

MAJOR SERVICE CHANGE POLICY

SERVICE CHANGES

All major increases or decreases in transit service are subject to a Title VI Equity Analysis prior to Board approval of the service change. A Title VI Equity Analysis completed for a major service change must be presented to the Caltrain Board for its consideration and included in the Caltrain Title VI Program with a record of the action taken by the Board.

Caltrain defines a major service change as any service change meeting at least one or both of the following criteria:

- A. An adjustment of service that equates to a reduction of or addition of 25 percent or more in total revenue train miles per day for the service day of the week (weekday, Saturday or Sunday) for which the change is made.
- B. A greater than 50 percent reduction or increase in the number of stops at a station per day for the service day of the week (weekday, Saturday or Sunday) for which the change is made.

Note: Any change that is a temporary or interim change due to construction or maintenance projects is exempted from the definition and is not considered a “major service change.”

DISPARATE IMPACT POLICY

This policy establishes a threshold for determining whether a given action has a disparate impact on minority populations versus non-minority populations. Per FTA Circular 4702.1B:

Disparate impact refers to a facially neutral policy or practice that disproportionately affects members of a group identified by race, color, or national origin, where the recipient's policy or practice lacks a substantial legitimate justification and where there exists one or more alternatives that would serve the same legitimate objectives but with less disproportionate effect on the basis of race, color, or national origin....

The policy shall establish a threshold for determining when adverse effects of [fare/]service changes are borne disproportionately by minority populations. The disparate impact threshold defines statistically significant disparity and may be presented as a statistical percentage of impacts borne by minority populations compared to impacts borne by non-minority populations. The disparate impact threshold must be applied uniformly...and cannot be altered until the next Title VI Program submission.

In the course of performing a Title VI Equity Analysis, Caltrain must analyze how the proposed action would impact minority as compared to non-minority populations. In the event the proposed action has a negative impact that affects minorities more than non-minorities with a disparity that exceeds the adopted Disparate Impact Threshold or that benefits non-minorities more than minorities with a disparity that exceeds the adopted Disparate Impact Threshold, Caltrain must evaluate whether there is an alternative that has a more equitable impact. Otherwise, Caltrain must take measures to mitigate the impact of the proposed action on the affected minority population and demonstrate that a legitimate business purpose cannot otherwise be accomplished and that the proposed change is the least discriminatory alternative.

The Caltrain Disparate Impact Threshold to determine if the adverse impacts of a major service change (as defined in the first part of this document) or a fare adjustment is established at 10 percent based on the cumulative impact of the proposed service and/or fare changes. This threshold applies to the difference of the impacts borne by minority populations compared to the same impacts borne by non-minority populations.

DISPROPORTIONATE BURDEN POLICY

This policy establishes a threshold for determining whether a given action has a disproportionate burden on low-income populations versus non-low-income populations. The Disproportionate Burden Policy applies only to low-income populations that are not also minority populations. Per FTA Circular 4702.1B:

The policy shall establish a threshold for determining when adverse effects of [fare/]service changes are borne disproportionately by low-income populations. The disproportionate burden threshold defines statistically significant disparity and may be presented as a statistical percentage of impacts borne by low-income populations as compared to impacts borne by non-low-income populations.... The disproportionate burden threshold must be applied uniformly...and cannot be altered until the next [Title VI] program submission.

At the conclusion of the analysis, if the transit provider finds that low-income populations will bear a disproportionate burden of the proposed [fare/]service change, the transit provider should take steps to avoid, minimize or mitigate impacts where practicable. The provider should describe alternatives available to low-income populations affected by the [fare/]service changes.

The Caltrain Disproportionate Burden Threshold to determine if the adverse impacts of a major service change (as defined in the first part of this document) or a fare adjustment is established at 10 percent based on the cumulative impact of the proposed service and/or fare changes. This threshold applies to the difference of the impacts borne by low-income populations compared to the same impacts borne by non-low-income populations.

SYSTEMWIDE SERVICE STANDARDS

Pursuant to requirements set forth in Federal Transit Administration (FTA) Circular 4702.1B Caltrain must establish and monitor its performance under quantifiable Service Standards and qualitative Service Policies. The Service Standards contained herein are used to develop and maintain efficient and effective commuter rail service. In some cases, these standards differ from standards used by Caltrain for other purposes.

