - ✓ Origin & Destination Surveys
  - ✓ Demographic analysis

### Step 2: Apply Evaluation Criteria

- ✓ Ridership standard (Passengers per hour)
- ✓ Economic standard (Subsidy per passenger)

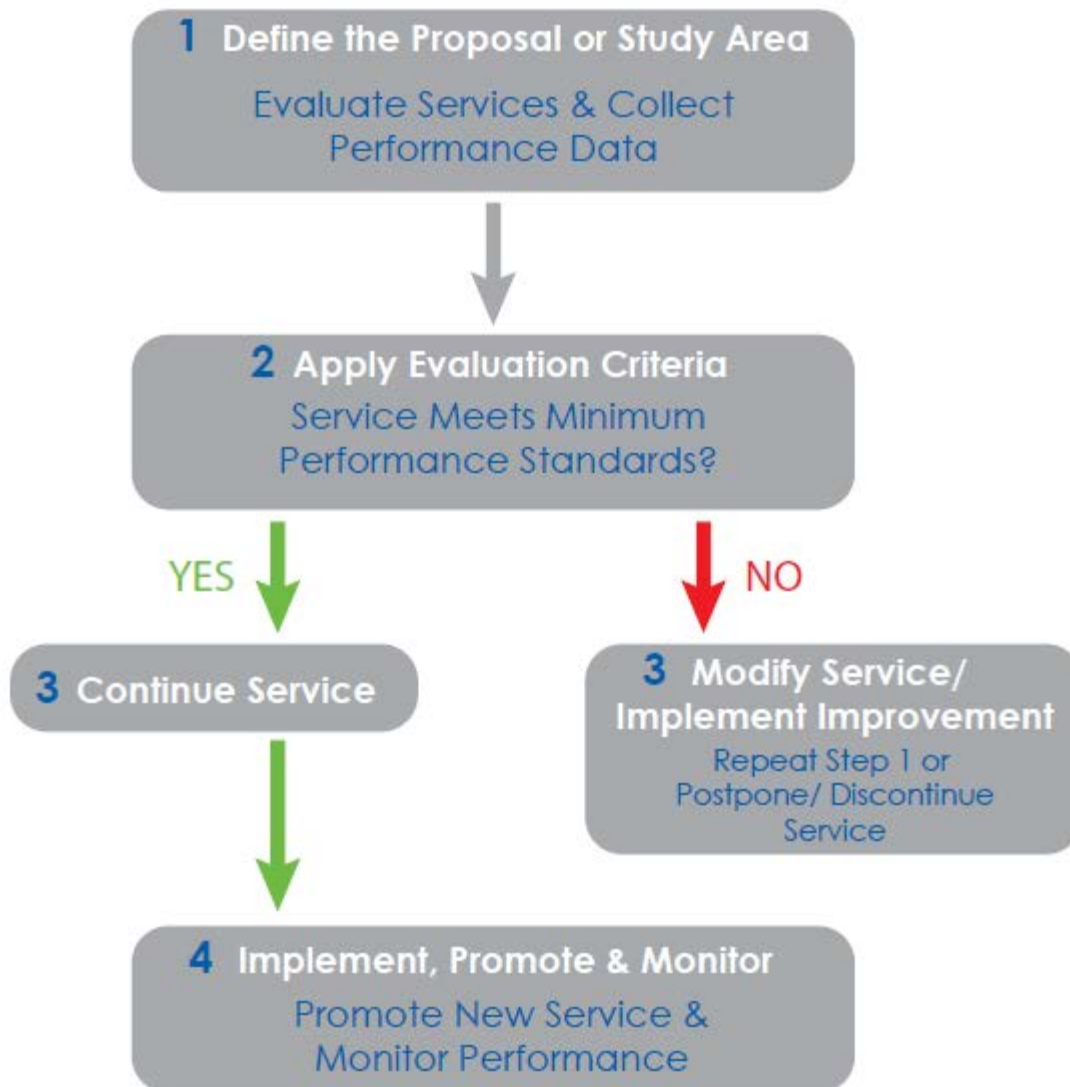
### Step 3: Make Recommendation

- TAC considers staff recommendations:
  - ✓ If minimum standards are met, consider maintaining or implementing
  - ✓ If minimum standards are not met, consider service modification and/or additional promotion and repeat Step 1.
  - ✓ If standards still not met, consider discontinuing service.
- TAC & staff make recommendation to BOD (budget permitting)

#### Step 4: Implement, Promote & Monitor

- If approved, implement new schedules or services
- Develop and implement service promotion plan for new or modified services
- Monitor service to ensure service makes progress toward performance targets

## FIXED-ROUTE SERVICE PLANNING CYCLE



### 3. PLANNING POLICY GUIDELINES

The following guidelines will be used by the Planning Department when developing plans for new service and restructuring existing service.

