

EQUITY ANALYSIS

February 2019

May 2019 Service Change

Equitable distribution of transit service is a core principle of the Regional Transportation District. This document details the measures taken to ensure major service changes do not result in a disparity in impacts absorbed by populations protected under Title VI of the Civil Rights Act of 1964 and Executive Order 12898 (Environmental Justice).

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Equity Analysis

SERVICE CHANGES

INTRODUCTION

Title VI and Environmental Justice

Equity is a core principle of the Regional Transportation District's (RTD) mission to provide mass transit service in the Denver Metro Area. An equitable mass transit system fairly distributes the benefits and adverse effects of transit service without regard for race, color, national origin, or low-income status. This principle is detailed and reinforced by Title VI of the Civil Rights Act of 1964 and Executive Order 12898 pertaining to environmental justice.

Title VI of the Civil Rights Act of 1964 prohibits discrimination on the basis of race, color, or national origin in programs receiving federal financial assistance. Specifically, Title VI states, "No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance."

In 1994, President Clinton issued Executive Order 12898, which states that each federal agency "shall make achieving environmental justice part of its mission by identifying and addressing disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations."

The Federal Transit Administration's (FTA) Circular 4702.1B provides its recipients of FTA financial assistance with instructions for achieving compliance with Title VI and Environmental Justice. In this circular, the FTA requires RTD to evaluate, prior to implementation, any and all service changes that exceed the established major service change threshold, to determine whether those changes will have a disproportionately negative impact on minority or low-income populations.

SERVICE CHANGE PHILOSOPHY

An equity analysis is triggered by proposed changes to the services provided by RTD. These changes include the addition of new routes, the elimination of existing routes, and changes to the alignment and trip frequency within existing routes. RTD has established policies to identify the service changes needed to meet the diverse travel needs of the citizens of the District and maintain a high-performance, sustainable transit system.

RTD services are divided into various service classes depending on service type, route alignment, and frequency. Each service class has its own service standards derived from the performance of all routes within each class. RTD continually adjusts services in response to changes in ridership and operational performance of the transit system as a whole. It is also the District's responsibility to identify services that are underperforming and recommend modifications, curtailment, or cancellation of service as warranted. In keeping with Colorado Revised Statutes, RTD utilizes official service standards to establish performance metrics used to identify underperforming services on a class-of-service basis. The District used these metrics to identify a series of service changes. Equity analyses examine the impact of the proposed changes on minority populations and low-income households at or below 150 percent of the Department of Health and Human Services Poverty Guidelines.

...The general assembly further finds that the district should be organized efficiently, economically, and on a demand-responsive basis and that the district should consider least-cost alternatives in discharging its responsibilities. The general assembly further finds that the farebox recovery ratio of the district must be improved so that resources once allocated for mass transportation can be made available for other surface transportation needs.

Colorado Revised Statutes 32-9-119.7 Farebox Recovery Ratios -- Plans

ANALYSIS

The FTA requires RTD to establish policies that will guide the analysis to determine whether major service changes will have a disproportionately negative impact on minority or low-income populations. Accordingly, RTD established equity analysis policies and a service evaluation process to meet this requirement.

Equity Analysis Policies

Per FTA Circular 4702.1B Chapter IV.7, RTD must establish a Major Service Change Policy, a Disparate Impact Policy, and a Disproportionate Burden Policy. Collectively, these policies provide foundational requirements for evaluating service change proposals for equity. These policies and their applicable thresholds are listed below:

1. **Major Service Change Policy:** A major service change is defined as a 25 percent addition or reduction in the service hours of any route that would remain in effect for twelve (12) or more months. All major service changes will be subject to an equity analysis that includes an analysis of adverse effects.
 - a. Adverse Effect is defined as a geographical or temporal reduction in service that includes, but is not limited to: eliminating a route, shortening a route by eliminating segments, rerouting an existing route, and increasing headways. RTD shall consider the degree of adverse effects and analyze those effects when planning major service changes.

