Executive Summary

TriMet is proposing to implement several service improvements in summer 2020, fall 2020 and spring 2021. In accordance with Title VI of the Civil Rights Act of 1964 and FTA Circular 4702.1B, TriMet conducts an 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 service proposal includes Major Service Changes to five 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 five existing lines meet TriMet’s established thresholds for Major Service Changes:

- Line 49 – Main/Baseline (New)
- Line 16 – Front Ave/St Helens Rd
- Line 47 – Century/174th (Name change previously Main/Evergreen)
- Line 87 – Airport Way/181st
- Line 155 – Sunnyside

Findings

1. **No system level disparate impact or disproportionate burden** for the 5 major service increases.

2. The vast majority of improvements are on lines with **average-or-above minority populations** in their service areas. As a result, a greater share of the region’s minority populations stand to **benefit** as compared to higher income populations.

3. A majority of improvements are on lines with **average-or-above low-income populations** in their service areas. As a result, a greater share of the region’s low-income populations stand to **benefit** as compared to higher income populations.

4. **Disproportionate and adverse effects** from the one major service reduction (Line 47). The minority and low-income populations in this service area are above the disparate impact and disproportionate burden thresholds. Potential impacts will be mitigated by the new bus line resuming service to the removed portion with a comparable level of service. Results from an on-board survey indicate there were no significant differences found when looking at the new route transfer question by race and income.
Table of Contents
I.  Background........................................................................................................................................... 2
II.  TriMet Title VI Compliance.................................................................................................................. 2
   A.  Major Service Change Policy............................................................................................................. 3
   B.  Disparate Impact Policy..................................................................................................................... 4
   C.  Disproportionate Burden Policy......................................................................................................... 5
III. Proposed Service Changes .................................................................................................................... 5
    A.  Description of Changes.................................................................................................................... 5
    B.  Major Service Change Test.............................................................................................................. 6
    C.  Line-level Analyses.......................................................................................................................... 7
    D.  System-level Analysis....................................................................................................................... 13
IV. Community Engagement ......................................................................................................................... 15
V.  Summary of Findings............................................................................................................................... 16

Attachment A: Analysis of impact on access to employment, education, health care, food, and parks/public recreation for minority and low-income populations
I. Background

Building upon several years of ongoing service improvements, TriMet’s Annual Service Plan for FY2021\(^1\) proposes Major Service Changes to five bus lines. Other changes will involve changes to improve reliability, travel time, and improvements to on-time performance for lines. Though these changes will represent improvements for riders on those lines, they are not large enough changes to be reviewed as Major Service Changes. The Major Service Changes presented here represent the large majority of TriMet’s proposed changes for FY21. The TriMet Board’s approval of a ten-year payroll and self-employment tax rate increase in 2015 makes the changes possible.

TriMet has engaged the community for the past few years to develop a shared vision for future transit service that will guide how the additional revenue is invested. Each year, TriMet staff will use information developed from the shared vision planning efforts and outreach, updated analyses and measures, and additional outreach to prioritize incremental service improvements for that year. The efforts will focus on five factors defined by the TriMet Board: demand, productivity, connections, equity, and growth. Each year’s plan will also consider safety, budget availability, and availability of staff and equipment to provide for expanded service.

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 Program\(^2\) 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.

---

\(^1\) Fiscal year 2021 runs from July 1, 2020 to June 30, 2021.

\(^2\) TriMet’s Title VI Program was updated and submitted to FTA in fall 2019
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.

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, or;

5. 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.

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

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, or;

5. 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., 32 percent compared to 29 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., 26 percent compared to 29 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: Proposed Service Changes in FY 2021 Annual Service Plan

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Line</th>
<th>Service Change Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>June 2020</strong></td>
<td>16 – Front Ave/St Helens Rd</td>
<td>▶ Add Sunday Service</td>
</tr>
<tr>
<td></td>
<td>16 – Front Ave/St Helens Rd</td>
<td>▶ Increase weekday peak frequency</td>
</tr>
<tr>
<td><strong>Fall 2020</strong></td>
<td>87 – Airport Way/181st</td>
<td>▶ Add later trips during the weekday</td>
</tr>
<tr>
<td></td>
<td>155 - Sunnyside</td>
<td>▶ Increase weekday peak frequency</td>
</tr>
<tr>
<td><strong>Spring 2021</strong></td>
<td>49 – Main/Baseline</td>
<td>▶ New Transit Line</td>
</tr>
<tr>
<td></td>
<td>47 – Century/174th</td>
<td>▶ Route change</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▶ Increase weekday frequency</td>
</tr>
</tbody>
</table>

