

BRIEFING MEMO

AC TRANSIT DISTRICT
Board of Directors
Executive Summary

GM Memo No. 07-143

Meeting Date: June 6, 2007

Committees:

- | | | | |
|----------------------------|-------------------------------------|------------------------------|--------------------------|
| Planning Committee | <input checked="" type="checkbox"/> | Finance Committee | <input type="checkbox"/> |
| External Affairs Committee | <input type="checkbox"/> | Operations Committee | <input type="checkbox"/> |
| Rider Complaint Committee | <input type="checkbox"/> | Paratransit Committee | <input type="checkbox"/> |
| Board of Directors | <input type="checkbox"/> | Financing Corporation | <input type="checkbox"/> |

SUBJECT:

Consider update of Board Policy 550, Service Standards and Design Policy

RECOMMENDED ACTION:

- Information Only Briefing Item Recommended Motion

Fiscal Impact:

None at this time.

Background/Discussion:

This Memo is a follow-up to the May 2 Board Workshop: Review of Service Deployment Policies and Aspirational versus Mandated Service Standards. The Workshop was convened at the Board's request, for a comprehensive discussion of the issues associated with service standards and Board policy.

BOARD ACTION: **Approved as Recommended** [] **Other** []
 Approved with Modification(s) []

[To be filled in by District Secretary after Board/Committee Meeting]

The above order was passed on _____, 2007.

Linda Nemeroff, District Secretary
By _____

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The workshop included discussion of the following:

- History of the AC Transit Strategic Planning Effort
- Service Policies and Short Range Transit Plan (SRTP) implications
- Service Policy Language issues
- Examples of language contained in Board Policy 550 (Service Standards and Design)

Attachment 1 to this Memo contains a summary of comments made by Board members and staff during the Workshop. The section below provides the conclusions reached at the Board Workshop, and includes suggested next steps for the review of Board Policy 550. In addition, the Planning Committee may wish to direct further discussion of other points raised during the Workshop.

The May 2 Workshop provided Board guidance and direction in the following areas:

- There must be agreement on what is meant by terms used in Board Policies.
- Policy guidance relative to service standards is a fundamental concern.
- The Planning Committee will be the vehicle to examine the standards contained in Policy 550, with the objective of determining which standards should be retained, and which should be updated.

Based on the above guidance, the primary recommendation of staff is to compile a glossary of terms used in each Board Policy as they are discussed by the Planning Committee, and to clarify the meaning of each term. Accordingly, Attachment 2 to this Memo begins that process with a listing of the terms and concepts applicable to or found in Board Policy 550. The current version of Policy 550 is included as Attachment 3, for ease of reference. Succeeding Board Memos will continue the discussion of the specific standards contained in Policy 550, with the objective of arriving at agreement on which sections need to be updated, revised or eliminated.

Prior Relevant Board Actions/Policies:

Board Policy 550

GM Memo 00-215 Service Deployment Policies

Attachments:

Attachment 1: Summary of Comments from Board Workshop of May 2, 2007

Attachment 2: Compilation of terms used in Board Policy 550

Attachment 3: Board Policy 550

Approved by: Rick Fernandez, General Manager

Prepared by: Nancy Skowbo, Deputy General Manager, Service Development

Date Prepared: May 29, 2007

May 2, 2007 Board Workshop Comments Regarding Policy 550

General Comments Concerning Policy 550

- Policy 550 increased in specificity over time. The District has made progress in defining appropriate standards.
- "Progress" in the context of the Workshop discussion is defined as increased specificity.
- To the extent that specificity is quantitative, is the agency being realistic? In other words, the specific standards need to be realistic.
- Once a specific standard has been agreed to, especially if it is quantitative, is it then a mandate, and if so, what are the ramifications of a mandate?
- It is clear that the Policy is "not working," because some parts of the Policy are unrealistic.
- Goal is to conform policy to reality, and then measure the General Manager's performance on what is realistic.

Comments Concerning Farebox Recovery

- It is important to measure farebox recovery. It may be important to have as a goal.
- Measuring farebox recovery is a requirement. However, it may not be appropriate as part of Policy 550.
- The language in Policy 550 has been interpreted as representing a mandate.