2. **Disparate Impact Policy:** A major service change should not adversely affect a minority population 10 percent more than non-minority populations; this level of impact is considered a disparate impact.
3. **Disproportionate Burden Policy:** A major service change should not adversely affect a low-income population 10 percent more than non-low-income populations; this level of impact is considered a disproportionate burden. A low-income population is a group of households who are at or below 150 percent of the Department of Health and Human Services Poverty Guidelines.

If a proposed major service change results in a disparate impact or a disproportionate burden, RTD will consider modifying the proposed service change. RTD will then analyze the modification and make sure it removed the potential disparate impact or disproportionate burden. If a less discriminatory option cannot be identified and RTD can demonstrate a substantial legitimate justification for the proposed service change, the FTA may allow RTD to proceed with the proposed change.

Service Change Overview

The equity analysis in this report examined the impact to minority and low-income populations caused by the proposed major service changes summarized below:

Route 33

Route 33 – Platte Valley Service Standard type - Urban Local – (10%-12.2 pass. per hr. / 25%-19.1 pass. per hr.) Due to low ridership performance, it proposed that this route service be discontinued. Current ridership performance stands at 10.3 passenger per hour, which falls below the Urban Local ridership standard. This proposal would impact approximately 55 weekday passengers. Alternative service to the Route 33 can be found in using combinations of Central and West Light Rail corridors, Routes 4, 9, 30 and 30 Limited.

Cost saving impacts are estimated to be approximately \$301,700 annualized.

Equity Analysis Methodology

The basic framework for analyzing service changes for equity involved comparing affected populations. Identify the proposed changes by routes.

1. Collect and examine latest ridership survey data for statistical validity and ridership demographics at the route level.
2. If statistically valid ridership data is unavailable, obtain applicable demographic data for the study area and spatially allocate the data within a buffer around routes (0.25-mile buffer for bus, 0.50-mile buffer for rail) based on American Community Survey block group population data.
3. Examine the percentage of minority and non-minority populations and to low-income and non-low-income (ridership or residents) subject to the change in service.

Unfortunately, the ridership data samples for the routes of this analysis are below the threshold for statistical validity. Alternatively, we must rely on population data from the US Census and American Community Survey to examine the distribution of adverse effects. Table 1 displays the service area demographic profile used to measure service changes for disparate impact and disproportionate burden.

