



Title VI Service Equity Analysis: January 2022 Service Changes

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On Behalf Of

TriMet's Department of Transit Equity, Inclusion, and Community Affairs

Executive Summary

TriMet is proposing to retroactively adopt emergency service changes dating back to January 2022. In accordance with Title VI of the Civil Rights Act of 1964 and FTA Circular 4702.1B, TriMet conducts a Service Equity Analysis any time Major Service Changes are proposed to ensure that changes do not unfairly impact people of color and low-income populations. The emergency service changes includes Major Service Changes to nine bus lines. Thus, an analysis is required prior to the TriMet Board of Directors taking action.

Methodology

TriMet's Title VI Program outlines the agency's Major Service Change, Disparate Impact, and Disproportionate Burden policies, as well as the way in which TriMet conducts Equity Analyses. Major Service Changes are analyzed for both potential adverse effects and distribution of benefits. This is done at both the individual line-level and system-level, and the analysis seeks to identify any potential disparities based on race/ethnicity or income.

Major Service Changes

The proposed changes to nine existing lines meet TriMet's established thresholds for Major Service Changes:

- Line 4 – Fessenden
- Line 15 – Belmont/NW 23rd
- Line 32 – Oatfield
- Line 33 – McLoughlin/King Rd.
- Line 35 – Macadam/Greeley
- Line 52 – Farmington/185th
- Line 54 – Beaverton Hillsdale Highway
- Line 56 – Scholls Ferry Rd.
- Line 67 – Bethany/158th

Findings

1. **There is a line level and system level disparate impact** for the one major service increase.
2. **No line level or system level disproportionate burden** for the 1 major service increase.
3. **No system level disparate impact** for the 8 major service decreases.
4. **There is a system level disproportionate burden** for the 8 major service decreases.
5. A majority of the reductions are on lines in service areas with **below average minority populations**. As a result, a greater share of the region's non-minority populations will stand to receive more of the **burden** as compared to minority populations.
6. A majority of the reductions are on lines in areas with **average-or-above low-income populations**. As a result, a greater share of the region's low-income populations will stand to receive more of the **burden** as compared to higher income populations.

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I. Background

At the close of 2021, due to an ongoing inability to recruit and train adequate numbers of bus operators, along with a rising attrition rate, TriMet was unable to fulfill the service levels currently scheduled for its bus routes. As a result, on January 9, 2022, TriMet again instituted a temporary, emergency service reduction on the bus lines that had been restored in August 2020. In addition to the reductions, TriMet restored service to a portion of Line 32-Oatfield that had been inadvertently reduced during the April 2020 service reduction. The Major Service Changes presented here represent TriMet's emergency service changes.

This report documents the equity analysis conducted for these changes.

II. TriMet Title VI Compliance

As a recipient of Federal Transit Administration ("FTA") financial assistance, TriMet must ensure that service changes – both increases 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 as well as minority populations by conducting a service equity analysis. Figure 1 shows the general sequence of steps and considerations in the equity analysis process.

TriMet's Title VI Program¹ 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, as set forth below.

A. Major Service Change Policy

All changes in service meeting the definition of Major Service Change are subject to a Title VI Equity Analysis prior to Board approval of the service change. A Title VI Equity Analysis will be completed for all Major Service Changes and will be presented to the Board for its consideration and included in the subsequent TriMet Title VI Program with a record of action taken by the Board.

¹ TriMet's Title VI Program was updated and submitted to FTA in fall 2019

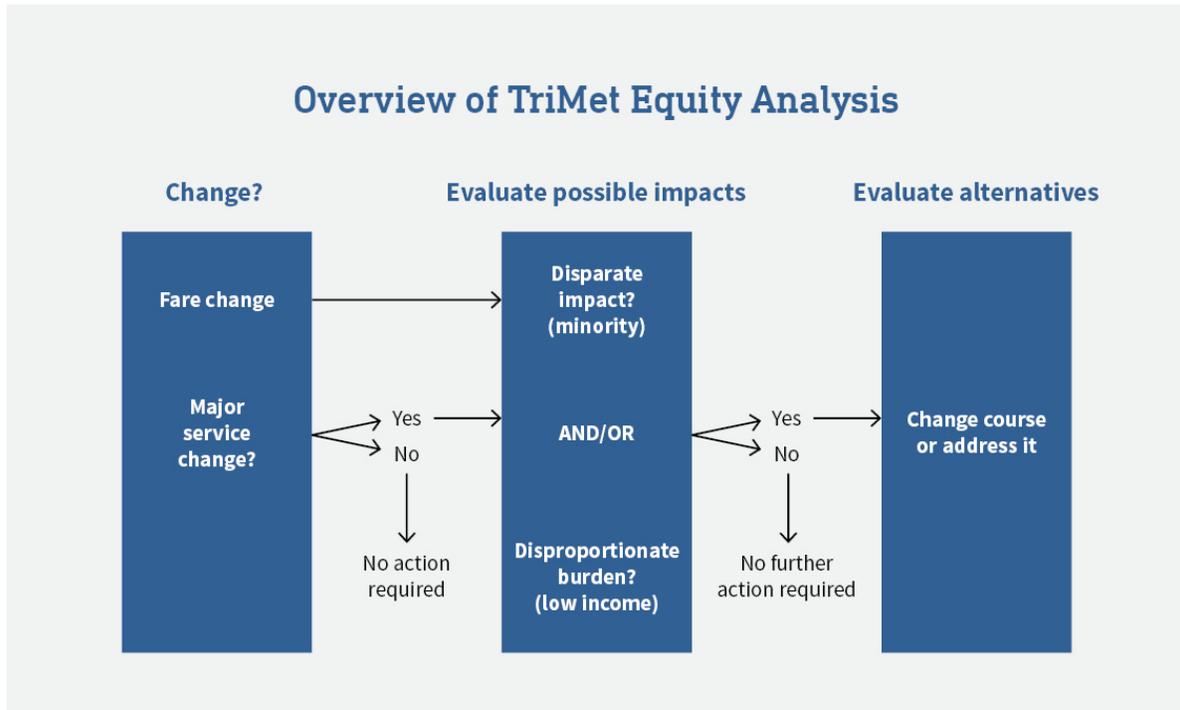


Figure 1: Overview of TriMet's Title VI Equity Analysis process

A **Major Service Change** is defined as:

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** (hours) of service on a daily basis for the day of the week for which a change is made, 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, 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 (span in days and/or hours, 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., 33 percent compared to 30 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., 27 percent compared to 30 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.

