



**Title VI Service Equity Analysis: May 2023 Service Change**

**April 7, 2023**

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## I. Executive Summary

TriMet is proposing to implement several service changes May 2023. In accordance with Title VI of the Civil Rights Act of 1964 and FTA Circular 4702.1B, TriMet conducts a Service Equity Analysis to ensure that minority and low-income populations are not unfairly impacted any time Major Service Changes are proposed. The May 2023 service change include Major Service Changes for two bus lines, which require an analysis prior to action by the TriMet Board of Directors.

### A. Methodology

TriMet's Title VI Program outlines the agency's Major Service Change, Disparate Impact, and Disproportionate Burden policies and Equity Analyses. TriMet analyzes Major Service Changes for potential adverse effects and distribution of benefits based on race/ethnicity or income at the individual line-level and system-level.

### B. Major Service Changes

The proposed changes to two lines meet TriMet's thresholds for Major Service Changes:

Line 17-Holgate/Broadway  
Line 70-12th/NE 33rd Ave

### C. Findings

1. There is a **potential line level disparate impact** for one Major Service Improvement
2. There are **no system-level disparate impacts or disproportionate burdens** for the Major Service Improvements
3. **Minority and low-income populations will not benefit substantially less** from the Major Service Improvements than non-minority and higher income populations.

## II. Background

TriMet proposes major service change to two bus lines to begin implementing the Forward Together Service Concept focused on ridership and improving connections to destinations for people with low and limited incomes. Other changes proposed for May 2023 do not meet the Major Service Change threshold to be reviewed in this analysis.

This report documents the equity analysis conducted for the major service changes.

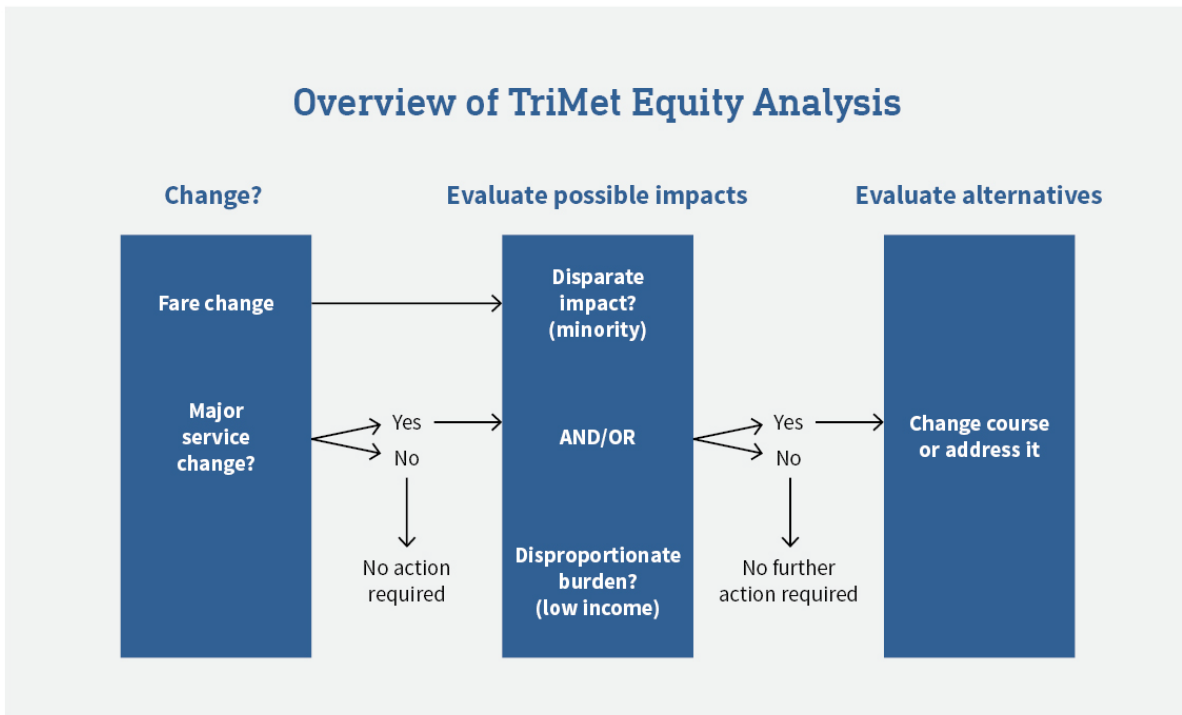
## III. TriMet Title VI Compliance

As a recipient of Federal Transit Administration (“FTA”) financial assistance, TriMet must ensure that service changes – both improvements and reductions – comply with Title VI of the Civil Rights Act of 1964, which 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.”*

