

Equity Analysis for Proposed Service Changes



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Ann Arbor Area Transportation Authority

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Table of Contents and Figures

1. Introduction	1
Background	1
Proposed Service Changes	2
Procedures	3
Data Sources	4
2. Analysis	5

1. Introduction

Background

The Federal Transit Administration (FTA) requires every transit agency with more than 50 fixed-route buses and which receives federal funding—to conduct a service equity analysis for all major service changes. The purpose of the analysis is to determine whether the service changes will have a disparate impact on minorities protected by Title VI of the Civil Rights Act of 1964 or will place a disproportionate burden on persons with low income, as defined in Presidential Executive Order 12988. Title VI specifically states, “No person in the United States shall on the grounds of race, color or national origin be excluded from participation in, be denied the benefits of, or be subject to discrimination under any program or activity receiving federal financial assistance.”

The Ann Arbor Area Transportation Authority (AAATA), doing business as TheRide, proposes implementing service changes in August 2021 as part of its Service Restoration Plan. Several of the proposed changes meet the locally defined threshold for a major service change, as required by Federal Transit Administration Circular 4702.1B. This service equity analysis report will assess the proposed major service changes and identify any disparate impacts or disproportionate burdens that may be created.

If disparate impacts are found, the FTA requires that the proposed service changes be modified to eliminate them. Alternatively, the board of directors of TheRide must pass a motion stating that the proposed changes are consistent with the legitimate business goals of TheRide and that no less discriminatory option exists to achieve the same business goals. If any disproportionate burdens are found, TheRide must provide a written justification to the AAATA board of directors for the proposed service change and the service equity analysis, which shows that no alternatives exist that would accomplish the legitimate objectives of TheRide with fewer disproportionate effects. The FTA does permit service changes that create a disproportionate burden to be implemented even if mitigation is not possible. Unlike with a finding of disparate impacts, the board of directors is not required to pass a specific motion for the FTA.

In April 2014, the AAATA adopted an Equity Analysis Policy with the following definitions:

Disparate Impact

- 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 exist alternatives that would serve the

same legitimate objectives but with less disproportionate effect on the basis of race, color, or national origin.

Disproportionate Burden

- Disproportionate burden refers to a neutral policy or practice that disproportionately affects low-income populations more than non-low-income populations. A finding of disproportionate burden requires the recipient to evaluate alternatives and mitigate burdens where practicable.

Disparate impacts can be created when service is reduced on routes that minorities predominantly use or if service improvements are implemented and the benefits accrue predominantly to non-minorities. Similarly, disproportionate burdens can be created when service is reduced on routes that persons with limited incomes predominantly use. A disproportionate burden can also be created if a service improvement is implemented that predominantly benefits riders who do not have limited incomes.

Minority Persons

Minorities include persons identifying as belonging to any of the following races or ethnic groups:

- American Indian and Alaska Native
- Asian
- Black or African American
- Hispanic or Latino, regardless of race
- Native Hawaiian or other Pacific Islander

Low-Income Populations

Low-income population refers to any readily identifiable group of low-income persons who live in geographic proximity and, if circumstances warrant, to geographically dispersed/transient persons (such as migrant workers or Native Americans) who a proposed FTA program, policy, or activity will similarly affect.

In practice, the AAATA has also expanded the definition of a low-income person since the policy was adopted to include a larger segment of the population. This change fits with the best practices of transit systems nationwide that understand that the federal poverty line is too low.

- Low-income person means a person whose median household income is at or below 150 percent of the US Department of Health and Human Services poverty guidelines.

Proposed Service Changes

A service equity analysis is required for major service changes, which are defined as changes to routing, frequency, span of service, or days of the week and involves the following:

- More than 25 percent of riders on a route, or;
- More than 25 percent of the miles of a route, or;
- Changes on multiple routes that affect more than 10 percent of the riders or route miles of the overall fixed-route system.

The service changes in the service restoration plan that meet the major service change definition include the following:

- Route 21—Discontinuation of full route
- Route 41—Discontinuation of full route
- Route 45—Fixed-route service replaced with FlexRide
- Route 46—Fixed-route service replaced with FlexRide
- Route 81—Discontinuation of full route
- Route 91—Discontinuation of full route
- Route 92—Discontinuation of full route

The proposed elimination of routes 21, 41, 81, 91, and 92 requires a full Title VI and environmental justice equity analysis. The FTA does not require an equity analysis for the conversion of a fixed-route service to FlexRide (Routes 45 and 46) if the same level of service, including area served, span of service, frequency, and days of the week operated, is the same as for the prior fixed-route operation.

The overall service restoration plan does not involve routes totaling 10 percent of riders or miles.

Procedures

TheRide policy governing the calculation of the impact of service changes on minority and low-income populations was adopted in April 2014 after the FTA revised its guidance on equity analysis in 2012. The policy states that TheRide will ensure the following:

- Measure the impact of proposed major service changes and proposed fare changes—positive and negative—on minority and low-income populations;
- Compare the impact with that on nonminority and non-low-income populations;
- Determine whether a disparate impact on minority riders and/or a disproportionate burden on low-income riders would result and, if so, explore measures to avoid or mitigate the disparate impact; and/or

- Identify and consider disproportionate burdens.