III. Proposed Service Changes

A. Description of Changes

Table 1 lists the proposed service changes by the quarter in which they would take effect. A majority of the changes proposed for the next year are service increases. However, one of the proposed changes

Table 1: January 2022 Emergency Service Changes

Date	Line	Service Change Description
January 9, 2022	Line 4 – Fessenden	➤ Reduce weekday frequency
	Line 15 – Belmont/NW 23rd	
	Line 33 – McLoughlin/King Rd.	
	Line 35 – Macadam/Greeley	
	Line 52 – Farmington/185th	
	Line 54 – Beaverton Hillsdale Highway	
	Line 56 – Scholls Ferry Rd.	
	Line 67 – Bethany/158th	
	Line 32 – Oatfield	➤ Increase weekday frequency service

Note: The emergency service changes also include some minor changes to several bus lines (8, 12, 17, 21, 30, 62, 71, 75, 76, and 78). However, these changes are not included in this analysis because they are too small to reach the Major Service Change threshold.

B. Major Service Change Test

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

Results of the comparison are shown in Table 2. To summarize, these changes meet TriMet’s adopted Title VI Major Service Change definition:

- Line 4 – Fessenden:** Frequency decrease of over 15% on weekdays
- Line 15 – Belmont/NW 23rd:** Frequency decrease of over 15% on weekdays
- Line 32 – Oatfield:** Frequency increase of over 15% on weekdays
- Line 33 – McLoughlin/King Rd:** Frequency decrease of over 15% on weekdays
- Line 35 – Macadam/Greeley:** Frequency decrease of over 15% on weekdays
- Line 52 – Farmington/185th:** Frequency decrease of over 15% on weekdays
- Line 54 – Beaverton Hillsdale Highway:** Frequency decrease of over 15% on weekdays
- Line 56 – Scholls Ferry Rd:** Frequency decrease of over 15% on weekdays
- Line 67 – Bethany/158th:** Frequency decrease of over 15% on weekdays

Table 2: Results of Major Service Change Test By Line

Line	Change in Route Length	Change in Span	Change in Frequency	Line Split	Retired Line	New Line or New Service
Line 4 - Fessenden			-15%			
Line 15 – Belmont/NW 23rd			-15%			
Line 32 – Oatfield			+15%			
Line 33 – McLoughlin/King Rd			-15%			
Line 35 – Macadam/Greeley			-15%			
Line 52 – Farmington/185th			-15%			
Line 54 – Beaverton Hillsdale Highway			-15%			
Line 56 – Scholls Ferry Rd:			-15%			
Line 67 – Bethany/158th			-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 increases are analyzed. For service increases, 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 for the service area of 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 Increases
3. Other Major Service Changes

1. Major Service Reduction

For service reductions, the analysis examines whether *adverse effects* (defined on pg. 3) 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 emergency service changes include eight Major Service Reductions.