The FTA has provided specific implementing guidelines and regulations for complying with Title VI in Circular 4702.1B (“Circular”). The Circular instructs transit agencies to consider impacts of Major Service Changes on low-income populations and minority populations by conducting a service equity analysis. Figure 1 shows the general sequence of steps and considerations in the equity analysis process.

**Figure 1: Overview of TriMet's Title VI Equity Analysis process**



TriMet’s Title VI Program outlines the agency’s policies, definitions and procedures for complying with Title VI and performing equity analyses. As required by the Circular, this includes the agency’s Major Service Change, Disparate Impact, and Disproportionate Burden policies, outlined below.

### A. Major Service Change Policy

Any service change that meets the Major Service Change threshold is subject to a Title VI Equity Analysis prior to Board approval. The completed Title VI Equity Analysis must be presented to the Board for consideration and included in the subsequent TriMet Title VI Program with a record of action taken by the Board.

**A Major Service Change is:**

1. A change to **15% or more of a line's route miles**. This includes routing changes where route miles are neither increased nor reduced (i.e. re-routes), or;
2. A change of **15% or more to a line's span** of service on a daily basis for the day of the week for which a change is made, as measured by revenue hours, or;
3. A change of **15% or more to a line's frequency** of service on a daily basis for the day of the week for which a change is made, as measured by revenue hours, or;
4. A single transit line is **split** into two or more transit lines,
5. A transit line is retired or eliminated from service, or;
6. A **new transit line** is established.

A Major Service Change occurs whether the above thresholds are met:

- a) Within a single service proposal, or;
- b) Due to a cumulative effect of routing, span, or frequency changes over the three years prior to the analysis

## **B. Disparate Impact Policy**

Testing for Disparate Impact evaluates effects on minority riders or populations as compared to non-minority riders or populations. "Minority" is defined as all persons who identify as being part of racial/ethnic groups besides white, non-Hispanic.

In the course of performing a Title VI Equity Analysis for possible disparate impact, TriMet will analyze how the proposed major service change or fare change action could impact minority populations, as compared to non-minority populations.

In the event the proposed action has an adverse impact that affects protected populations more than other populations at a level that exceeds the benchmarks established in the adopted Disparate Impact Policy, or that restricts the benefits of the service change to protected populations, the finding would be considered as a potential Disparate Impact. Given a potential Disparate Impact, TriMet will evaluate whether there is an alternative that would serve the same objectives and with a more equitable impact. Otherwise, TriMet will take measures to minimize or mitigate the adverse impact of the proposed action.

The Disparate Impact Policy defines measures for determination of potential Disparate Impact on minority populations resulting from Major Service Changes or any change in fares. The policy is applied to both adverse effects and benefits of Major Service Changes. Adverse effects of service changes are defined as:

1. A decrease in the level of transit service (hours, days, and/or frequency); and/or
2. Decreased access to comparable transit service, which is defined as an increase of the access distance to beyond one-quarter mile of bus stops or one-half mile of rail stations.

The determination of disparate impact associated with service changes is defined separately for impacts of changes on an individual line, and for system-level impacts of changes on more than one line, as well as for both service reductions and service improvements.

