Equity Analysis Program

Introduction

FTA requires transit providers to conduct Title VI equity analyses whenever they plan a fare change and/or a major service change. Equity analyses are required regardless of whether the proposed changes would cause positive or negative impacts to riders. In other words, transit providers must conduct an equity analysis for all fare changes and for major service reductions and major service expansions. Financial exigencies and other special circumstances (e.g., economic hardships, size of transit provider’s service area or staff) do not exempt transit providers from the requirement to conduct equity analyses.

Purpose

The major purpose of conducting service and fare equity analyses prior to implementing service and/or fare changes is to determine whether the planned changes will have a disparate impact on the basis of race or income. By conducting equity analyses, TANK intends to ensure that the impacts of service and fare changes are distributed equitably to minority and low-income populations and are not discriminatory. We also seek to ensure that minority and low-income communities have an equal opportunity to participate in the public involvement process that often precedes a decision to change service and fares.

Practice

Figure 9 displays a demonstrative flow chart of TANK’s Equity Analysis Program. As can be seen, any permanent fare change would trigger equity analysis. In the case of service change, the first step is determining whether the change is considered a Major Service Change (see Major Service Change Policy below), which triggers Equity Analysis as well. By applying equity analysis, TANK determines whether the change would pose disparate impact and/or disproportionate burden on Title VI protected classes.

Finally, the appropriate action should be taken based on the determination: If a major service change or a fare change constitute disparate impact on minority populations or pose
disproportionate burden on low-income populations, TANK will take actions to either minimize or mitigate the effects. In severe cases, TANK will not implement the change.

TANK may implement major service changes or fare changes that would have disproportionately high and adverse effects provided that TANK demonstrates at least one of the following terms:

A. The action meets a substantial need that is in the public interest
B. Inaction would have more severe adverse effects, financial or otherwise, than the preferred alternative.
C. In case of service elimination, the service to be eliminated is part of a route that has been substandard for two successive years in at least one criteria of the TANK Annual Substandard Route Review.

Figure 1: Service Change Equity Analysis -Flow Chart
Source: FTA Service and Fare Equity Training Overview (http://www.fta.dot.gov/civilrights/12328_5445.html)
In this program, we first describe the TANK’s policies of Major Service Change, Disparate Impact and Disproportionate Burden. These policies define the thresholds that TANK applies for determination. We then provide a step-by-step explanation of the Equity Analysis procedure.

**Major Service Change Policy**
Under the new FTA Title VI guidelines, transit providers are required to define their own thresholds to determine when a change in service qualifies as a major service change.

Typically, TANK makes service changes in the beginning of every transit schedule period ("pick"). In most cases, the pick change package consists of mere running time modifications and minor routing deviations. Occasionally, TANK implements more significant changes package in the pick, such as additional new service, elimination of transit segments, and significant headway change.

TANK determination of Major Service Change applies when the proposed service change package meets one or more of the following criteria. Such a package triggers a Service Equity Analysis, which will be reviewed and approved by TANK Board of Directors.

A. The service change package would impact 25 percent or more of the transit revenue hours allocated to any county within the TANK service area. When TANK implements a service cut or service addition that significantly impact the counties subsidy contribution, TANK should compare service levels of current and proposed service in order to measure this criterion. If change in any one of the counties meet or exceed the 25 percent threshold, then the service change will be considered major within the corresponding county.

B. The proposed service change package includes implementation of a new route that would serve a city or a regional travel pattern that is not included in the current service.

C. The service change package includes an elimination of a route segment, where no alternative service is provided within one mile walking distance from one or more bus stops on the segment to be eliminated.
Per the FTA guidance, temporary service changes lasting less than twelve (12) months and temporary fare changes lasting less than six (6) months shall be exempt from the major service change policy. For more details, see FTA Circular 4702. 1B. Chap. IV 10-21.

Disparate Impact and Disproportionate Burden Policy
Under the new FTA Title VI guidelines, transit providers are required to establish their own thresholds to determine when disparate impacts and disproportionate burdens exist as a result of a major service change or fare change.

“Disparate impact” refers to a facially neutral policy or practices that disproportionately impacts members of a group identified by race, color, or national origin.

“Disproportionate burden” refers to a neutral policy or practice that disproportionately impacts low-income populations compared to non-low-income populations. Low-income populations are not a protected class under Title VI. However, recognizing the inherent overlap of environmental justice principles in this area, FTA requires transit providers to include this policy as part of the equity analysis process.