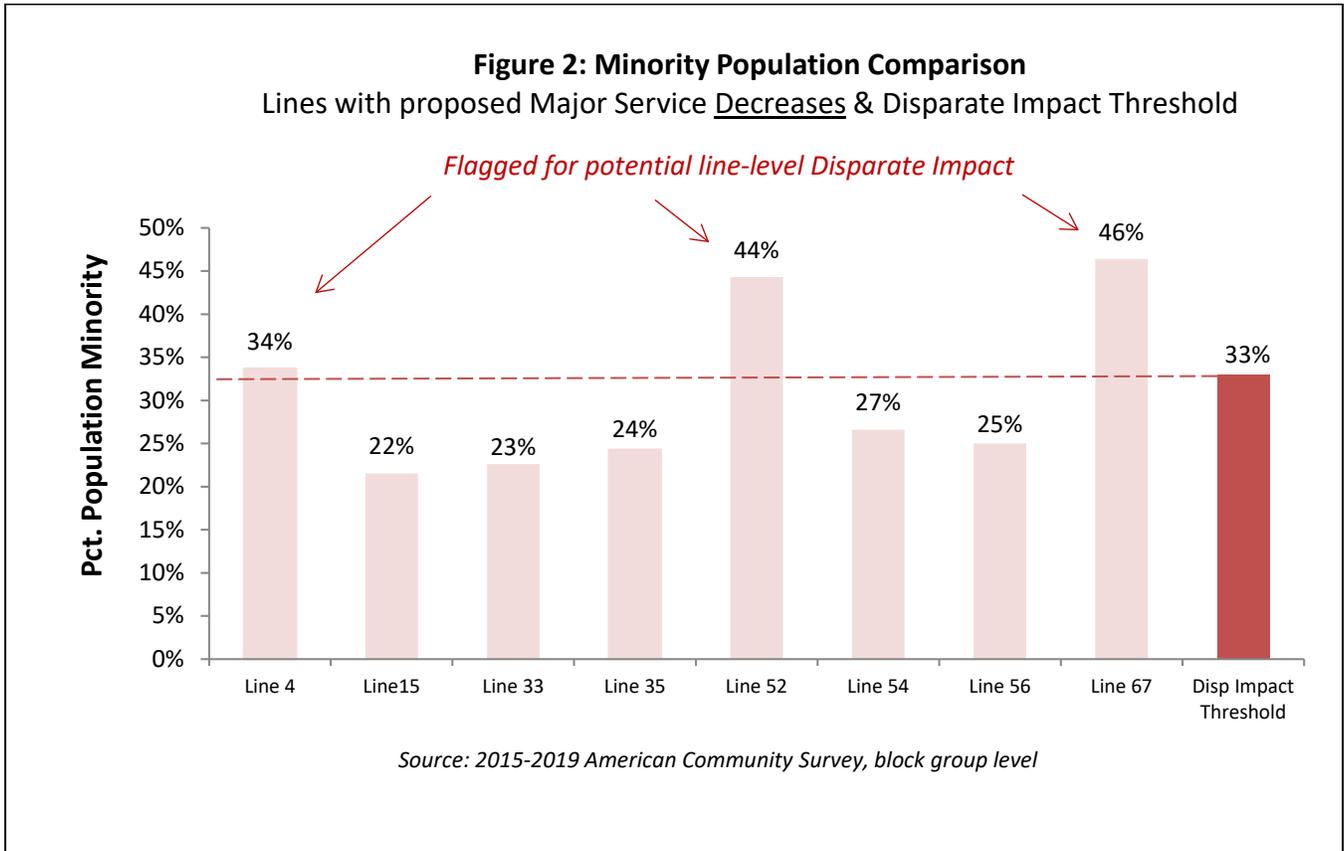
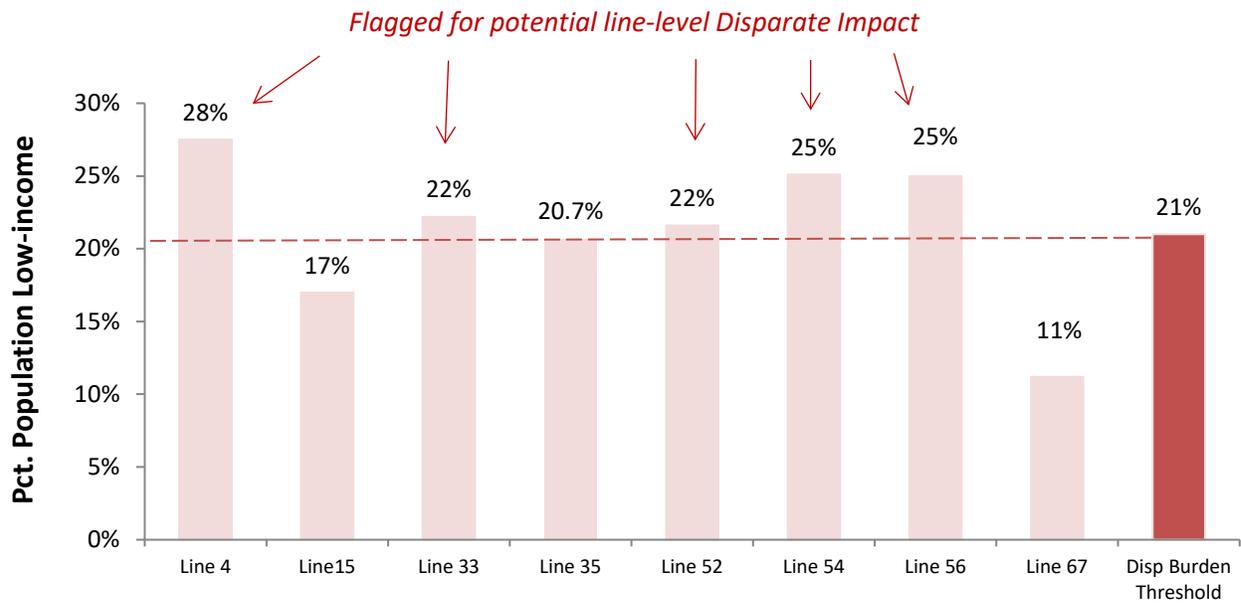


Figure 3: Low-income Population Comparison
 Lines with proposed Major Service Decreases & Disproportionate Burden Threshold



Source: 2015-2019 American Community Survey, block group level. Low-income defined as at or below 150% federal poverty level.

➤ **Line 4** (Reduce weekday frequency)

The change for this line would reduce frequency to a service area population that is 34% minority and 28% low-income, which are both above the Disparate Impact (33%), and Disproportionate Burden (21%) thresholds for Major Service Decreases. This indicates a **potential Disparate Impact and Disproportionate Burden**, calling for further examination, in particular the system-level analysis provided in the next section.

In terms of access², this change would reduce service from:

- About 101,407 jobs
 - 36% are low-to-medium wage jobs, which is below the TriMet district average
 - 16% are jobs held by minorities, which is similar to the TriMet district average
 - 8% are jobs held by Hisp./Latino workers, which is below the TriMet district average
- 14 grocery stores/supermarkets and 1 international grocer
- 226 human and social service centers
- 3 colleges/universities
- 6 high schools and 4 middle schools
- 73 employment resource centers

² Access defined as within ¼ mile of a stop on the line. For full details of access to services by line, see Attachment A.