*Note: The FY21 Annual Service Plan also includes minor changes to line 6 and 12 (upgrading to 12-minute weekday frequent service). 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 49 – Main/Baseline:** New Transit Line  
**Line 16 – Front Ave/St Helens Rd:** Add Sunday Service and Frequency increase of over 15% on weekdays  
**Line 47 – Century/174th:** Route change and Frequency increase of over 15% on weekdays  
**Line 87 – Airport Way/181st:** Span increase of over 15% on weekdays  
**Line 155 – Sunnyside:** Frequency increase of over 15% on weekdays
Table 2: Results of Major Service Change Test By Line

<table>
<thead>
<tr>
<th>Line</th>
<th>Change in Route Length</th>
<th>Change in Span</th>
<th>Change in Frequency</th>
<th>Line Split</th>
<th>New Line or New Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line 49 – Main/Baseline</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Line 16 – Front Ave/St Helens Rd (Sunday)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Line 16 – Front Ave/St Helens Rd (Weekday)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Line 47 – Century/174th (Weekday)</td>
<td>✓</td>
<td></td>
<td>+25%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Line 87 – Airport Way/181st</td>
<td></td>
<td>+17%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Line 155 – Sunnyside (Weekday)</td>
<td></td>
<td></td>
<td>+47%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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 proposal for the Line 47 includes the only Major Service Reduction in this service plan.
The Line 47 route change would add service between South Hillsboro and Portland Community College-Rock Creek. Doing so would remove Line 47 service from a total of 28 stops, including both directions of service. As shown in Figures 2 and 3, the population in the surrounding area is 45% minority and 30% low-income, which are above the Disparate Impact threshold (32%) and Disproportionate Burden threshold (24%) for Major Service Reductions. Thus, this change is flagged for potential line-level Disparate Impact and Disproportionate Burden. All stops will have comparable service within ¼ mile due to the new bus line continuing to serve those stops currently served by the Line 47. Therefore, adverse effect does not apply.

Table 3: Stops and populations impacted by routing changes to Line 47

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Nearest comparable service</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than ¼ mile</td>
<td>28</td>
<td>538</td>
<td>45%</td>
<td>30%</td>
</tr>
<tr>
<td>Over ¼ mile*</td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

*Adverse effect applies

Figure 2: Minority Population Comparison
Proposed Line 47 Major Service Reduction

Line above threshold = Flag for potential line-level Disparate Impact

Source: 2013-2017 American Community Survey, block group level

This section only analyzes the service reduction component of the Line 47 service change proposal. The analysis of the service increase component is provided in the next section.
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 26% Disparate Impact threshold. Figure 5 displays the low-income population along each line as compared to the 19% 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 4: Minority Population Comparison
Lines with proposed Major Service Increases & Disparate Impact Threshold

Flagged for potential line-level Disparate Impact


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

Low-income population below threshold = No flag for potential line-level Disproportionate Burden

Source: 2013-2017 American Community Survey, block group level. Low-income defined as at or below 150% federal poverty level.
- **Line 49 – Main/Baseline** *(New bus line)*

The proposed routing for this line would potentially benefit a service area population that is **46% minority** and **21% low-income**, which are at or above the Disparate Impact and Disproportionate Burden thresholds for Major Service Increases. Additionally, the new bus line will take over service from Line 47 between Hillsboro Transit Center and Downtown Hillsboro. Thus, there is **no Disparate Impact** and **Disproportionate Burden** at the line level.