The FTA requires all fixed route transit providers of public transportation to develop quantitative standards for the following indicators. Individual public transportation providers set these standards; therefore, these standards will apply to each individual agency rather than across the entire transit industry:

- A. Vehicle Load
- B. Vehicle Headways
- C. On-time Performance
- D. Service Availability

STATION HIERARCHY

For purposes of determining service and facility levels at stations, a hierarchy has been established that classifies each station into one of five types. The hierarchy is related to the level of ridership at the station. The following chart shows the station type names and general service description:

Station Type	Service Description
Major	Baby Bullet, limited and local
Intermediate	Limited and local
Minor	Local
Gilroy	Peak direction service only
Special	Limited use station

A. VEHICLE LOAD

Vehicle load factor is described by the October 2012 FTA Circular 4702.1B:

Vehicle load can be expressed as the ratio of passengers to the total number of seats on a vehicle. For example, on a 40-seat bus, a vehicle load of 1.3 means all seats are filled and there are approximately 12 standees. A vehicle load standard is generally expressed in terms of peak and off-peak times. Transit providers that operate multiple modes of transit must describe the specific vehicle load standards for peak and off-peak times for each mode of fixed route transit service (i.e., bus, express bus, bus rapid transit, light rail, heavy rail, commuter rail, passenger ferry, etc., as applicable), as the standard may differ by mode.

Providing sufficient seating capacity to meet demand is a priority for Caltrain. However, during the peak of the peak because of high passenger loads and limited capacity, it is not always possible to provide a seat for each passenger. During non-peak hours, the Caltrain standard is not to exceed one passenger per seat, but in the peak the standard is not to exceed one standee per five seats.

Staff monitors vehicle loads from train crew reports, passenger comments, passenger counts of special event trains and from an annual passenger count performed on every train. Whenever feasible, resources will be reallocated to meet passenger demand.

Service Standards

<u>Service Type</u>	<u>Peak Load Factor</u>	<u>Off-Peak Load Factor</u>
All	1.2	1.0

B. VEHICLE HEADWAY

Vehicle headway is described by the October 2012 FTA Circular 4702.1B:

Vehicle headway is the amount of time between two vehicles traveling in the same direction on a given line or combination of lines. A shorter headway corresponds to more frequent service. Vehicle headways are measured in minutes (e.g., every 15 minutes); service frequency is measured in vehicles per hour (e.g., 4 buses per hour). Headways and frequency of service are general indications of the level of service provided along a route. Vehicle headway is one component of the amount of travel time expended by a passenger to reach his/her destination. A vehicle headway standard is generally expressed for peak and off-peak service as an increment of time (e.g., peak: every 15 minutes; and off peak: every 30 minutes). Transit providers may set different vehicle headway standards for different modes of transit service. A vehicle headway standard might establish a minimum frequency of service by area based on population density. For example, service at 15-minute peak headways and 30-minute off-peak headways might be the standard for routes serving the most densely populated portions of the service area, whereas 30-minute peak headways and 45-minute off-peak headways might be the standard in less densely populated areas. Headway standards are also typically related to vehicle load. For example, a service standard might state that vehicle headways will be improved first on routes that exceed the load factor standard or on routes that have the highest load factors.

During peak and surrounding (shoulder) times, Caltrain serves stations largely based on demand. Midday, evenings and weekends are largely hourly service. Supplemental service is often provided for special events based on estimated ridership demand.

Service Standards Minimum Average Headways (in minutes)

<u>Station Type</u>	<u>Peak</u>	<u>Reverse-Peak</u>	<u>Midday</u>	<u>Evenings & Weekends</u>
Major	20	20	60	60
Intermediate	30	30	60	60
Minor	60	60	60	60
Gilroy	3 trips per peak period			
Special	-----Provided as needed-----			

C. ON-TIME PERFORMANCE

On-time performance is described by the October 2012 FTA Circular 4702.1B:

On-time performance is a measure of runs completed as scheduled. This criterion first must define what is considered to be “on time.” For example, a transit provider may consider it acceptable if a vehicle completes a scheduled run between zero and five minutes late in comparison to the established schedule. On-time performance can be measured against route origins and destinations only, or against origins and destinations as well as specified time points along the route. Some transit providers set an on-time performance standard that prohibits vehicles from running early (i.e., ahead of schedule) while others allow vehicles to run early within a specified window of time (e.g., up to five minutes ahead of schedule). An acceptable level of performance must be defined (expressed as a percentage). The percentage of runs completed system-wide or on a particular route or line within the standard must be calculated and measured against the level of performance for the system. For example, a transit provider might define on-time performance as 95 percent of all runs system-wide or on a particular route or line completed within the allowed “on-time” window.

On-time Performance Service Standard

A train is determined to be on-time if it reaches its final destination within five minutes of the published schedule time. Caltrain does not permit its trains to depart early. It is Caltrain’s goal to have 95 percent of trains meet this on-time criteria. Monthly on-time performance is tracked and published as part of a monthly performance report to the Caltrain Board.

D. SERVICE AVAILABILITY

Service availability is described by the October 2012 FTA Circular 4702.1B:

Service availability is a general measure of the distribution of routes within a transit provider's service area...A standard might also indicate the maximum distance between stops or stations...Commuter rail service or passenger ferry service availability standards might include a threshold of residents within a certain driving distance as well as within walking distance of the stations or access to the terminal.