➤ **Line 15** (*Reduce weekday frequency*)

The change for this line would reduce frequency to a service area population that is 22% minority and 17% low-income, which are both below the Disparate Impact (33%) and Disproportionate Burden (21%) thresholds for Major Service Decreases. Thus, there is **no Disparate Impact and no Disproportionate Burden at the line-level.**

In terms of access, this change would reduce service from:

- About 116,123 jobs
 - 40% are low-to-medium wage jobs, which is below the TriMet district average
 - 15% are jobs held by minorities, which is below the TriMet district average
 - 9% are jobs held by Hisp./Latino workers, which is below the TriMet district average
- 17 grocery stores/supermarkets and 1 international grocer
- 180 human and social service centers
- 1 colleges/universities
- 5 high schools and 1 middle school
- 95 employment resource centers

➤ **Line 33** (*Reduce weekday frequency*)

The change for this line would reduce frequency to a service area population that is 23% minority, which is below the Disparate Impact threshold (33%). Thus, there is **no potential Disparate Impact** at the line level. The service area population is 22% low-income, which is above and Disproportionate Burden (21%) threshold for Major Service Decreases. This indicates a **potential Disproportionate Burden**, calling for further examination, in particular the system-level analysis provided in the next section.

In terms of access, this change would reduce service from:

- About 21,167 jobs
 - 61% are low-to-medium wage jobs, which is above the TriMet district average
 - 13% are jobs held by minorities, which is below the TriMet district average
 - 12% are jobs held by Hisp./Latino workers, which is above the TriMet district average
- 7 grocery stores/supermarkets
- 148 human and social service centers
- 1 colleges/universities
- 6 high schools and 1 middle school
- 10 employment resource centers

➤ **Line 35** (*Reduce weekday frequency*)

The change for this line would reduce frequency to a service area population that is 24% minority and 20.7% low-income, which are both below the Disparate Impact (33%) and Disproportionate Burden (21%) thresholds for Major Service Decreases. Thus, there is **no Disparate Impact and no Disproportionate Burden at the line-level.**

In terms of access, this change would reduce service from:

- About 113,891 jobs
 - 36% are low-to-medium wage jobs, which is below the TriMet district average
 - 8% are jobs held by minorities, which is below the TriMet district average
 - 15% are jobs held by Hisp./Latino workers, which is above the TriMet district average
- 13 grocery stores/supermarkets
- 174 human and social service centers
- 3 colleges/universities
- 3 high schools
- 100 employment resource centers

➤ **Line 52** (*Reduce weekday frequency*)

The change for this line would reduce frequency to a service area population that is 44% minority and 22% low-income, which are both above the Disparate Impact (33%), and Disproportionate Burden (21%) thresholds for Major Service Decreases. This indicates a **potential Disparate Impact and Disproportionate Burden**, calling for further examination, in particular the system-level analysis provided in the next section.

In terms of access, this change would reduce service from:

- About 16,730 jobs
 - 56% are low-to-medium wage jobs, which is above the TriMet district average
 - 19% are jobs held by minorities, which is above the TriMet district average
 - 14% are jobs held by Hisp./Latino workers, which is above the TriMet district average
- 113 grocery stores/supermarkets and 4 international grocers
- 118 human and social service centers
- 2 colleges/universities
- 4 high schools and 1 middle school
- 9 employment resource centers

➤ **Line 54** (*Reduce weekday frequency*)

The change for this line would reduce frequency to a service area population that is 27% minority, which is below the Disparate Impact threshold (33%). Thus, there is **no potential Disparate Impact** at the line level. The service area population is 25% low-income, which is above and Disproportionate Burden (21%) threshold for Major Service Decreases. This indicates a **potential Disproportionate Burden**, calling for further examination, in particular the system-level analysis provided in the next section.

In terms of access, this change would reduce service from:

- About 100,648 jobs
 - 36% are low-to-medium wage jobs, which is below the TriMet district average
 - 15% are jobs held by minorities, which is below the TriMet district average
 - 8% are jobs held by Hisp./Latino workers, which is below the TriMet district average
- 14 grocery stores/supermarkets and 1 international grocer
- 113 human and social service centers

- 2 colleges/universities
- 1 high school and 1 middle school
- 88 employment resource centers

➤ **Line 56** (*Reduce weekday frequency*)

The change for this line would reduce frequency to a service area population that is 25% minority, which is below the Disparate Impact threshold (33%). Thus, there is **no potential Disparate Impact** at the line level. The service area population is 25% low-income, which is above and Disproportionate Burden (21%) threshold for Major Service Decreases. This indicates a **potential Disproportionate Burden**, calling for further examination, in particular the system-level analysis provided in the next section.

In terms of access, this change would reduce service from:

- About 97,304 jobs
 - 35% are low-to-medium wage jobs, which is below the TriMet district average
 - 15% are jobs held by minorities, which is below the TriMet district average
 - 8% are jobs held by Hisp./Latino workers, which is below the TriMet district average
- 11 grocery stores/supermarkets
- 107 human and social service centers
- 2 colleges/universities
- 3 high schools and 2 middle schools
- 85 employment resource centers

➤ **Line 67** (*Reduce weekday frequency*)

The change for this line would reduce frequency to a service area population that is 46% minority, which is above the Disparate Impact threshold (33%) for Major Service Decreases. This indicates a **potential Disparate Impact**, calling for further examination, in particular the system-level analysis provided in the next section. The service area population is 11% low-income, which is below the Disproportionate Burden (21%) threshold. Thus, there is **no Disproportionate Burden potential** at the line level.

In terms of access, this change would reduce service from:

- About 6,304 jobs
 - 55% are low-to-medium wage jobs, which is above the TriMet district average
 - 18% are jobs held by minorities, which is above the TriMet district average
 - 12% are jobs held by Hisp./Latino workers, which is above the TriMet district average
- 1 grocery store/supermarket
- 58 human and social service centers
- 1 college/university
- 1 high school
- 12 employment resource centers

2. Major Service Increases

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

Figure 4 displays the minority population along each line proposed for a major increase as compared to the 27% Disparate Impact threshold. Figure 5 displays the low-income population along each line as compared to the 15% Disproportionate Burden threshold. Because these are proposed service increases, protected populations *falling below* these thresholds are flagged for potential concerns. The narrative analysis of each individual line follows, which includes further considerations of access to jobs, education, health care, food and parks/public recreation for minority and low-income populations.