In terms of access 4, this line would maintain 5 service from the Line 47 to:

- About 10,761 jobs
  - 80% are low-to-medium wage jobs, which is above the TriMet district average
  - 9% are jobs held by minorities, which is below the TriMet district average
  - 14% are jobs held by Hisp./Latino workers, which is above the TriMet district average
- 1 community college and 2 educational centers
- 6 grocery stores/supermarkets, including 2 Hispanic grocer
- 3 employment resource centers
- 6 human and social services centers
- 1 parks/public recreation

In terms of access, this line would provide **new service** to:

- About 6,668 jobs
  - 90% are low-to-medium wage jobs, which is above the TriMet district average
  - 16% are jobs held by minorities, which is above the TriMet district average
  - 9% are jobs held by Hisp./Latino workers, which is above the TriMet district average
- 1 middle school
- 1 grocery store/supermarket
- 1 human and social services centers

- **Line 16 – Front Ave/St. Helens Rd** *(Add Sunday Service and weekday frequency increase)*

This service increase would potentially benefit a service area population that is **20% minority**, which is below the Disparate Impact threshold (26%) for Major Service Increases. This indicates a potential **Disparate Impact**, calling for further examination, in particular the considerations below as well as the system-level analysis provided in the next section. The service area population is **24% low-income**, which is above the Disproportionate Burden threshold (18%) for Major Service Increases. Thus, there is **no Disproportionate Burden** at the line-level.

In terms of access, this added service would **improve service** to:

- About 112,233 jobs
  - 85% are low-to-medium wage jobs, which is above the TriMet district average
  - 12% are jobs held by minorities, which is below the TriMet district average
  - 6% are jobs held by Hisp./Latino workers, which is below the TriMet district average
- 1 community college, 1 high school, and 3 educational centers

---

4 Access defined as within ¼ mile of a stop on the line. For full details of access to services by line, see Attachment A.
5 Service removed from Line 47 will be maintained by the New “N” Line
• 6 grocery stores/supermarkets, including 1 international grocer
• 2 human and social services centers
• 6 employment resource centers

➤ Line 47 – Century/174th (Route change and weekday frequency increase)
The proposed route change would extend service and increase frequency for Line 47 riders. This service increase to the South Hillsboro portion would potentially benefit a service area population that is 41% minority, which is above the Disparate Impact threshold (26%) for Major Service Increases. Thus, there is no Disparate Impact at the line level. The service area population is 17% low-income, which is below the Disproportionate Burden threshold (18%) for Major Service Increases. This indicates a potential Disproportionate Burden, calling for further examination, in particular the considerations below as well as the system-level analysis provided in the next section.

In terms of access, the route change would provide new service to:
• About 4,687 jobs
  o 75% are low-to-medium wage jobs, which is much greater than the TriMet district average
  o 18% are jobs held by minorities, which is much greater than the TriMet district average
  o 9% are jobs held by Hisp./Latino workers, which is slightly above the TriMet district average
• 1 community college and one high school
• 9 grocery stores/supermarkets, including 1 international grocer
• 2 human and social services centers

In terms of access, the frequency increase would improve service to:
• About 35,723 jobs
  o 82% are low-to-medium wage jobs, which is well above the TriMet district average
  o 18% are jobs held by minorities, which is well above the TriMet district average
  o 9% are jobs held by Hisp./Latino workers, which is above the TriMet district average
• 1 high school, 1 middle school, and 2 educational centers
• 9 grocery stores/supermarkets, including 1 Hispanic grocer
• 2 human and social services centers

➤ Line 87 – Airport Way/181st (Weekday span improvements)
This service increase would potentially benefit a service area population that is 45% minority and 34% low-income, which are above the Disparate Impact and Disproportionate Burden thresholds for Major Service Increases. Thus, there is no Disparate Impact and Disproportionate Burden at the line level.

In terms of access, this added service would improve service to:
• About 64,790 jobs
  o 87% are low-to-medium wage jobs, which is much greater than the TriMet district average
  o 14% are jobs held by people of color, which is above the TriMet district average
  o 9% are jobs held by Hisp./Latino workers, which is above the TriMet district average
• 1 community college, 1 high school, 1 middle school, and 3 educational centers
• 5 community health care service centers
• 12 grocery stores/supermarkets, including 2 international grocer and 1 Hispanic grocer
Line 155 – Sunnyside
(Weekday frequency increase)

This service increase would potentially benefit a service area population that is 28% minority, which is above the Disparate Impact threshold (26%) for Major Service Increases. Thus, there is no Disparate Impact at the line-level. The service area population is 14% low-income, which is below the Disproportionate Burden threshold (18%) for Major Service Increases. This indicates a potential Disproportionate Burden, calling for further examination, in particular the considerations below as well as the system-level analysis provided in the next section.