Table 1 - RTD Service Area Demographic Profile

Percent Minority ¹	Percent Low-income ²
35%	21%

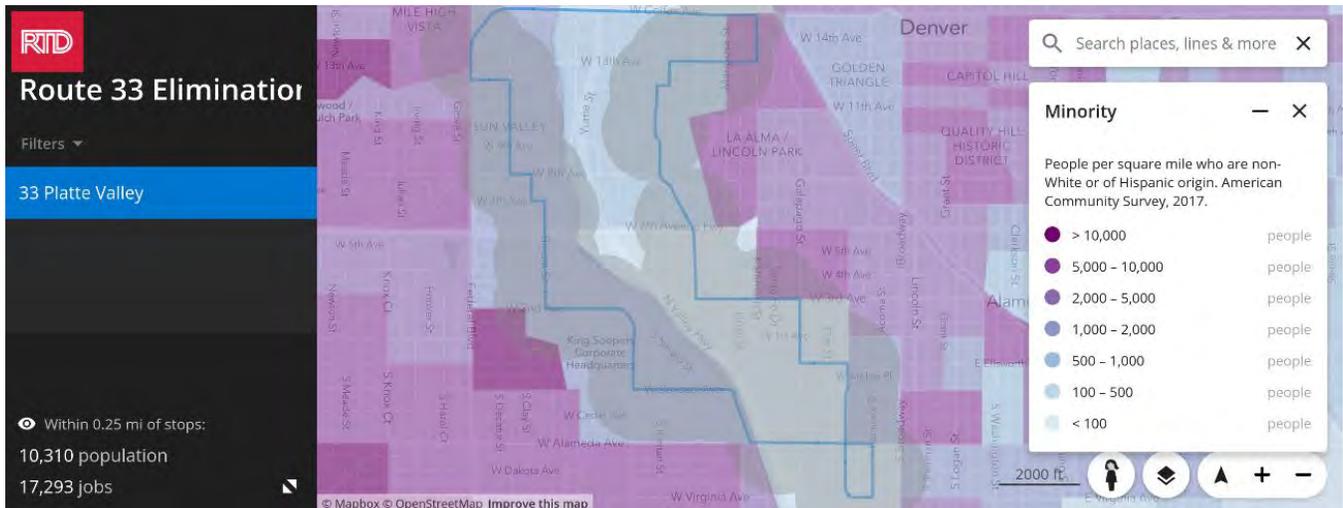
Route 33 Analysis

As previously mentioned, its proposed to discontinue the route 33. To examine the impacts of this change, demographics of the population in proximity to the route 33 were analyzed. An examination of the route demographics did reveal a disproportionate distribution of adverse effects among the minority population. The data and maps used to conduct this analysis are displayed in Table 2, Figure 1 and Figure 2.

Table 2 – Route 33 Population Demographics

Route	Minority Population	+/- Systemwide Minority Population	Low-Income Population	+/- Systemwide Low-income Population
Route 33	55%	+20%	29%	+8%

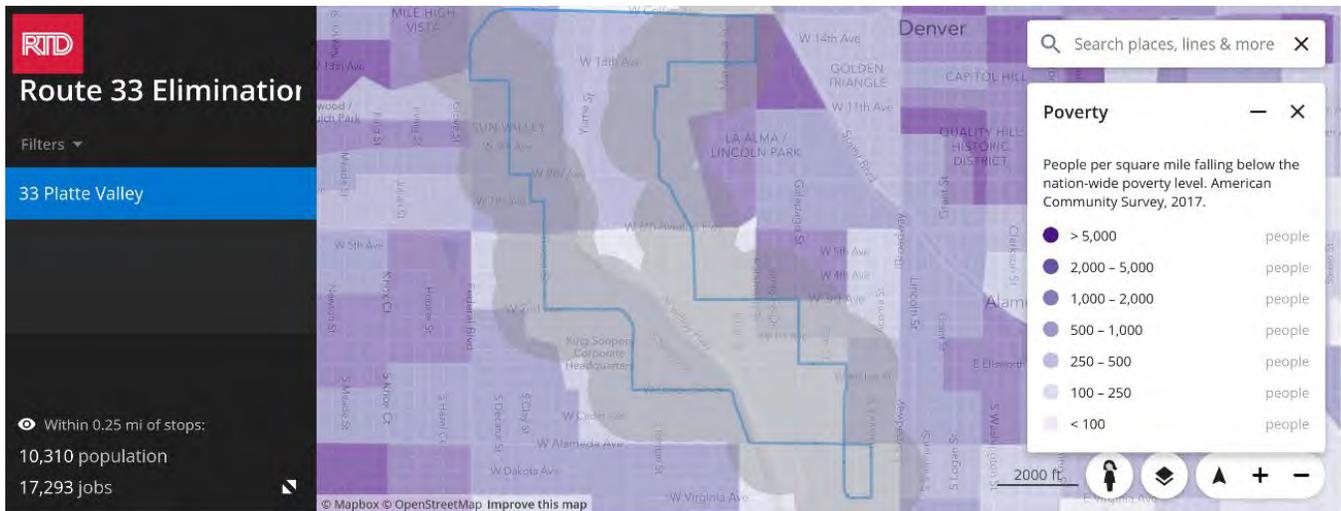
Figure 1 – Route 33 Minority Map



¹ American Community Survey - 2016 5-Year Estimates

² 2013 American Community Survey (2013)

Figure 2 – Route 33 Low-income Map



Conclusion

The primary objective for this analysis was to examine proposed service changes to ensure minority and low-income populations would not be more adversely affected than non-minority and non-low-income populations. An analysis of demographic data has shown the proposed service changes would result in a disparate impact and would not result in a disproportionate burden. The minority population in proximity to this route is 20% higher than the minority population in the service area. This proposed change exceeds the disparate impact threshold by 10%.

The route 33 ridership has consistently fallen below ridership thresholds for urban routes (a minimum of 12.2 boardings per hour). Though the low ridership is legitimate reason to reduce service, the disparate impact requires staff to identify the least discriminatory alternative.

Based on these findings, it recommended that the proposed discontinuance of the route 33 be rescinded and replaced with a less impactful alternative.