1. In the event of potential adverse effects resulting from service reductions:
  - a) A Major Service Change to a *single line* will be considered to have a potential Disparate Impact if the percentage of impacted minority population in the service area of the line exceeds the percentage of minority population of the TriMet District as a whole by at least 3 percentage points (e.g., 35 percent compared to 32 percent).
  - b) To determine the *system-wide* impacts of Major Service Change reductions on more than one line, the percentage of the TriMet district's minority population that is impacted is compared to the percentage of the TriMet district's non-minority population that is impacted. If the percentage of the minority population impacted is at least 20 percent greater than the percentage of the non-minority population impacted (e.g., 12 percent compared to 10 percent), the overall impact of changes will be considered disparate.
2. In the event of service improvements:
  - a) A major service change to a *single line* will be considered to have a potential Disparate Impact if:
    - i. The improvement is linked to other service changes that have disproportionate and adverse effects on minority populations, or;
    - ii. The percentage of impacted minority population in the service area of the line is less than the percentage of minority population of the TriMet District as a whole by at least 3 percentage points (e.g., 29 percent compared to 32 percent).
  - b) To determine the *system-wide* impacts of major service change improvements on more than one line, the percentage of the TriMet district's minority population that is impacted is compared to the percentage of the TriMet district's non-minority population that is impacted. If the percentage of the minority population impacted is at least 20 percent less than the percentage of the non-minority population impacted (e.g., 8 percent compared to 10 percent), the overall impact of changes will be considered disparate.
3. Additional considerations to complement the quantitative Disparate Impact analysis above may include evaluating impacts to accessing employment, education, food, or health care for minority populations.

Upon determination of Disparate Impact, TriMet will either:

- a) Alter the service proposal to avoid, minimize, or mitigate potential Disparate Impacts, or;

- b) Provide a substantial legitimate justification for keeping the proposal as-is, and show that there are no alternatives that would have a less Disparate Impact on minority riders but would still accomplish the project or program goals.

**C. Disproportionate Burden Policy**

Testing for Disproportionate Burden evaluates potential effects on low-income riders or populations, defined as at or below 150% of the federal poverty level. The line and system level evaluations are identical to those used to determine potential Disparate Impacts, but compare low-income and higher income populations rather than minority and non-minority populations.

**IV. Proposed Service Changes**

**A. Description of Changes**

Table 1 lists the proposed changes by the type of service change:

**Table 1: Proposed Service Changes in FY2024 Annual Service Plan**

Line	Service Change Description
Line 17-Holgate/Broadway	➤ Increase frequency and span on the SE Holgate segment of Line 17.
Line 70-12th/NE 33rd Ave	➤ Route change to SE Ladd, 21 <sup>st</sup> , Milwaukie, & 17th

**B. Major Service Change Test**

To determine whether individual service changes meet the definition of Major Service Change, current and proposed route length and/or revenue hours are compared. Changes of 15% or more qualify as Major Service Changes, including changes meeting this threshold cumulatively over three years.

Results of the comparison are shown in Table 2:

**Table 2: Results of Major Service Change Test By Line**

Line	Route Change/Route Length Change	Frequency/Span Change	Line Split	Eliminate Line	New Line or Service
Line 17		+15%			
Line 70	+15%				

## C. Line-level Analyses

Having identified the service changes which meet the definition of Major Service Change, the next step in the analysis is to look at each line individually to determine potential Disparate Impacts (minority populations) and/or Disproportionate Burdens (low-income populations).

Both service reductions and service improvements are analyzed. For service improvements, the analysis examines the extent to which the *benefits* of the improvements are inclusive of minority and low-income populations.

The line-level analysis compares minority and low-income populations within ¼ mile buffers of bus stops on each line proposed for a Major Service Change to the minority and low-income populations of the TriMet District as a whole. The analysis is separated by type of service change being proposed:

1. **Major Service Reduction**
2. **Major Service Improvements**
3. **Other Major Service Changes**

### 1. **Major Service Reduction**

For service reductions, the analysis examines whether *adverse effects* are disproportionately borne by minority or low-income populations. If *adverse effects* are identified and a line's minority and/or low-income populations are at least 3 percentage points greater than the minority or low-income populations for the TriMet District as a whole, the proposed change is flagged as a potential Disparate Impact or Disproportionate Burden.

The May 2023 service change includes **one Major Service Reduction** for the Line 70, due to the proposed Route Change that “Decreased access to comparable transit service, which is defined as an increase of the access distance to beyond one-quarter mile of bus stops or one-half mile of rail stations” as outlined in the Disparate Impact Policy.