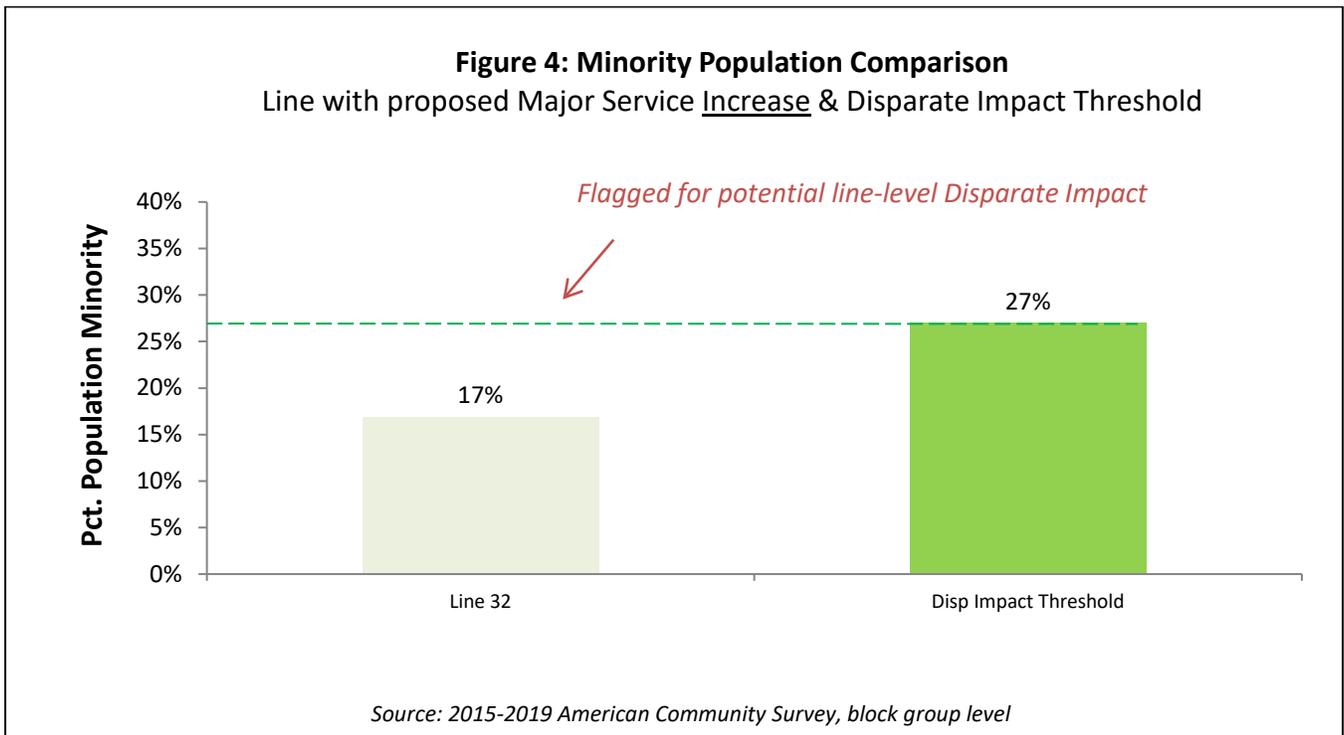
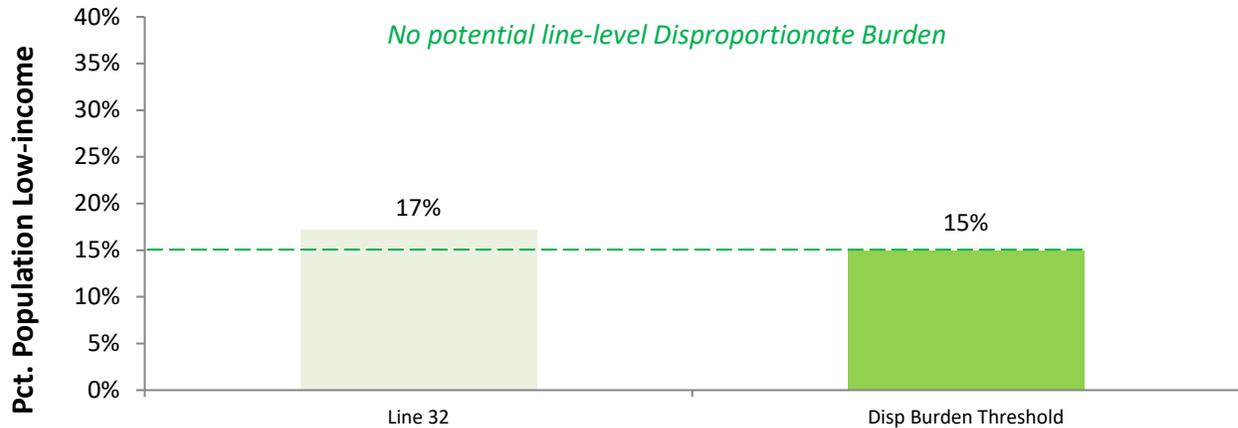


Figure 5: Low-income Population Comparison
 Line with proposed Major Service Increases & Disproportionate Burden
 Threshold



Source: 2015-2019 American Community Survey, block group level. Low-income defined as at or below 150% federal poverty level.

➤ **Line 32 (Weekday frequency increase)**

The change for this line would increase frequency to a service area population that is 17% minority, which is below the Disparate Impact threshold (27%) for Major Service Increases. This indicates a **potential Disparate Impact**, calling for further examination, in particular the system-level analysis provided in the next section. The service area population is 17% low-income, which is above the Disproportionate Burden (15%) threshold. Thus, there is no **Disproportionate Burden potential** at the line level.