#### 3.1. SYSTEM DESIGN

##### Route Structure

The system shall be designed to be as direct as possible and to provide maximum accessibility to transit. One-way loops are not considered desirable except to facilitate bus turnaround at terminal points when there is no practicable alternative. The highest priority for deployment of resources will be those routes or markets exhibiting the highest transit demand. All routes should be planned to operate bi-directional where feasible.

##### New Development Review

Shifts in population as a result of new residential developments and/or new commercial business parks are considered when developing route plans. Planning staff will work with City and County planning and public works staff to address potential transit needs, review plans and provide feedback early in the development process.

##### Bus Stop Placement

It is GCT's policy to encourage counties, cities, and developers to coordinate with the District on the location of bus stops. Although GCT's does not own the bus stops, we will provide recommendation on the feasibility and placement of stops. Refer to GCT's Bus Stop Guidelines for specific bus stop guidance.

#### 3.2. QUALITATIVE INPUT

##### Public and Employee Input

Members of the public and GCT employees can be valuable sources of information in planning quality bus service. In order to incorporate inputs from these sources, proposed service changes will be communicated far enough in advance of implementation so that input can be evaluated effectively. This input process will also be applied to any potential fare policy changes.

GCT's **public input** process includes some or all of the following elements: utilizing Transit Guides stationed at major stops, hosting Public Meetings, attending Community Events and Meetings, Website notices, Radio and Print Ads, and Social Media postings.

GCT's **employee input** process includes some or all of the following elements: input from Monthly Safety Meetings, Employee Newsletters, Ride Checks, and Coffee with the GM sessions.

In addition planning staff works with the "Planning and Scheduling Advisory Committee" to get feedback on service plans. The committee is comprised of a mix of senior and newer drivers who are invited to collaborate with planning staff on a regular basis.

Planning staff will evaluate public and employee input for possible inclusion in future service changes. Following the input process and completion of service change planning, GCT shall attempt to contact the participants where practicable to thank them for their input and impart final results of the plan. Concurrently, GCT will begin implementing the approved promotion plan for the service changes (refer to Service Promotion Policy).

### Member Cities and Other Agencies Input

Planning Staff will work with the Technical Advisory Committee (TAC), VCTC, member cities staff, and other community agencies to gain public input from all communities in the service area. Input from each member city and relevant departments will be taken into consideration.

### 3.3. QUANTITATIVE DATA COLLECTION

Quantitative ridership and performance data will be collected on a regular basis using a combination of manual and onboard transit technology systems. The systems used to collect data are listed below.

TYPE OF DATA COLLECTED	SYSTEM USED
On-Time Performance & Vehicle Location	NextBus management system
Passenger Counts & Fare Collected by Route	Farebox Management Software
Passenger Counts by stop <i>Note: APC data is currently managed by VCTC as part of their Smartcard system.</i>	Automatic Passenger Counters (APCs)
Travel Time & Time Demand	Next Bus & Manual ride checks
Scheduling & Bus Stop Coordinates	INIT Mobile-PLAN
Service Miles	Google Earth
Population Demographics	GIS Arc Map & Census data
Origin & Destination data	Manual surveyors
Passenger Surveys	Manual surveyors

## 4. SCHEDULING GUIDELINES

The following guidelines will be used by the Planning Department when developing schedules for new service and restructuring existing service.

### 4.1. SERVICE TYPES

The following classifications are used to describe routes based on the route's characteristics:

- **Trunk** routes will operate via major arterial roads and will connect two or more major development and employment centers.
- **Local** routes will connect densely populated residential areas to major development and employment centers. Local routes will operator on a mix of arterial and feeder streets.
- **Express / Limited** routes will be designed to connect major activity centers and shall be routed via local freeways and arterial streets with limited stops.

### 4.2. MINIMUM SERVICE FREQUENCY

Headways (frequency of trips) will be based on passenger demand and budgetary considerations. New routes will provide the minimum frequencies specified below. The following table indicates the minimum frequency guideline for types of service and time of day.