Comments Concerning Span of Service

- Is Span of Service (contained in Policy 550) actually a policy level issue, or is it part of day-to-day management?
- Span of Service could be defined in policy-level terms (e.g., use *range* of hours, as opposed to listing *specific* hours.
- Next step: define Policy 550 so that standards are achievable.
- "Span" is a good word but the implication is that the lower number is the minimum.
- If a standard is expressed as a range or a span, the lower number connotes minimality.
- It's okay to use ranges; for example, on X type route, the service will be between 5 minutes and 15 minutes.
- Comment from one Board member: set the bar high.
- Should a policy be a hybrid (that is, a combination of goals, aspirations and mandates), or should it be strictly one of the three?
- Is the Board looking for absolute mandates?
- Demand for service is the most important thing: demand drives frequency.
- Through the Planning Committee, Board and staff will look at the standards contained in Policy 550, and determine which ones we should keep, and which ones need to change.

Comments Concerning Language in Board Policies

- It's not a question of what we call our language; it's how the language is written.
- Truly aspirational language would use words such as "should be," or "guided by."
- "Commit" is not a mandate for one Board member; rather, it is something that one works *toward*.
- Staff needs clear direction from the Board on what the expectation(s) is(are).
- There is a distinction between "policy" and "day-to-day management."
- The Transit Capacity & Quality of Service Manual (TCQSM) metrics are tools to measure the quality of service; they are not policy.
- What are the standards? What is the policy guidance this Board wants to set?
- Comment: there is a difference between what we *want* to do, and what we are *going* to do. For example, an ideal frequency is X trips per hour, and it would cost X dollars. That is separate from the policy that describes what the agency is going to implement. In this approach, the aspirations don't disappear.
- There is a distinction between "Targets" and "Standards."
- Staff should make it clear whether or not a given "Target" is achievable.
- "Standards," by definition, are achievable, because they connote adherence, or the expectation of adherence. The same is true of "Targets."
- "Targets" and "Standards" are almost always quantitative.
- Board, staff, and the public all need to have a common sense of what is meant when a policy is set, and when a policy is written.
- The first part of Policy 550 should be a glossary.

Word Definitions

- Think about using the word "guideline." This is a word we don't use enough.
- The word "Standard" connotes "adherence."
- The word "Goal" connotes improvement. It represents an area where staff thinks there should be improvement and where improvement is *achievable*.
- "Aspiration" means a lowering of expectations to at least one Board member.
- Words such as "commit," "shall," "will," or "dictate" are mandates
- The word "commit" does not represent a mandate for at least one Board member
- "Targets" are something you try to achieve. This word does not connote "adherence." It has no connotation of improvement over what is in existence.
- "Target" in itself is neither aspirational nor a mandate. It's something that one is *aiming* for, and is usually quantitative in nature.
- "Goal" connotes "progress;" "Targets" connote achievability.

Important Terms and Concepts Used in Board Policy 550

The following list provides important terms and concepts applicable to or used in Board Policy 550. It is the suggestion of staff, based on direction from the May 2, 2007 Board Workshop, that the Planning Committee and Board discuss these terms as part of the process of revising Board Policies. It is envisioned that one outcome of this exercise will be a *Glossary of Terms*, to be included as part of updated Board Policy 550.

- Standards, Goals and Objectives: see Workshop comments. If included in Policy 550, definitions to clarify what this Board means by each term shall be part of the Glossary.
- Targets: this term was suggested in one proposed revision of Policy 550. See also Workshop comments.
- “Commit,” “shall,” “will” and “dictate” versus “should,” “would,” “guided by,” and “guidelines:” see Workshop comments.
- Density: persons per square mile. Policy 550 more closely defines density as follows: High Density = 20,000 and over; Medium Density = 10,000 – 20,000; Low Density = 5,000 – 10,000; Extremely Low Density = 0 – 5,000 (such as areas of Fremont and hills).
- Preferred Service Levels: Policy 550 provides a breakdown of “preferred service levels” for different densities. Board review should include a discussion of the terminology as well as the recommended frequencies.
- Service Definitions: Policy 550 provides definitions for the following service types: Rapid; Trunk Route; Major Corridors; Urban Crosstown or Feeder; Suburban Crosstown or Feeder; Owl Service; Extremely Low Density Service.
- Span of Service: see Workshop comments for potential revisions to language.
- Service Frequencies: Policy 550 specifies that service “*should* operate not less than every 10 minutes on major corridors, and less than every 15 minutes on other services...” For discussion, note subjunctive tense and proposed frequencies.
- Clock Headways: Policy 550 states that clock headways are “memory-based headways so that the service always is scheduled at the same time (s) each hour.”
- Service Allocation Guidelines: Policy 550 provides guidance for the allocation of service primarily on the basis of demand or use, provided that minimum service levels are provided.
- Vehicle Load Standards: Policy 550 breaks out Vehicle Load Factor (the ratio of the number of seats on a vehicle to the number of passengers on board) by route type.
- Service Characteristics: Attached to Policy 550 is a chart of specific service characteristics. Certain of these characteristics should be revised or eliminated. See also Workshop comments.