In terms of access, this would improve service to:

- About 15,809 jobs
 - 57% are low-to-medium wage jobs, which is above the TriMet district average
 - 11% are jobs held by minorities, which is below the TriMet district average
 - 10% are jobs held by Hisp/Latino workers, which is similar to the TriMet district average
- 7 grocery stores/supermarkets
- 90 human and social service centers
- 1 colleges/universities
- 9 high schools and 2 middle schools
- 10 employment resource centers

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*.

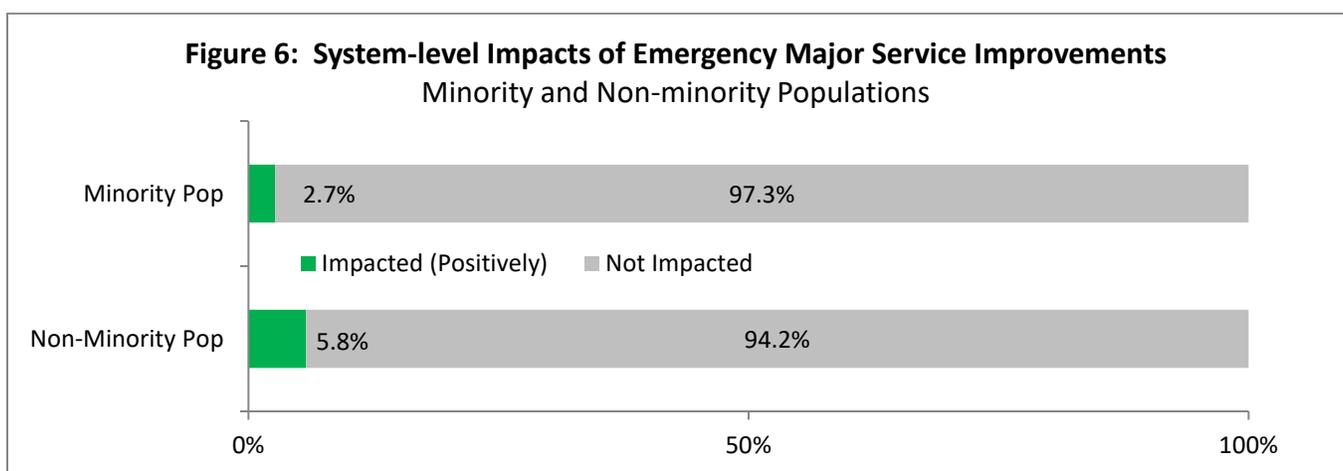
➤ **System-level Disparate Impact Analysis: Major Service Increases**

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 3 and Figure 6 compare the positively impacted minority and non-minority populations. A lower percentage of the District’s minority population stands to benefit by the proposed Major Service Increase compared to the non-minority population (2.7% vs. 5.8%, respectively). Therefore, **a System-level Disparate Impact** is found related to the proposed Major Service Increases.

Table 3: System-level Disparate Impact Analysis of Major Service Increases

Pct. of TriMet District Non-Minority Pop Positively Impacted	Minority Pop Disparate Impact Threshold	Pct. of TriMet District Minority Pop Positively Impacted	Potential Disparate Impact?
5.8%	Less than 4.6%	2.7%	Yes



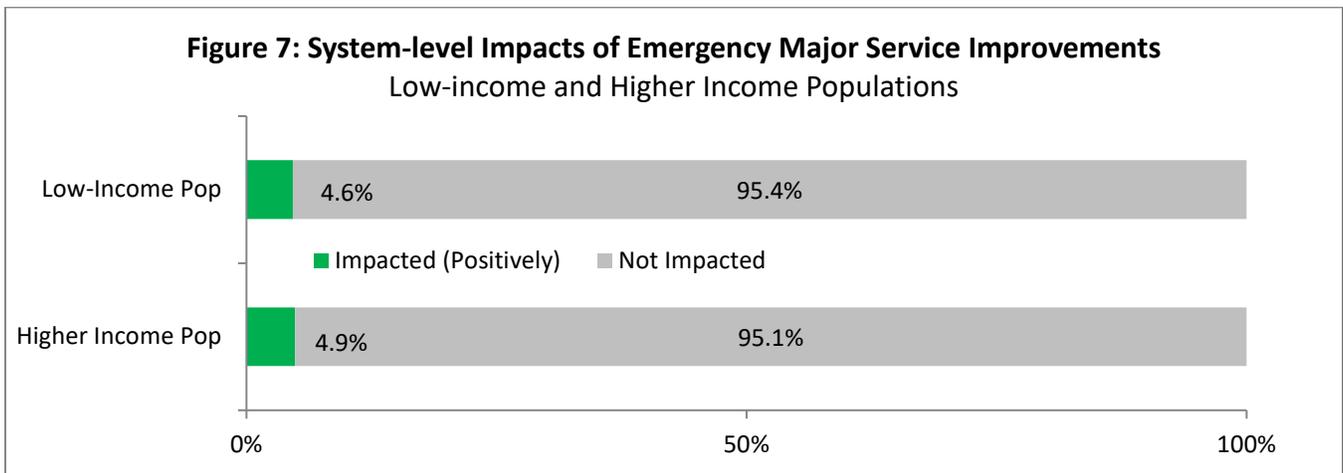
➤ **System-level Disproportionate Burden Analysis: Major Service Increases**

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 4 and Figure 7 compare the impacted low-income and higher income populations. A slightly less percentage of the District’s low-income population stands to benefit from the proposed Major Service Increases as compared to the higher income population (4.6% vs. 4.9%, respectively). However, this does not exceed the low-income population disproportionate burden threshold (3.9%). Therefore, **no System-level Disproportionate Burden** is found related to the proposed Major Service Increases.