TANK’s measurement of disparate impact and disproportionate burden contemplates the population of the TANK service areas as the comparison groups. It involves a comparison between the proportion of the protected class population in the area to be affected, and the proportion of the protected class population in the TANK service area. Essentially, if the affected area has significantly more minority and low-income population as compared to the TANK service area, then the service/fare change may constitute disparate impact and/or pose disproportionate burden.

TANK will make the determination of disparate impact and disproportionate burden by comparing between the proportion of the protected populations in the affected area (A) and the equivalent proportion in the TANK service area (B). If A is more than 20% different when compared to B, then the change may pose disparate impact or disproportional burden. For instance, if the segments affected by a service change serve an area that is 40 percent minority
in average, and the TANK service area population is 18 percent minority in average, then changes may have a disparate impact on minority population.

The determination procedure would be applied to all major service changes and permanent fare changes. It is described in-detailed under the Equity Analysis section below. For more details about the requirements, see FTA Circular 4702. 1B. Chap. IV 10-12.

**Equity Analysis Procedures**  
**Introduction**

This sub-section introduces TANK’s Equity Analysis procedure, step-by-step. There are two kinds of analyses: (1) Analysis that was triggered by a proposed Major Service Change; and (2) analysis required due to fare change. The objectives of both procedures are:

- Analyzing how the proposed changes may impact protected classes
- Determining whether the service change would constitute disparate impact or disproportionate burden.
- Identify methods to minimize and mitigate the impact.

**Service change Equity Analysis**  
**Given the change is defined as a Major Service Change:**

A. Describe the considerations for the service change, i.e. what the purposes and what the issues to address are. These may include ridership drop/ increase, duplication of service, demographic shifts, service requests, or Network Study recommendations.

B. Utilizing GIS, conduct an Overlay Analysis contemplating all route/ segment affected by the service change.

Definitions:
- Census data- the most recent American Community Survey (ACS).
- Geographic unit- census block group (BG)
Affected area population is defined using a 0.25 mile buffer around the impacted segment. All BG that intercept the buffer area are considered ‘affected’.

- Benchmark area population is the TANK Service Area, including Boone, Kenton, and Campbell Counties, KY.
- Minority population- as defined in Section B.1 (service Area Demographics) above.
- Low-income population- as defined in Section B.1 (service Area Demographics) above.

C. Base on TANK’s Disparate Impact and Disproportionate thresholds, conclude whether the service changes constitute disparate impact on protected classes.

Fare Change Equity Analysis
The fare equity analysis requirement applies to all permanent fare changes regardless of the amount of increase or decrease. Exceptions are special fare promotions and temporary fare reductions. As with the service equity analysis, FTA requires transit providers to evaluate the effects of fare changes on low-income populations in addition to Title VI-protected populations.

For proposed changes that would increase or decrease fares on the entire TANK system, or on certain transit modes (express or local), or by fare payment type or fare media, TANK shall analyze any available information generated from ridership surveys indicating whether minority and/or low-income riders are disproportionately more likely to use the mode of service, payment type, or payment media that would be subject to the fare change. Notably, Census data will not be effective data for fare analyses, since it is impossible to know, based on Census data, what fare media riders are using.

To conduct a fare change equity analysis:

A. Determine the number and percent of users of each fare media being changed.
B. Review fares before the change and after the change.
C. Compare the differences for each particular fare media between minority users and overall users.
D. Compare the differences for each particular fare media between low-income users and overall users.

E. In accordance with TANK Disparate Impact and Disproportionate Policy, the change may pose such impacts if any of the proportion of any of the protected population affected by the change is higher or lower than 20% when compared to the proportion in the overall population.

F. Conclude whether the fare change poses disparate impact or disproportionate impact.

**Equity Analysis Public Engagement**

TANK policies in regards to Major Service Change, Disparate Impact and Disproportionate Burden, are posted on TANK’s website at the URL [https://www.tankbus.org/titlevi/](https://www.tankbus.org/titlevi/)

As stated online, any person may contact TANK with comments and questions. Anyone desiring a public hearing on the TANK policy should submit a written request to the Transit Planning department and a public meeting will be scheduled.

The TANK Board of Directors meets each month on the 2nd Wednesday of the month. Meetings are held at 5:30 p.m. at the TANK offices, 3375 Madison Pike, Ft. Wright. The monthly meetings are open to the public and a portion of the meetings is dedicated for public comments. TANK invites any interested party to participate in the meeting, provide comments, and ask questions in regards to the Title VI Equity Analysis Program.

Upon request, TANK management team will discuss and propose policy amendments as needed to TANK Board of Directors.