BOARD POLICY

Category: Service Development

SERVICE STANDARDS AND DESIGN POLICY

PURPOSE

As a public transportation provider and mobility manager for the East Bay, the Alameda-Contra Costa Transit District's goal is provide service in an efficient, effective and equitable manner. To accomplish this goal, the District establishes objectives relating to the design and allocation of services to develop a marketable and well-used transit system. Service design should be continually examined to ensure that service is allocated correctly, in accordance with stated objectives.

GUIDING PRINCIPLES

The following Guiding Principles are for the design and allocation of transit service in the East Bay:

1. AC Transit, working with other transit operators in its service area, will increase annual per capita transit trips within the AC Transit service area to 100 by 2010.
2. AC Transit will not only act as a provider of a social good, but an aggressive instigator of service, and an overall mobility manager for the East Bay.
3. AC Transit will develop a straightforward and marketable transit system, one that is easily understood by the public and easy to use, and which runs frequently enough so that passengers do not need a schedule to use the system on a large part of the service. AC Transit's service network will provide for a multi-destinational system that serves all major traffic generators throughout the East Bay, regardless of location.
4. AC Transit will be the lead transportation agency as the central East Bay core cities increase density, leading to more demands for transit services. AC Transit will support these smart growth and in-fill efforts by designing routes and services to meet this new demand.

5. AC Transit will aggressively pursue transit priority and transit preferential measures at the most important locations to improve street operation of the transit system, to decrease transit passenger travel times, to improve reliability, and to reduce overall system operating cost.
6. The transit system must be seamless to the passenger regardless of the operator. Services, transfers and fares must be transparent to the passenger.
7. The transit system route network will allow for modal conversions, when and if those are appropriate, and the service planning effort must complement the District's other planning work.
8. Transit service must be prioritized to those areas with the greatest potential for transit use, with good patronage rewarded by better service and shorter passenger waits.

DEFINITIONS, STANDARDS AND MEASURES

Density Standards and Service Objectives

One of AC Transit's main criteria for service allocation is the density of land uses along a route. In denser areas, service will be more frequent, routes will be spaced closer together, and the evening service will run later. The following table reflects the preferred service levels for different densities.

Persons per Square Mile	Route Spacing	Route Structure	Weekday Base Frequency	Weekend Frequency
20,000 and over (High Density) [such as International Blvd., Telegraph Ave.]	¼ mile	Grid	Trunk: 10 min. Crosstown: 15 min.	Trunk: 15 min. Sat and Sun Crosstown: Sat: 15 min Sun: 30 min.
20,000 - 10,000 (Medium Density) [such as grid sections in Oakland and Berkeley]	¼ - ½ mile	Grid	Trunk: 10 min. Crosstown: 15 min.	Trunk: Sat: 15 min Sun: 30 min Crosstown: Sat: 30 min. Sun: 60 min.
10,000 - 5,000 (Low Density) [such as Hayward, Castro Valley, some areas of Richmond, Fremont]	½ mile	Focal Point Timed- Transfer	Trunk: 15 min. Crosstown: 30 min.	Trunk: Sat: 30 min. Sun: 60 min Crosstown: Sat: 30 min. Sun: 60 min.
5,000 - 0 (Extremely low Density) [such as areas of Fremont and hills]	1 mile	Focal Point Timed- Transfer	No Standard	No Standard

Distance to Bus Routes

Standards for how far passengers should travel to reach a bus route shall be based on density, with some allowance made for Express or Transbay services which generally operate from catchment areas that may not meet the density standards. This standard shall also take into consideration topography or street patterns, which may increase or decrease the distance to bus routes.