MINIMUM SERVICE FREQUENCY TARGETS		
<u>Service Type</u>	<u>Mon-Fri / Peak</u>	<u>Weekends / Off-Peak</u>
Trunk Route	20 minutes	30 minutes
Local Route	30 minutes	45 minutes
Neighborhood Connector	30 minutes	60 minutes
<i>Express / Limited*</i>	<i>3 peak period trips</i>	<i>*Not provided at this time.</i>

- Existing services that cannot meet these minimum guidelines while adhering to the minimum productivity guidelines may be identified as candidates for service changes or appropriate marketing promotion within available resources.
- Elimination of the route may be considered if service changes and/or promotional efforts do not improve productivity.

### 4.3. SCHEDULING GUIDELINES

#### Maximum Passenger Loads

For reasons of safety and passenger comfort, peak loads shall not exceed GCT's maximum load factor 1.5; which means for a bus with forty seats there may be up to twenty standees for a total of sixty passengers on the bus; i.e. a load factor of 1.0 means that every seat is full and nobody is standing at the busiest point in the route.

### Booster Service

Booster service will be established along fixed-route bus routes to supplement scheduled service and prevent overcrowding of regularly scheduled service. Booster buses may be deployed during school dismissal times, during special events, or when passengers are refused due to heavy loads.

### Layovers

Driver layovers and recovery time will be scheduled to ensure schedule reliability. When practicable, layovers will be established concurrent with recovery time at the endpoints of a route or at major nodes where connection time is established. Recovery time is built into a schedule to protect schedule reliability; minor additional time is inserted to allow a driver to catch up when the bus has fallen behind schedule.

### Holiday Service

Holiday service may be either Saturday or Sunday service, depending on the degree of closures of businesses. Information regarding holiday closures shall be obtained from major employers and businesses located within the GCT service area. Holiday levels of service may also be determined based on ridership history.

### Major Traffic Generators

The starting and ending times of major employers, universities, hospitals and schools will be considered in developing individual route schedules.

### Transfers

If transfers constitute more than 30% percent or more of the ridership on a line, staff will evaluate opportunities for direct service. Where feasible, timed transfer connections will be focused on designated transit centers such as Ventura Transit Center, Oxnard Transit Center and C Street Transfer Center and where major transit routes intersect.

### VISTA & Metrolink Transfers

Staff will coordinate with other service providers including VISTA and Metrolink to maximize the opportunity for seamless transfers between systems.

### Bus Allocation

Buses will be assigned to routes according to capacity requirements, neighborhood characteristics and roadway configuration.

### Schedule Monitoring

Service schedules will be monitored by utilizing the NextBus, and evaluated through periodic onboard running time checks. Monthly schedule adherence reports will be posted in the driver's area. Routes that are more than 5 min late or more than 1 minute early more than 10% of the time will be studied to determine if schedule changes are needed.

### Interlining Routes

Where two separate routes have a common transfer location and result in a large number of transfers, those two routes are candidates for interlining. Interlined buses operate on both routes, allowing passengers to remain onboard. For two routes to be potential candidates for interlining, frequencies should be nearly identical.



## 5. SERVICE PROMOTION POLICY

In conjunction with route planning, a promotional plan shall be prepared to coincide with all route changes, whether new or revised, so that existing and new passengers are informed about transit services that may meet their transportation needs.

### 5.1. TARGET AUDIENCE

The Marketing Manager will be closely involved in the planning of new or revised routes and services for the purpose of identifying potential target audience.

- As new routes, services or route modification are proposed, a target audience will be clearly identified in the promotional plan.

### 5.2. MARKETING MESSAGE

Once a target audience is identified, a marketing plan is developed. The marketing plan will be implemented utilizing the most effective means in which to best reach the target audience. The target audience may include existing passengers, potential new riders or local businesses and therefore the delivery may vary to reach each group.