In terms of access, this added service would improve service to:
- Over 23,390 jobs
  - 77% are low-to-medium wage jobs, which is greater than the TriMet district average
  - 4% are jobs held by minorities, which is well below the TriMet district average
  - 8% are jobs held by Hisp./Latino workers, which is similar to the TriMet district average
- 1 high school and 1 medical school
- 1 employment resource center
- 2 human and social services centers
- 7 grocery stores/supermarkets

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 4 and Figure 6 compare the positively impacted minority and non-minority populations. A greater percentage of the District’s minority population stands to benefit by the proposed Major Service Increase compared to the non-minority population (13.7% vs. 8.9%, respectively). Therefore, no System-level Disparate Impact is found related to the proposed Major Service Increases.
Table 4: System-level Disparate Impact Analysis of Major Service Increases

<table>
<thead>
<tr>
<th>Pct. of TriMet District Non-Minority Pop Positively Impacted</th>
<th>Minority Pop Disparate Impact Threshold</th>
<th>Pct. of TriMet District Minority Pop Positively Impacted</th>
<th>Potential Disparate Impact?</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.9%</td>
<td>Less than 7%</td>
<td>13.7%</td>
<td>No</td>
</tr>
</tbody>
</table>

Figure 6: System-level Impacts of Proposed FY21 Major Service Improvements

![Bar chart showing minority and non-minority populations impacted positively.]

- **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 5 and Figure 7 compare the impacted low-income and higher income populations. A greater percentage of the District’s low-income population stands to benefit from the proposed Major Service Increases as compared to the higher income population (11.5% vs. 9.9%, respectively). Therefore, no System-level Disproportionate Burden is found related to the proposed Major Service Increases.

Table 5: System-level Disproportionate Burden Analysis of Major Service Increases

<table>
<thead>
<tr>
<th>Pct. of TriMet District Higher Income Pop Positively Impacted</th>
<th>Low-Income Pop Disparate Impact Threshold</th>
<th>Pct. of TriMet District Low Income Pop Positively Impacted</th>
<th>Potential Disproportionate Burden?</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.9%</td>
<td>Less than 8%</td>
<td>11.5%</td>
<td>No</td>
</tr>
</tbody>
</table>
IV. Community Engagement

The service proposals analyzed in this report stem from a multi-year planning and outreach process to develop a vision for future transit service in the Portland metropolitan region. Divided by sub-region of the TriMet service district, these “Service Enhancement Plans” were undertaken to identify and prioritize opportunities to improve bus service as well as pedestrian and bike access to transit, given current and projected population and job growth. These are long-range plans which include dozens of bus service improvements beyond those proposed for implementation over the next year. 6

An initial FY21 service plan was developed in fall 2019, at which point TriMet posted the proposed changes on trimet.org to solicit feedback, placed advertisements in newspapers across the service district, conducted on-board outreach and sent postcards to nearby residents of lines with proposed routing changes, presented the proposal to the Transit Equity Advisory Committee, sent emails to riders and other stakeholders, and staff held four TriMet Open Houses. TriMet contracted with Centro Cultural and JLA to conduct culturally specific outreach during the open houses and in individual interviews. Open house attendees received Fred Meyer gift cards, while Central Cultural provided food, interpretation services, and daycare upon request. JLA provided interviews with community members through their community liaison program. At this time, there are no modifications requested through the feedback and a majority of the comments were in support of the FY21 service proposal.

For the second phase of outreach, TriMet will hold two open houses in February 2020 to solicit feedback about any updates to the proposal. Many elements of the initial outreach phase will be repeated (postcards, newspaper advertisements, emails). Finally, TriMet will hold a public hearing at its March 25, 2020 board meeting to receive comments on the proposed service changes.