Persons per Square Mile	Distance to Bus Routes
20,000 and over (High Density) [such as International Blvd., Telegraph Ave.]	¼ mile
20,000 - 10,000 (Medium Density) [such as grid sections in Oakland and Berkeley]	¼ - ½ mile
10,000 - 5,000 (Low Density) [such as Hayward, Castro Valley, some areas of Richmond, Fremont]	½ mile to ¾ mile
5,000 - 0 (Extremely low Density) [such as areas of Fremont and hills]	1 mile or greater

SERVICE DEFINITIONS

The following provides a description of each type of service:

Rapid: Provides limited stop service along a Trunk Route or Major Corridor featuring wide stop spacing, headway based schedules, transit signal priority and passenger amenities. Underlying local service contributes to aggregate service frequency.

Trunk Route: Provides the backbone of the transit system; operates along the arterial streets and provides a high level of local and limited stop service (10 minute frequencies or better) based on demand for high levels of service. These routes have the highest priority for capital improvements.

Major Corridors: Complements the trunk route network, providing a high level of local stop service (15 minute frequencies or better).

Urban Crosstown or Feeder: Provides service in high density or demand areas that feeds either BART or other AC Routes, or serves neighborhood circulation functions with a high level of service (15 minute frequencies or better). Includes all other high productivity routes.

Suburban Crosstown or Feeder: Provides service in lower density areas to feed either BART or other AC Routes. May also service neighborhood circulation functions.

Owl Service: Provides service during the late night period and may require a modified route network.

Extremely Low Density Service: Provides some level of service in areas that have low population density or low transit use. Operates on secondary streets linking to trunk, transit routes, BART stations and ferry terminals. Incorporates significant transfer activity.

Adopted : 6/94

Route Type	Span of Service	Frequency
Trunk and Major Corridors	5 am to Midnight	10 minute peak or better
Rapid Service	5 am to Midnight	12 minute or better (headway based)
Urban Crosstown / Feeder	5 am to 10 pm	15 minute peak or better
Suburban Crosstown / Feeder	5 am to 10 pm	30 minute peak or better
Extremely Low Density	5 am to 10 pm	No standard
Owl (modified Trunk route)	5 am to Midnight	30-60 minute

Span of Service –

The District commits to operating all services from 5 am to 10 pm, with service on major corridors operating until midnight. Owl service on selected corridors operates from midnight to 5 am.

Service Frequencies –

In the District’s most urban locations, service should operate not less than every 10 minutes on major corridors and less than every 15 minutes on other services so that passengers do not need a schedule to use transit. In other, less dense areas, service should operate at frequencies of not less than 30 minutes and timed-transfers should be accommodated. In all cases of service operating at frequencies exceeding 15 minutes, schedule shall be written on clock, memory-based headways so that the service always is scheduled at the same time(s) each hour.

Service Characteristics and Standards

Service Characteristics and standards vary by type. The following charts provide characteristics for Trunk/Major Corridors, Rapid Enhancements, BRT Enhancements, Urban Crosstown or Feeders, Suburban Crosstown or Feeders, and Extremely Low Density Service.

A matrix that establishes service characteristics for the various types of service is located at the end of this policy.

SERVICE ALLOCATION GUIDELINES

Within each service category, District staff will allocate service primarily on the basis of demand or use, provided that minimum service levels are provided. For example, within the Trunk/Major Corridor/Rapid category, all services would provide at least 10-minute frequencies; the allocation of service levels that provide more frequent service would be on the basis of demand.

VEHICLE LOAD STANDARDS

A Vehicle Load Factor is the ratio of the number of seats on a vehicle to the number of passengers on-board. Load factor is an indicator of the extent or probability of overcrowding, and may indicate the need for additional vehicles to maintain useful service.

The Load factor is determined by taking the number of seats on a specific route which pass the peak load point during the peak hour and dividing that number into the number of passengers that are actually carried past that point during that hour.

Load factors can vary by service type. For purposes of the AC Transit District, different Vehicle Load thresholds shall be used to measure service effectiveness or to determine remediation. The following thresholds shall be monitored:

Route Type	Vehicle Load Factor
Trunk and Major Corridors	1.25 (25% standees)
Rapid Corridors	1.25 (25% standees)
Urban Crosstown / Feeder	1.25 (25% standees)
Suburban Crosstown / Feeder	1.25 (25% standees)
Extremely Low Density	1.25 (25% standees)
Transbay/Express	1.0 (no standees)
Owl (modified Trunk route)	1.0 (no standees)

For purposes of measuring the Vehicle Load Factor for Transbay or Express Service, the Vehicle Load Factor shall be measured as the route enters the “express area” and is operating closed-door, which is generally on the freeway.