The results of the line-level potential Disparate Impact and Disproportionate Burden analyses shown in Tables 3 & 4:



**Table 3: Potential Line-Level Major Service Reduction Disparate Impact Analysis**

A Major Service Reduction to a single line will be considered to have a potential Disparate Impact if the percentage of impacted minority population in the service area of the line exceeds the percentage of minority population of the TriMet District as a whole by at least 3 percentage points (e.g., 35 percent compared to 32 percent).

Percent minority population for entire TriMet District: 32.0%

Line	Total Line Population	Minority Population	Percent Minority Population	Single Line Disparate Impact (>=35.0%)
70	15,642	2,795	17.9%	NO

Sources: TriMet GIS, Metro Regional Land Information System, and US Census American Community Survey Table: 2017-2021 (5-Year Estimates) Table B03002-Hispanic or Latino Origin By Race <https://trimet.org/equity/pdf/TriMet-2022-Title-VI-Program-Update.pdf#page=40>

**Table 4: Potential Line-Level Major Service Reduction Disproportionate Burden Analysis**

A Major Service Reduction to a single line will be considered to have a potential Disproportionate Burden if the percentage of impacted low-income population in the service area of the line exceeds the percentage of low-income population of the TriMet District as a whole by at least 3 percentage points (e.g., 19.8 percent compared to 16.8 percent).

Percent population earning below 150% federal poverty level for the entire TriMet service district: 16.8%

Line	Total Line Population	Population Below 150% FPL	Percent Population Below 150% FPL	Single Line Disproportionate Burdens (>=19.8%)
70	15,538	2,589	16.7%	NO

Sources: TriMet GIS, Metro Regional Land Information System, and US Census American Community Survey 2017-2021 5Y Estimates Table: Table C17002-Ratio Of Income To Poverty Level In The Past 12 Months (Block Group Level Data) <https://trimet.org/equity/pdf/TriMet-2022-Title-VI-Program-Update.pdf#page=42>

**2. Major Service Improvements**

For service improvements, the analysis examines whether *benefits* are inclusive of minority and low-income populations. If *benefits* are identified and a line’s minority and/or low-income populations are at least 3 percentage points less than the minority or low-income populations for the TriMet District as a whole, the proposed change is flagged as a potential Disparate Impact or Disproportionate Burden.

The May 2023 service change includes **two Major Service Improvements** for the Line 17 Increase in Frequency/Span and for the Line 70 Route Change that added service to new areas.

The results of the line-level potential Disparate Impact and Disproportionate Burden analyses shown in Tables 5 & 6:

**Table 5: Potential Line-Level Major Service Improvement Disparate Impact Analysis**

A Major Service Improvement to a single line will be considered to have a potential Disparate Impact if the percentage of impacted minority population in the service area are at least 3 percentage points less than the minority populations for the TriMet District as a whole (e.g., 29 percent compared to 32 percent).

Percent minority population for entire TriMet District: 32.0%

Line	Total Line Population	Minority Population	Percent Minority Population	Single Line Disparate Impact (<=29.0%)
17	71,271	20,861	29.3%	No
<b>70</b>	<b>20,127</b>	<b>4,680</b>	<b>23.2%</b>	<b>Yes</b>

Sources: TriMet GIS, Metro Regional Land Information System, and US Census American Community Survey Table: 2017-2021 (5-Year Estimates) Table B03002-Hispanic or Latino Origin By Race <https://trimet.org/equity/pdf/TriMet-2022-Title-VI-Program-Update.pdf#page=40>

**Table 6: Potential Line-Level Major Service Improvement Disproportionate Burden Analysis**

A Major Service Improvement to a single line will be considered to have a potential Disproportionate Burden if the percentage of impacted low-income population in the service area are at least 3 percentage points less than the low-income populations for the TriMet District as a whole (e.g., 13.8 percent compared to 16.8 percent).