#### Existing Passengers

- *Media:* The following media will be used to reach this market:
  - Bus Book
  - Interior Transit Ads / Car Cards
  - Rider Alerts on the Bus
  - Bus Stop Schedule Information
  - Direct Mail Campaign
  - Media Outreach/Press Release(s)
  - Newspaper Display Advertisements
  - Website/ Social Media Updates
  - Transit Guides - placed at busy bus stops and transfer points
- *Distribution:* Community outreach and education should begin no less than 4 weeks prior to a pending service change so that passengers are provided time to learn about the changes and, if necessary, adjust their travel patterns/times accordingly. Printed promotional materials and press releases are to begin distribution according to the timeline developed in the marketing plan. GCT employees shall be provided a copy of all materials that are distributed to the public so that they are aware and knowledgeable of what the public is receiving.
- *Translation:* All marketing materials will be bilingual for maximum inclusivity of the Spanish speaking audience.

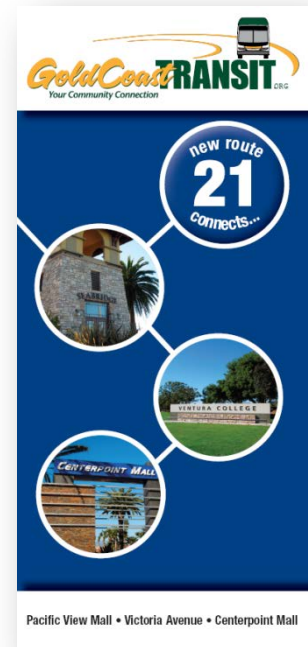


*Sample Ad Promoting New Schedules*

## Potential New Passengers

This group is to be clearly identified and will likely fall into segmented target audiences such as, residents (i.e. new housing developments), seniors, commuters, students, etc. in service area(s) affected by the new or changed route(s).

- *Media:* Based on the identified audience, following are options which may be employed:
  - Newspaper Ads
  - Direct Mail Campaigns
  - Printed Marketing Pieces: This may include, brochures, rack cards, etc.
  - Radio/Television Advertisements
  - Movie Theater On-screen Advertisements
  - Press Releases/Media Interviews
  - Website/ Social Media Updates
  - Brand/Logo Development (as deemed appropriate.)
  - Marketing Partnerships: Partnerships help GCT to broaden its reach by pooling the resources of other agencies and message and businesses.
  - Participation in Group Meetings: As deemed appropriate based on target audience and new or changing service (e.g. speaking at senior center)
  - Public Relations: including speaking at public events, etc., to help communicate the service changes and clarify any community/passenger concerns.
  
- *Distribution:* All materials targeting the potential new passenger will be distributed on or after the new service launch to promote immediate usage. GCT employees shall be provided a copy of all materials that are distributed to the public so that they are knowledgeable about what the public is receiving.



**Sample Brochure  
Promoting New Route**

## 5.3. Promotion Plan Schedule

A schedule shall be prepared in conjunction with the promotional plan which clearly outlines when each marketing medium will reach the intended target audience.

## 5.4. Budget

A proposed budget for service promotion plans associated with route planning will be established. The budget is to clearly detail all mediums used to reach the target audience and anticipated costs associated with each. The promotional plan & budget shall be subject to approval by General Manager.

## 5.5. Service Promotion Analysis

Upon implementation of a new or revised route, ridership will be evaluated over several months to determine the success or need for additional marketing efforts. It may be determined that a

small on-board survey of the new or newly revised route should be conducted to understand how passengers learned of the service. From this survey, a further marketing effort may be developed to continue building ridership. In this case, the steps above would be employed

## 6. SERVICE EVALUATION POLICY

GCT continually receives requests for changes to existing service and for new service in growing areas of the District. Additionally, GCT may be operating some services that are not attracting enough riders. In order to be consistent in the evaluation of service proposals, and to ensure that the service being provided represents the most cost-effective use of the District's resources, a set of service evaluation standards will be annually reviewed and updated by GCT.

### 6.1. Service Standards

There are two primary reasons for the ongoing use of the service standards.

- 1) To evaluate the effectiveness of existing services; or,
- 2) To evaluate new and proposed services.

These standards will help to identify routes which should be prioritized for potential service changes such as:

- Restructuring to eliminate less productive route segments or trips;
- Adjusting service frequency to better reflect the demand for service;
- Providing additional promotion of less patronized routes where appropriate;

### 6.2. Evaluating Existing Routes

The productivity guidelines below will be used to identify existing routes for appropriate improvement measures. Separate guidelines are identified for each class of service (trunk or local). Routes are to be evaluated on both ridership (boardings per hour) and on an economic measure (subsidy per passenger).



#### Ridership Measure

For Trunk and Local routes, which typically have passengers boarding and alighting at all points along the route; the unit of measure used will be "passengers per revenue hour."