The following is a summary of themes across the feedback received: [This section will be completed once all public input is reviewed and the TriMet board of directors has been made aware and considered this service proposal and equity analysis.]

6 For more information, go to https://trimet.org/betterbus/serviceimprovements-fy21
V. Summary of Findings

Table 6 on the next page summarizes the results of the line-level and system-level Disparate Impact and Disproportionate Burden analyses. As shown, Title VI concerns are minimal with the proposed FY21 Annual Service Plan. The proposal promises to improve service significantly for minority and low-income populations, with only one improvement (to Line 16) serving areas with relatively low minority populations as compared to the TriMet district. The Lines 47 (South Hillsboro portion) and 155 also serves a relatively low proportion of low-income households as compared to the TriMet district. However, improving service on these lines does not raise concerns of an inequitable distribution of benefits given: a) the results of the system-level analysis; b) that the other 4 lines proposed for improvements did not have any line-level Disparate Impacts; and c) the other 3 lines proposed for improvements did not have any line-level Disproportionate Burdens.

The one proposed service reduction (to the Line 47) does appear to create disproportionate and adverse effects given the high concentrations of minority and low-income populations potentially impacted. These impacts will be mitigated by the new bus line resuming service to the removed portion and with a comparable level of service. The proposed change could potentially create transfers for some riders. In effort to evaluate the impacts of the proposed route change, TriMet Service Planners launched an on-board survey to assess trip patterns. Surveying took place a week after school was back in session at PCC Rock Creek, from September 30 – October 7. The entire survey of 20 questions was available in English and Spanish. Thirteen other languages were available which asked three questions. There were no significant differences found when looking at the new route transfer question by race and income. Thus, the transfer created by the proposed Line 47 route change does not raise a high level of concern with respect to Title VI.
Table 6: Summary of Disparate Impact and Disproportionate Burden Analysis Results

<table>
<thead>
<tr>
<th></th>
<th>Potential Disparate Impact?</th>
<th>Potential Disproportionate Burden?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Major Service Reduction</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>47 – Main/Evergreen</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Major Service Increases</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>49 – Main/Baseline</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>16 – Front Ave/St Helens Rd</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>47 – Century/174th</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>87 – Airport Way/181st</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>155 – Sunnyside</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Combined Improvements (System-level)</strong></td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td><strong>Other Major Service Changes</strong></td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>
Attachment A: Analysis of impact on access to employment, education, health care, food, and parks/public recreation for minority and low-income populations
### Line 49 – Main/Baseline

New line connecting Hillsboro TC and Willow Creek TC

- Creates new access
- Improves access
- Removes access
- Reduces access

<table>
<thead>
<tr>
<th>Employment</th>
<th>Employment Resource Centers</th>
<th>Education &amp; Educational Services</th>
<th>Community Health Care Services</th>
<th>Grocery Stores &amp; Supermarkets</th>
<th>Parks &amp; Public Recreation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MAINTAIN ACCESS</strong></td>
<td>• Maintains access to an estimated <strong>10,761 jobs</strong></td>
<td>• Labor Ready Northwest Inc</td>
<td>• Portland Comm. College</td>
<td>• Walgreens (2 locations)</td>
<td>• Hillsboro Swim Team</td>
</tr>
<tr>
<td></td>
<td>• Leadpoint Business Services</td>
<td>• Miller Education Center Options Program</td>
<td>• Tuality Community</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Convergence Services Group</td>
<td>• Elite Truck School</td>
<td>• Hillsboro Senior Resource Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Domestic Violence Resource Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Lifeworks NW</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• De Paul Treatment Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Virginia Garcia Hillsboro Health Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Raymond Arthur Brown Middle School</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Saving Grace Maternity Home</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Walmart</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Low/Medium Wage Jobs*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Jobs Held by Workers of Color*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Jobs Held by Hispanic/Latino Workers*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>□ Line &quot;N&quot; (Line 47 portion) □ TriMet District</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>53% □ □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>9% □ □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>13% □ □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>14% □ □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8% □ □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>NEW ACCESS</strong></td>
<td>• Creates access to an estimated <strong>6,668 jobs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Low/Medium Wage Jobs*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Jobs Held by Workers of Color*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Jobs Held by Hispanic/Latino Workers*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>□ Line &quot;N&quot; (Baseline portion) □ TriMet District</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>53% □ □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>9% □ □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>16% □ □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>13% □ □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>9% □ □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8% □ □</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Low/Medium wage jobs defined as having earnings of under $3,333 per month, or about $40,000 per year. Jobs held by workers of color include jobs where the race indicated was not "White Alone". Jobs held by Hispanic/Latino workers include jobs where the ethnicity indicated was Hispanic/Latino. Source: US Census Bureau.
### Line 16 – Front Ave/St Helens Rd