Percent population earning below 150% federal poverty level for the entire TriMet service district: 16.8%

Line	Total Population	Population Below 150% FPL	Percent 150% Below FPL Population	Single Line Disproportionate Burdens (<=13.8%)
17	67,864	14,691	21.6%	NO
70	19,787	3,439	17.4%	No

Sources: TriMet GIS, Metro Regional Land Information System, and US Census American Community Survey 2017-2021 5-Year Estimates Table: Table C17002-Ratio Of Income To Poverty Level In The Past 12 Months (Block Group Level Data) <https://trimet.org/equity/pdf/TriMet-2022-Title-VI-Program-Update.pdf#page=42>

➤ **Line 70 (Route length change)**

This change would increase service for a population that is below the Disparate Impact threshold (29%) for Major Service Improvements. This indicates a **potential Disparate Impact**, calling for further examination in the system-level analysis section

**3. Other Major Service Changes**

There are no Other Major Service Changes.

**D. System-level Analysis**

Because more than one line is proposed for a Major Service Change, a system-level analysis is required in addition to the line-level analysis. The system-level analysis aims to measure impacts of all Major Service Changes combined to determine how equitable the impacts would be across racial/ethnic and

economic lines. Service increases and service reductions are analyzed separately in order to examine both potential system-level *adverse effects* and distribution of *benefits*.

➤ ***System-level Disparate Impact Analysis: Major Service Improvements***

The system-level Disparate Impact analysis of Major Service Increases is completed by determining what portion of the TriMet District’s minority population stands to benefit from the Major Service Change improvements, and comparing that to the portion of the District’s non-minority population that potentially benefits. A potential Disparate Impact would exist if minority populations benefitted substantially less than non-minority populations. The way we measure this is to test whether 20% less (or 4/5) of the District’s minority than non-minority population stood to benefit from the improvements.

Table 7 compares the impacted minority and non-minority populations:

**Table 7: System-Level Major Service Improvements Disparate Impact Analysis**

Population Category	District-Wide Population	May 2023 Service Improvement Impacted Population	Percent Impacted Population	System-wide Disparate Impact (Minority Pop Percentage <= 4.7%)
Minority	528,988	25,541	4.8%	NO
Non-Minority	1,121,634	65,858	5.9%	
Sources: TriMet GIS, Metro Regional Land Information System, and US Census American Community Survey Table: 2017-2021 (5-Year Estimates) Table B03002-Hispanic or Latino Origin By Race <a href="https://trimet.org/equity/pdf/TriMet-2022-Title-VI-Program-Update.pdf#page=40">https://trimet.org/equity/pdf/TriMet-2022-Title-VI-Program-Update.pdf#page=40</a>				

A higher percentage of the District’s non-minority population (5.9%) stands to benefit from the proposed Major Service Improvements, compared to the minority population (4.8%). However, this is not less than the minority population disparate impact threshold (4.7%). Therefore, a ***system-level Disparate Impact is not found for the proposed Major Service Improvements.***

➤ ***System-level Disproportionate Burden Analysis: Major Service Improvements***

The System-level Disproportionate Burden analysis is completed by determining what proportion of the TriMet District’s low-income population is positively impacted by the Major Service Increases, and comparing that to the District’s higher income population that is positively impacted. “Higher income” includes all persons above the low-income threshold of 150% of the federal poverty level. A potential Disproportionate Burden would exist if low-income populations benefitted substantially less than higher income populations. The way we measure this is to test whether 20% less (or 4/5) of the District’s low-income than higher income population stands to benefit from the improvements.

Table 8 compares the impacted low-income and higher income populations:

**Table 8: System-Level Major Service Improvements Disproportionate Burden Analysis**

Population Category	District-Wide Population	FY2024 Service Improvement Impacted Population	Percent Impacted Population	System-Wide Disproportionate Burden (Low-Income Pop Percentage <=4.1%)
Below 150% of FPL	273,937	18,130	6.6%	NO
Above 150% of FPL	1,355,683	69,521	5.1%	
Sources: TriMet GIS, Metro Regional Land Information System, and US Census American Community Survey 2017-2021 5-Year Estimates Table: Table C17002-Ratio Of Income To Poverty Level In The Past 12 Months (Block Group Level Data) <a href="https://trimet.org/equity/pdf/TriMet-2022-Title-VI-Program-Update.pdf#page=43">https://trimet.org/equity/pdf/TriMet-2022-Title-VI-Program-Update.pdf#page=43</a>				

A higher percentage of the District’s low-income population stands to benefit from the proposed Major Service Improvements (6.6%) compared to the higher income population (5.1%). Therefore, a *system-level Disproportionate Burden is not found for the proposed Major Service Improvements.*

Because only one line is proposed for a Major Service Reduction, a system-level analysis is not required.