#### Economic Measure

For Trunk and Local routes, the economic unit of measurement used will be "subsidy per passenger". This measure combines fare revenues and total cost impacts to produce a net rate that comprehensively reflects the cost to

- Staff will evaluate routes each quarter, and may recommend action when an existing route falls into the least productive 25% (quartile) of routes in both measures for 6 consecutive months.
- Routes that do not meet adopted service standards are not automatically designated for elimination. Elimination of routes is only intended as a last resort, when it has been determined that no cost-effective actions are able to improve the productivity of a route.

- Routes that do meet these minimum guidelines may also be targeted for measures to improve productivity by making minor changes to headways or trip times.

### 6.3. Evaluating New & Proposed Service

- Evaluation of proposed transit service will take place as proposals are received or as new transit needs are identified. The table below lists values to be used to evaluate the projected performance by service type.
- Staff will evaluate all new routes after the first six months of operation, and again annually. Routes should meet the target for their service type (trunk, local) **after three years**.
- New routes that fall below the performance targets **or** routes that have not shown adequate progress toward meeting the guidelines will be targeted for cost-effective actions to increase productivity or for elimination.

SYSTEMWIDE PERFORMANCE TARGET			
Ridership Measure			
Passengers Per Revenue Hour			
Trunk Routes	20	Local Routes	15

### 6.4. Displacement

The application of standards to existing routes is a flexible process. The above-mentioned productivity measures should be used as a guideline and other factors should be considered when making service adjustments. GCT will make every attempt to minimize the amount of displacement that occurs in any part of the service area when implementing service changes or reductions. As a general, reducing the number of trips should be considered prior to the elimination of an entire route

### 6.5. Evaluating Specific Trips by Time of Day

The guidelines for evaluating specific trips on a route may vary by the time of day, with ridership standards for Off-Peak (typically early morning, mid-day and late night) service generally lower than those for Peak daytime service. Off-Peak trips must have boardings of at least **50%** of the specified percentage of the target guidelines, as defined in the table above.

### 6.6. Lifeline or Rural Area Service

There may be communities, neighborhoods or parts of the service area that GCT may choose to provide service to on the grounds of necessity or 'transit dependence' even though they do not meet the minimum thresholds set for transit service. 'Lifeline' services may be considered when they specifically address the needs of those that most depend on transit.

## 6.7. Updating of Service Standards

The numerical values of productivity targets shall be updated annually, using ridership, revenue and cost figures based on the system-wide average. Routes that were introduced during the year will not be included in determining the target values since they are not required to meet the productivity guidelines until they have been in operation for at least three years. Routes that were eliminated will also not be included.

## APPENDIX A - GLOSSARY OF TERMS

**Layover Time** - Time built into a schedule between arrival at the end of a route and the departure for the return trip, used for the recovery of delays and preparation for the return trip.

**Load Factor** - The ratio of passengers actually carried versus the total passenger capacity of a vehicle.

**Off-Peak Period** - Non-rush periods of the day when travel activity is generally lower and less transit service is scheduled.

**Peak Period** - Morning and afternoon time periods when transit riding is heaviest.

**Passengers Per Revenue Hour** - The number of passenger boarding on divided by revenue hours.

**Revenue Hour** - The measure of scheduled hours of service available to passengers for transport on the routes. Excludes deadhead hours but includes recovery/layover time. Calculated for each route.

**Route** - An established series of streets and turns connecting two terminus locations.

**Running time** - The time assigned for the movement of a revenue vehicle over a route, usually done on a [route] segment basis by various time of day.

**Service Area** - The square miles of the agency's operating area.

**Service Span** - The span of hours over which service is operated, e.g., 6 a.m. to 10 p.m. Service span often varies by weekday, Saturday, or Sunday.

**Total Miles** - The total miles includes revenue, deadhead, and yard (maintenance and servicing) miles.

**Travel Time** - The time allowed for an operator to travel between the garage and a remote relief point.

**Trip** - The one-way operation of a revenue vehicle between two terminus points on a route. Trips are generally noted as inbound, outbound, eastbound, westbound, etc. to identify directionality when being discussed or printed.

**Unlinked Passenger Trips** - The total number of passengers who board public transit vehicles. A passenger is counted each time he/she boards a revenue vehicle even though the boarding may be the result of a transfer from another route to complete the same one-way journey.