*Adds Sunday Service*

- Creates new access
- Improves access
- Removes access
- Reduces access

<table>
<thead>
<tr>
<th>Employment</th>
<th>Employment Resource Centers</th>
<th>Education &amp; Educational Services</th>
<th>Community Health Care Services</th>
<th>Grocery Stores &amp; Supermarkets</th>
<th>Parks &amp; Public Recreation</th>
</tr>
</thead>
</table>
| • Improves access to an estimated **112,233 jobs** | • New Avenues for Youth
• Central City Concern
• Bison Workforce Solutions
• Emerald City Medical Staffing
• Northwest Staffing Resources
• Nonprofit Professionals Now | • Greenhouse Alternative High School
• Oregon Council for Hispanic Advancement
• Portland Community College
• Metro Montessori at Childpeace
• Epicodus
• Floral Design Institute | • Impact NW
• BCFS Health and Human Services
• Coalition of Community Health Clinic | • Rite Aid (2 locations)
• Safeway
• St John Grocery Outlet
• World Foods
• CVS | N/A |
| Low/Medium Wage Jobs* | | | | | |
| Jobs Held by Workers of Color* | | | | | |
| Jobs Held by Hispanic/Latino Workers* | | | | | |

*Low/Medium wage jobs defined as having earnings of under $3,333 per month, or about $40,000 per year. Jobs held by workers of color include jobs where the race indicated was not “White Alone”. Jobs held by Hispanic/Latino workers include jobs where the ethnicity indicated was Hispanic/Latino. Source: US Census Bureau.*

- Line 16
- TriMet District

85% 53%

12% 13%

6% 8%

8%

13%
### Line 47 – Century/174th

**Re-route and Weekday Frequency Increase**

- Creates new access
- Improves access
- Removes access
- Reduces access

#### Employment

<table>
<thead>
<tr>
<th>Access Type</th>
<th>Employment Resource Centers</th>
<th>Education &amp; Educational Services</th>
<th>Community Health Care Services</th>
<th>Grocery Stores &amp; Supermarkets</th>
<th>Parks &amp; Public Recreation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IMPROVES ACCESS</strong></td>
<td>N/A</td>
<td>Portland Community College – Rock Creek</td>
<td>Kaiser Permanente</td>
<td>Walgreens (3 locations)</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td>Early College High School</td>
<td>OHSU Doernbecher Pediatrics</td>
<td>QFC</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td></td>
<td></td>
<td>Safeway</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td></td>
<td></td>
<td>Rite Aid</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td></td>
<td></td>
<td>India Supermarket</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td></td>
<td></td>
<td>CVS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td></td>
<td></td>
<td>Trader Joes</td>
<td></td>
</tr>
<tr>
<td><strong>NEW ACCESS</strong></td>
<td>N/A</td>
<td>Century High School</td>
<td>Saving Grace Maternity Home</td>
<td>Walgreens (4 locations)</td>
<td>Hillsboro Volleyball Club</td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td>South Meadows Middle School</td>
<td>Coda</td>
<td>Walmart</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td></td>
<td></td>
<td>Safeway</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td></td>
<td></td>
<td>Albertsons</td>
<td></td>
</tr>
</tbody>
</table>

- **Improves access to an estimated 35,723 jobs**
- **Creates access to an estimated 4,687 jobs**

- Low/Medium Wage Jobs*: 53%
- Jobs Held by Workers of Color*: 13%
- Jobs Held by Hispanic/Latino Workers*: 8%

- Low/Medium Wage Jobs*: 82%
- Jobs Held by Workers of Color*: 13%
- Jobs Held by Hispanic/Latino Workers*: 8%