Table 4: System-level Disproportionate Burden Analysis of Major Service Increases

Pct. of TriMet District Higher Income Pop Positively Impacted	Low-Income Pop Disproportionate Burden Threshold	Pct. of TriMet District Low Income Pop Positively Impacted	Potential Disproportionate Burden?
4.9%	Less than 3.9%	4.6%	No



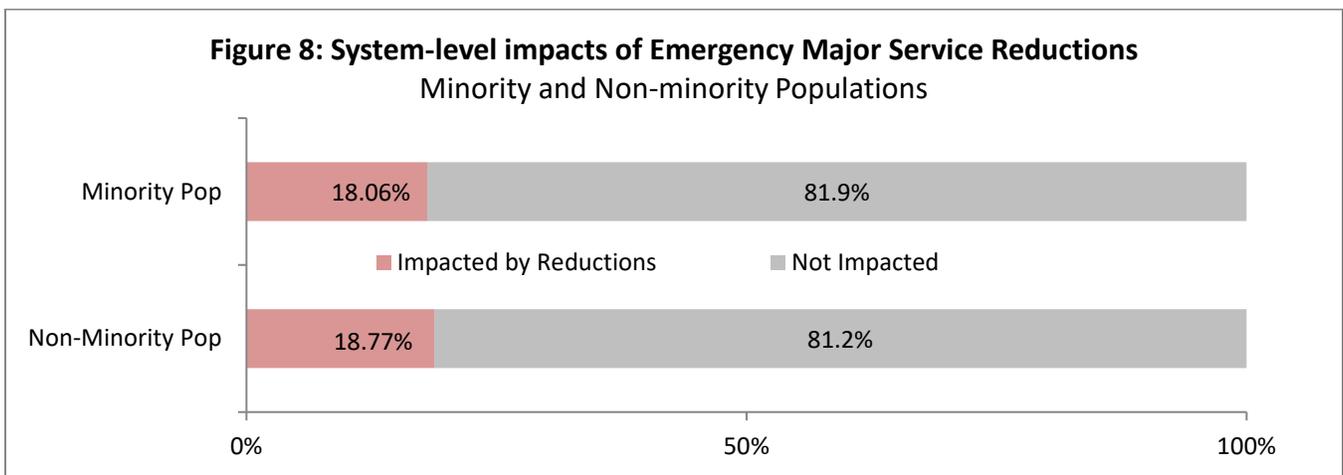
➤ **System-level Disparate Impact Analysis: Major Service Reductions**

The system-level Disparate Impact analysis of Major Service Reductions is completed by determining what proportion of the TriMet District’s minority population is potentially adversely impacted from the service reductions and comparing that to the District’s non-minority population that may be adversely impacted. A potential Disparate Impact would exist if minority populations were impacted substantially more by service reductions than non-minority populations. The way we measure this is to test whether 20% more of the District’s minority than non-minority population were impacted by the service reductions.

Table 5 and Figure 8 compare the impacted minority and non-minority populations. A slightly greater percentage of the District’s minority population is negatively impacted by the proposed Major Service Reductions as compared to the non-minority population (18.06% vs. 18.77%, respectively). However, this does not exceed the minority population disparate impact threshold (22.5%). Therefore, ***no system-level Disparate Impact is found related to the proposed Major Service Reductions.***

Table 5: System-level Disparate Impact Analysis of Major Service Decreases

Pct. of TriMet District Non-Minority Pop Negatively Impacted	Minority Pop Disparate Impact Threshold	Pct. of TriMet District Minority Pop Negatively Impacted	Potential Disparate Impact?
18.77%	More than 22.5%	18.06%	No



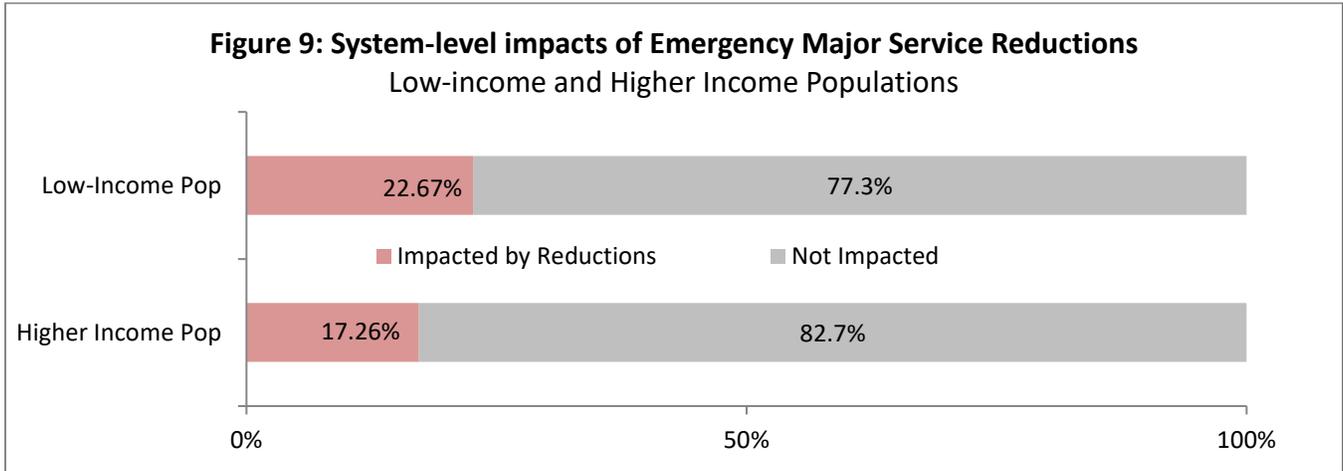
➤ ***System-level Disproportionate Burden Analysis: Major Service Reductions***

The system-level Disproportionate Burden analysis is completed by determining what proportion of the TriMet District’s low-income population is potentially adversely impacted from the service reductions and comparing that to the District’s higher income population that may be adversely 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 were impacted substantially more by service reductions than higher income populations. The way we measure this is to test whether 20% more of the District’s low-income than higher income population were impacted by the service reductions.