This equity analysis will be made available to the public as part of the public input process carried out, as described in the AAATA Public Input policy for Service and Fare Changes (2011).

Procedure for Analysis of Changes to the Days of Service

The procedures for analyzing an increase in the days of operation are specified in the policy as follows:

- Increase in the days of operation of a route or routes: A finding of disparate impact is made if a) the service improvement is on nonminority route(s), and b) after the change, the route(s) with increased days of service operate on days on which the majority of minority routes do not operate. Similarly, disproportionate burden exists if a) the service improvement is on non-low-income route(s), and b) after the change, the route(s) with increased days of service operate on days on which the majority of low-income routes do not operate.

The inverse would apply in the case of reduced days of service:

- Decrease in the days of operation of a route or routes: A finding of disparate impact is made if a) the service reduction is on minority route(s), and b) after the change, the route(s) with decreased days of service do not operate on days on which the majority of non-minority routes do operate. Similarly, disproportionate burden exists if a) the service reduction is on low-income route(s), and b) after the change, the route(s) with decreased days of service do not operate on days on which the majority of non-low-income routes do operate.

Data Sources

The FTA guidance permits transit agencies to use either the federal census or onboard surveys to calculate disparate impacts and disproportionate burdens for service changes. Although onboard surveys might seem to provide more precise information regarding the demographics of ridership, frequent minor service changes and small sample sizes on some routes make the use of onboard data statistically unreliable. TheRide, like most transit agencies, will use demographic data from the federal census and the American Communities Survey conducted by the Census Bureau, which are statistically accurate.

2. Analysis

A total of five routes are proposed for service reduction, resulting in the complete elimination of service: Routes 21, 41, 81, 91, and 92. All five routes proposed for elimination are low-income routes, which means the census tracts within 0.25 mil of the discontinued routes have a higher proportion of people living below the federal poverty line than the service area as a whole. None of the five routes are minority routes because all five routes serve a lower percentage of minority residents than those routes found on average in the service area. The findings are based on the analysis shown in Figure 1.

Figure 1 – Equity Analysis of Discontinued Routes Based on Census Tracts

Route	Low Income	Minority	Low Income	Minority	Proposed Days of Operation
Service Area	22.6%	37.7%			
21	52.4%	32.5%	Yes	No	0
41	33.8%	32.2%	Yes	No	0
81	59.2%	33.0%	Yes	No	0
91	50.0%	35.8%	Yes	No	0
92	44.0%	37.5%	Yes	No	0

- Median number of service days/week per week for non-low-income routes being operated: 6 days per week
- Median number of service day/week for low-income routes being discontinued: 0 days per week

Findings

Discontinuing Routes 21, 41, 81, 91, and 92 creates a disproportionate burden because the eliminated routes serving low-income areas will provide service on fewer days per week than the majority of non-low-income routes.

None of the routes proposed for elimination are minority routes, so no disparate impacts are created.

Mitigation

The FTA guidance for equity analysis requires transit systems to identify any possible mitigations for disproportionate burdens that may be found. However, if no mitigations are possible, the proposed changes may still proceed.

The rerouting of Route 33 to the Amtrak Depot partially mitigates the elimination of Route 21. On weekends, Route 22 is available for this coverage.

The availability of TheRide Vanpool services mitigates the elimination of Routes 81, 91, and 92.

The continued operation of Routes 3, 4, and 5, which serve the same destinations, mitigates the loss of Route 41. Route 41 was a shuttle service designed to link Eastern Michigan University (EMU), College of Business, with the main EMU campus. The College of Business was relocated to the main campus, eliminating the need for the extra capacity provided by the shuttle.

Alternatives to Discontinuing Routes 21, 41, 81, 91, and 92

Though discontinuing Routes 21, 41, 81, 91, and 92 creates a disproportionate burden, TheRide believes that no alternatives exist that would accomplish same business goals set by the Board's Ends with fewer disproportionate effects.

For this service recovery plan, TheRide identified five guiding principles at the beginning of this planning process based on the Board's Ends policies:

- Restore pre-pandemic service hours.
- Maintain similar service coverage.
- Improve service reliability with focus on routes with high ridership.
- Review and modify routes and service levels with low ridership to better utilize limited resources – this would include both geographic areas and different service periods where routes are not performing well.
- Simplify route branching structure to make them easy to understand, communicate, and use.

The initial service proposal was developed following these principles and reviewed by the public in March and April. This final service plan reflects the community's feedback gathered during the public and stakeholder engagement process.

Every route in TheRide network, except one, is identified as a low-income route, with a higher percentage of low-income riders than are present in the general population. The only non-low-income route in the network is Route 66, with 17.8 percent low-income riders. Route 66 has significantly higher ridership than the routes proposed for elimination and cutting this service would leave a major gap in the system.

It would not be possible to find operational savings of the same magnitude without cutting other low-income routes with higher ridership. The savings from cutting routes 21, 41, 81, 91, and 92 have been reallocated to improve service reliability of high ridership routes in other low-income areas as service is restored. This is consistent with the business goals set by the Board's Ends policies.