## V. Community Engagement

TriMet staff conducted two rounds of public outreach, which resulted in over 5,000 comments being submitted.

The first outreach process occurred in September – October 2022 and requested public comment on all the service changes in the Forward Together Service Concept. Staff made information available on [trimet.org/forward](http://trimet.org/forward), included a survey in eight languages via an online language translation tool, advertised to the community through social media (Facebook and Twitter) and handouts translated into eight languages (English, Spanish, Korean, Vietnamese, Chinese, Ukrainian, Russian, and Somali). The survey was also advertised to TriMet’s Riders Club via email, to customers at transit centers via e-readers at the stops with QR codes, and employees via ExpressLine, the online employee newsletter. The survey received 4,597 responses, of which 124 were completed in a language other than English. In addition to the online outreach, TriMet staff conducted six in-person open house meetings and one virtual open house meeting. All of the open houses featured some non-English language translation depending on where they were located.

The second outreach process occurred in January – February 2023 and requested comment on the specific service changes in the Forward Together Service Concepts proposed to be implemented in the FY2024 Annual Service Plan. Staff made information available on [trimet.org/plan](http://trimet.org/plan) and through eleven in-person open house meetings and six virtual events. All in-person events featured some non-English language translation depending on location. The proposed changes and open houses were also advertised on KATU, KGW, KOIN, Fox News, and in newspapers such as the Oregonian, Willamette Week, and the Statesman Journal. TriMet also promoted the service changes on social media (Facebook and Twitter). Visitors to the webpage submitted 1,115 comments.

The following is a summary of themes across the feedback received for Line 70:

- Reliability – Riders supported the change to avoid the rail crossing that led to lengthy and unpredictable delays
- Access to Schools – Riders supported the change to bring serve closer to Cleveland High School
- Route Change – Riders shared support and concern about the route change that impact travel time and ability to access destinations

The Line 17-Broadway/Holgate changes were included in the Sept.-Oct. public process for Forward Together Service Concept, but not the Jan.-Feb. public process for the FY24 Service Changes. This is because the Line 17-Holgate service changes weren't in the original proposal for the FY24 Service Changes. However, they were added in response to feedback received regarding the Line 70-12<sup>th</sup>/NE33rd service changes shared with the community during the public process for the FY24 changes. As a result, the Line 17 service changes were added as a mitigation to an issue raised during the community engagement for Line 70. Community outreach will occur prior to implantation of the change in May 2023.

## VI. Summary of Findings

Table 9 summarizes the results of the line-level Disparate Impact and Disproportionate Burden analyses:

**Table 9: Summary of Disparate Impact and Disproportionate Burden Analysis Results**

		Potential Disparate Impact?	Potential Disproportionate Burden?
<b>Major Service Reductions</b>	Line 70-12th/NE 33rd Ave	No	No
	<b>Combined Reductions (System-level)</b>	N/A	N/A
<b>Major Service Improvements</b>	Line 17-Holgate/Broadway	No	No
	Line 70-12th/NE 33rd Ave	Yes	No
	<b>Combined Improvements (System-level)</b>	No	No
<b>Other Major Service Changes</b>		-	-

While potential a disparate impact was identified for the Major Service Improvement on Lines 70, TriMet staff recommend making the route length change to improve school access to schools and address reliability issues due to the rail crossing.

## May 2023 Service Change Equity Analysis

Since no system-level disparate impact or disproportionate burden were found for the Major Service Improvements, the service area's minority and low-income populations will not benefit substantially less from the improvements than non-minority and higher income populations.