Table 6 and Figure 9 compare the impacted low-income and higher income populations. A greater percentage of the District’s low-income population is negatively impacted by the proposed Major Service Reductions as compared to the higher income population (22.67% vs. 17.26%, respectively). Therefore, ***a system-level Disproportionate Burden is found related to the proposed Major Service Reductions.***

Table 6: System-level Disproportionate Burden Analysis of Major Service Decreases

Pct. of TriMet District Higher Income Pop Negatively Impacted	Low-Income Pop Disproportionate Burden Threshold	Pct. of TriMet District Low Income Pop Negatively Impacted	Potential Disproportionate Burden?
17.26%	More than 20.7%	22.67%	Yes



IV. Community Engagement

Due to the sharp decline in bus operators, service reductions were implemented on January 9, 2022 on an emergency basis. As a result, TriMet staff was not able to conduct its traditional public outreach process.

Typically, TriMet staff conducts two rounds of public outreach for the annual service changes, known as the Annual Service Plan (ASP), which results in hundreds of comments being submitted. The first outreach process occurs in the fall. This process asks for public comment on the initial set of proposed service changes. Staff reaches out to the public in multiple ways: a webpage, email blasts to TriMet’s Riders Club and other lists, social media posts, press releases, mailed post cards to people living within a ¼ mile of impacted bus lines, and live interactions.

Prior to the pandemic, live interactions generally included multiple open house meetings in different locations around the District and staff riding buses to speak with customers when needed. Over the last several years, TriMet also has contracted with community-based organizations to contact underserved communities, allowing us to engage with culturally specific communities that we may not otherwise reach.

However, given the urgency of the bus operator shortage and its effect on schedules, staff was not able to conduct its typical outreach process for the January 9, 2022 emergency service reductions. Although TriMet communicated to the public that the service changes were happening through the same means as it usually does, there was not time for the usual interaction between staff and the community concerning the emergency service reductions. As a result, TriMet staff was not able to conduct its traditional public outreach process.

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

There were 22 customer complaints in the months following the service change. The most common complaints referred to:

- Overcrowding – Line 17-Holgate/Broadway received the most comments about overcrowding and long waits between buses due to reduced frequency. The problem has mostly occurred in the mornings and in the evenings. Staff is looking to address the problem during the September service change.
- Early morning frequency – Customers would like more frequency early in the morning to access jobs.
- Connections – The reduction in frequency has resulted in longer wait times when transferring buses.

V. Summary of Findings

Table 7 on the next page summarizes the results of the line-level and system-level Disparate Impact and Disproportionate Burden analyses. As shown, there is a line level and system level disparate impact for the one major service increase. However, there is no line level or system level disproportionate burden for the one major service increase.

For the reductions, there is no system level disparate impact indicating a majority of the reductions are on lines in service areas with below average minority populations. As a result, a greater share of the region's non-minority populations will stand to receive more of the burden as compared to minority populations.

On the other hand, there is a system level disproportionate burden indicating a majority of the reductions are on lines in areas with average-or-above low-income populations. As a result, a greater share of the region's low-income populations will stand to receive more of the burden as compared to higher income populations.

VI. Alternatives to Address Findings

The findings of this analysis prompt TriMet to consider possible measures to avoid, minimize, and/or mitigate the Disproportionate Burden on low-income riders. Avoiding the Disproportionate Burden would entail returning back service to the April 2020 service levels for the eight routes. Under the assumption that the TriMet Board retroactively adopts the service reductions, the following options could be considered to address identified impacts.

Option 1: Minimize disproportionate burden

TriMet could consider slightly increasing revenue hours (i.e., increase weekday frequency) to a select number of routes serving low-income riders to maintain an adequate level of service frequency.

Option 2: Mitigate disproportionate burden

TriMet could consider increasing revenue hours (i.e., increase weekday frequency) specifically to routes 4, 54, and 56 (i.e., routes that serve the highest concentration of low-income riders). This would reverse the major

service change threshold being met for these routes. As a result, the system level disproportionate burden finding would be mitigated.

Option 3: Take no additional action

TriMet could adopt the equity analysis for the January emergency service reductions without addressing the impacts identified in the analysis.

Staff considered the options to avoid, minimize, and mitigate the system level disproportionate burden findings. At this time, it is not practicable to move forward with the options 1 and 2. Due to the bus operator shortage, TriMet is unable to make immediate service mitigations to offset the adverse impacts from the January 2022 service reduction. However, TriMet expects to gain efficiencies that will increase the number of bus operators when Powell Garage fully reopens in fall 2022. The increased number of available operators will allow for mitigating service increases to occur in January 2023. Therefore, this provides the agency with the substantial legitimate justification for keeping the emergency service reductions as-is and there are no alternatives that would have a less Disproportionate Burden on low-income riders.

Table 7: Summary of Disparate Impact and Disproportionate Burden Analysis Results

		Potential Disparate Impact?	Potential Disproportionate Burden?
Major Service Reductions	4 - Fessenden	Yes	Yes
	15 - Belmont/NW 23rd	No	No
	33 - McLoughlin/King Rd	No	Yes
	35 - Macadam/Greeley	No	No
	52 - Farmington/185th	Yes	Yes
	54 - Beaverton Hillsdale Highway	No	Yes
	56 - Scholls Ferry Rd	No	Yes
	67 - Bethany/158th	Yes	No
	Combined Reductions (System-level)	No	Yes
Major Service Increase	32 - Oatfield	Yes	No
	<i>Combined Improvements (System-level)</i>	Yes	No
Other Major Service Changes		-	-