APPLICATION OF STANDARDS

To determine service effectiveness, staff will conduct ridership surveys on a regular basis. This information will be used to determine evaluative components such as passengers per vehicle hour, vehicle load factor or the overall ranking of the services.

Bi-annually, AC Transit staff will provide the Board of Directors with an assessment of route performance within the service categories. Transit lines will be ranked by a variety of metrics such as passengers per hour or annual subsidy. Minority Transit routes (those routes that have at least 1/3 of the total route mileage in a census tract with a percentage of minority population greater than the percentage of minority population in the service district) will be also be identified.

Service that falls below the 25 percentile of all routes within its category will be analyzed for the following:

- Schedule adjustments, if service frequencies are more generous than required by this Policy.
- Running time adjustments or minor route changes, to provide substantially the same level of service while reducing operating costs and retaining most passengers.
- Route improvements, including route consolidation or through-routing to improve efficiency and effectiveness.

Adopted : 6/94

Amendment(s): 7/04

- Route discontinuance, should there be no other means to improve efficiency or provide a well-used transit product.
- Other actions, such as grant funded opportunities, to improve route performance.

BOARD ACTION

- Prior to the Board initiating action on changes to routes or the route network, staff will provide an analysis of the issues, including an analysis of potential effects on minority communities as required by Title VI of the Civil Rights Act of 1964, as well as a recommendation based on this analysis.
- Public Hearings will be held in accordance with Board Policy 163 before Board action on service changes or recommendations.

Board Policy 550: Service Characteristics

Service Type	Frequencies	Scheduling	Service Routing	Diversion from Standard	Route Spacing	Street Operations	Vehicles	Stop Spacing	Stop Amenities	Farebox Recovery	Passengers per hour
Trunk/ Major Corridor	not exceeding 10 min; usually more frequently	Clock Headways preferred	Major Arterial streets	Not allowed without specific findings of the Board	On major streets with ADT of more than 25,000	Mixed flow operation	High-Capacity, fast boarding, low floor	1/4 to 1/2 mile depending on density	Only when provided by advertising or city	40 percent minimum	40 weekdays (min) 35 weekends (min)
Rapid Service	not exceeding 12 min; usually more frequently	Headway based	Major Arterial streets	Not allowed without specific findings of the Board	On major streets with ADT of more than 25,000	Mixed flow with signal priority	High-Capacity, fast boarding, low floor	1/2 to 2/3 mile depending on density	well designed stops, shelters, real time information	40 percent minimum	40 weekdays (min) 35 weekends (min)
BRT	Not exceeding 10 min; 7.5 min preferred	Headway based	Major Arterial streets	Not allowed without specific findings of the Board	On major streets with ADT of more than 25,000	Significant portion of exclusive lane operation	High-Capacity, fast boarding, low floor	1/2 to 2/3 mile depending on density	well designed stops/stations, real-time passenger information with significant passenger amenities	40 percent minimum	40 weekdays (min) 35 weekends (min)
Urban Crosstown/Feeder	Not exceeding 15 min; can be more frequent	Clock Headways	Secondary Streets	To serve traffic generators and transit nodes	1/2 mile maximum	Mixed flow operation	Standard 40' vehicle	1/8 to 1/2 mile depending on density	Only when provided by advertising or city	25 percent minimum	30 weekdays (min) 25 weekends (min)
Suburban Crosstown Feeder	Not exceeding 30 min; can be more frequent	Timed transfer with other crosstown lines	Secondary Streets	To serve traffic generators and transit nodes	1/2 to one mile	Mixed flow operation	Standard 30' or 40' vehicle	1/4 to 1/2 mile depending on density	Only when provided by advertising or city	20 percent minimum	20 weekdays (min) 15 weekends (min)
Extremely Low Density	No standard	Timed transfer with other crosstown lines	Timed Transfer with other crosstown or feeders	To serve traffic generators and transit nodes	One mile or flexible service/circulator	Mixed flow operation	Standard 30' or 40' vehicle	No current standard	Only when provided by advertising or city	20 percent minimum	No standard