Caltrain station spacing is mostly based on locations inherited from a previous owner (the Southern Pacific Railroad) before the Peninsula Joint Powers Board took over the system in 1992. The 48-mile railroad from San Francisco to Tamien has 23 regular stations (not counting Special station types) for an average station spacing of 2.1 miles. The distance between stations one must travel to access service is based on average distance (miles) between adjacent stations (both directions) for types of service stopping at the station.

Service Availability Standards

<u>Station Type</u>	<u>Station Spacing</u>
Major	5 miles
Intermediate	3 miles
Minor	2 miles
Gilroy	6 miles
Special	1 mile

SYSTEMWIDE SERVICE POLICIES

FTA requires fixed-route transit providers to develop a policy for each of the following service indicators. Transit providers also may opt to set policies for additional indicators as appropriate. The following system-wide policies differ from service standards in that they are not necessary based on meeting quantitative thresholds; but rather qualitative evaluation results:

- A. Vehicle Assignment
- B. Transit Amenities

A. VEHICLE ASSIGNMENT

According to the October 2012 FTA Circular 4702.1B:

Vehicle assignment refers to the process by which transit vehicles are placed into service in depots and on routes throughout the transit provider's system. Policies for vehicle assignment may be based on the age of the vehicle, where age would be a proxy for condition. For example, a transit provider could set a policy to assign vehicles to depots so that the age of the vehicles at each depot does not exceed the system-wide average. The policy could also be based on the type of vehicle. For example, a transit provider may set a policy to assign vehicles with more capacity to routes with higher ridership and/or during peak periods. The policy could also be based on the type of service offered. For example, a transit provider may set a policy to assign specific types of vehicles to express or commuter service. Transit providers deploying vehicles equipped with technology designed to reduce emissions could choose to set a policy for how these vehicles will be deployed throughout the service area.

The Caltrain revenue fleet consists of 118 passenger cars (25 Bombardier and 93 Nippon Sharyo/Gallery cars) and 29 diesel locomotives. All trains are comprised of one locomotive and five passenger cars. All Gallery car trains include at least one Americans with Disabilities Act (ADA) accessible rail car, one car with a luggage rack and two cars that together accommodate up to 80 bikes. All Bombardier cars are ADA accessible and Bombardier trains all have two bike cars that accommodate up to 48 bikes.

Caltrain consists (i.e., locomotives, cab cars and passenger cars) are rotated on a daily basis to serve different scheduled trains. Several trains a day are specified to be equipped with Gallery consists to utilize the higher bike capacity of 80 (versus 48 for a Bombardier equipped train) for trains that have very high bike demand. Another group of trains are specified to be equipped with Bombardier consists in order to take advantage of its additional 10 seats and four doors per car for trains that have very high passenger loads. The use of Gallery versus Bombardier equipment is not matched to any particular service type or station, except Gilroy service that is always provided utilizing Gallery consists.

B. TRANSIT AMENITIES

According to the October 2012 FTA Circular 4702.1B:

Transit amenities refer to items of comfort, convenience, and safety that are available to the general riding public. Fixed route transit providers must set a policy to ensure equitable distribution of transit amenities across the system. Transit providers may have different policies for the different modes of service that they provide. Policies in this area address how these amenities are distributed within a transit system, and the manner of their distribution determines whether transit users have equal access to these amenities. This subparagraph is not intended to impact funding decisions for transit amenities. Rather, this subparagraph applies after a transit provider has decided to fund an amenity.

Caltrain provides a variety of amenities at stations to attract and retain customers. Station amenities are distributed based on ridership activity of stations and conditions that were adopted by the JPB when it took over the railroad. Stations are divided into three groups (Level 1- 3). These levels correspond roughly with the station hierarchy designations listed in the introduction to the system-wide service standards.

The “Core” set of amenities exist at most stations and include bike lockers, bike racks, shelters/canopies, benches, trash cans, pay phones, smart card fare validation equipment and ticket vending machines (TVMs). It is standard for each station to have a posted system map, schedule, other customer information, variable message signs and public announcement systems (PA). The standard amenities are included in the definition of core amenities.

Only a few stations with unique access situations have elevators or escalators. The placement of elevators is often at the choice and cost of others when a station is constructed or reconstructed.

Amenities Policy

<u>Station Type</u>	<u>Level</u>	<u>Amenities</u>
Major	Level 1	Core amenities
Intermediate	Level 1	Core amenities
Minor	Level 1	Core amenities
Gilroy	Level 2	Core amenities without bike racks, PA & VMS
Special	Level 3	TVMs only, at stations with scheduled stops