*Low/Medium wage jobs defined as having earnings of under $3,333 per month, or about $40,000 per year. Jobs held by workers of color include jobs where the race indicated was not “White Alone”. Jobs held by Hispanic/Latino workers include jobs where the ethnicity indicated was Hispanic/Latino. Source: US Census Bureau.
### Line 87 – Airport Way/181st

**Weekday Span Improvements**

- **Creates new access**
- **Improves access**
- **Removes access**
- **Reduces access**

<table>
<thead>
<tr>
<th>Employment Resource Centers</th>
<th>Education &amp; Educational Services</th>
<th>Community Health Care Services</th>
<th>Grocery Stores &amp; Supermarkets</th>
<th>Parks &amp; Public Recreation</th>
</tr>
</thead>
</table>
| Improves access to an estimated **64,790 jobs** | • IRCO  
• Central City Concern  
• Human Solutions  | • Wallace Medical Concern  
• Rockwood  
• Vibra Speciality Hospital  
• NW Down Syndrome Support  
• Addictions Northwest  
• Human Solutions  | • Safeway  
• Walgreens (2 locations)  
• Winco  
• Hong Phat Market  
• Izobilie Euro Foods  
• Parkrose Grocery Outlet  
• CVS  
• Tienda Y Carnicería La Tapatía  
• Rite Aid  
• Walmart  | N/A |

#### Low/Medium Wage Jobs*:
- 53% 82%

#### Jobs Held by Workers of Color*:
- 14% 13%

#### Jobs Held by Hispanic/Latino Workers*:
- 9% 8%

---

*Low/Medium wage jobs defined as having earnings of under $3,333 per month, or about $40,000 per year. Jobs held by workers of color include jobs where the race indicated was not “White Alone”. Jobs held by Hispanic/Latino workers include jobs where the ethnicity indicated was Hispanic/Latino. Source: U.S. Census Bureau.
### Sunnyside

**Weekday Frequency Increase**

- ☑ Creates new access
- ☑ Improves access
- ☐ Removes access
- ☐ Reduces access

<table>
<thead>
<tr>
<th>Employment</th>
<th>Employment Resource Centers</th>
<th>Education &amp; Educational Services</th>
<th>Community Health Care Services</th>
<th>Grocery Stores &amp; Supermarkets</th>
<th>Parks &amp; Public Recreation</th>
</tr>
</thead>
</table>
| • **Improves** access to an estimated **23,390 jobs**<br>
  Low/Medium Wage Jobs*<br>
  Jobs Held by Workers of Color*<br>
  Jobs Held by Hispanic/Latino Workers* | | | | | | |
| ![Line 155](image1.png) | ![TriMet District](image2.png) | ![Central City Concern](image3.png) | ![Clackamas Middle College](image4.png) | ![Sunnyside Health and Wellness Center](image5.png) | ![Safeway](image6.png) | ![Clackamas United Soccer Club](image7.png) |
| ![Line 155](image8.png) | ![TriMet District](image9.png) | ![Clackamas Middle College](image10.png) | ![National Dialysis Medical School](image11.png) | ![Kaiser Sunnyside](image12.png) | ![Walgreens (2 locations)](image13.png) | ![North Clackamas Volleyball Club](image14.png) |
| ![Line 155](image15.png) | ![TriMet District](image16.png) | ![Central City Concern](image17.png) | ![Sunnyside Health and Wellness Center](image18.png) | ![Kaiser Sunnyside](image19.png) | ![Safeway](image20.png) | ![Clackamas United Soccer Club](image21.png) |
| ![Line 155](image22.png) | ![TriMet District](image23.png) | ![Central City Concern](image24.png) | ![Sunnyside Health and Wellness Center](image25.png) | ![Kaiser Sunnyside](image26.png) | ![Safeway](image27.png) | ![Clackamas United Soccer Club](image28.png) |

*Low/Medium wage jobs defined as having earnings of under $3,333 per month, or about $40,000 per year. Jobs held by workers of color include jobs where the race indicated was not “White Alone”. Jobs held by Hispanic/Latino workers include jobs where the ethnicity indicated was Hispanic/Latino. Source: US Census Bureau.