



Equity Analysis: Spring 2016 - Spring 2017 Service Changes

Final Report

March 16, 2016

Executive Summary

TriMet is proposing to implement several service improvements over the next year, made possible by the TriMet Board of Directors' approval of the payroll and self-employment tax rate increase in September 2015. 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 proposals for the next year include eight Major Service Changes, requiring such an analysis prior to the Board 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 both for 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

Proposed changes to the following eight lines meet TriMet's established threshold for Major Service Change:

- Line 20-Burnside/Stark:** Service increase of over 25%
- Line 21-Sandy Blvd/223rd:** Service increase of over 25%
- Line 36-South Shore:** Route change of over 25%
- Line 63-Washington Park/Arlington Hts:** New weekend service
- Line 71-60th Ave/122nd Ave:** Split route
- Line 83-Washington Park Loop:** Discontinue route
- Line 87-Airport Way/181st:** Service increase of over 25%
- Line 97-Tualatin-Sherwood Rd:** New bus line

Findings

- **No Disparate Impact on minority populations**
 - Service improvements benefit minority populations as much or more than others.
 - The few reductions do not disproportionately impact minority populations.
- **No Disproportionate Burden on low-income populations**
 - Service improvements benefit low-income populations as much or more than others.
 - The few reductions do not disproportionately impact low-income populations.

I. Background

In September 2015 the TriMet Board of Directors (“Board”) approved a payroll and self-employment tax rate increase which will provide additional revenue for transit service in the District over the next ten years. The agency has been engaging 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.

To implement the shared vision, TriMet’s intention is to roll out service improvements every spring and fall, beginning in spring 2016. Staff has developed the next three packages of proposed service changes, through spring 2017, to cover FY2017 and synchronize the Annual Service Plan with agency budget decision-making. This report documents the equity analysis conducted for these changes.

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.

II. TriMet Title VI Compliance

TriMet’s Title VI Program ¹ 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 received concurrence from the FTA in January 2014

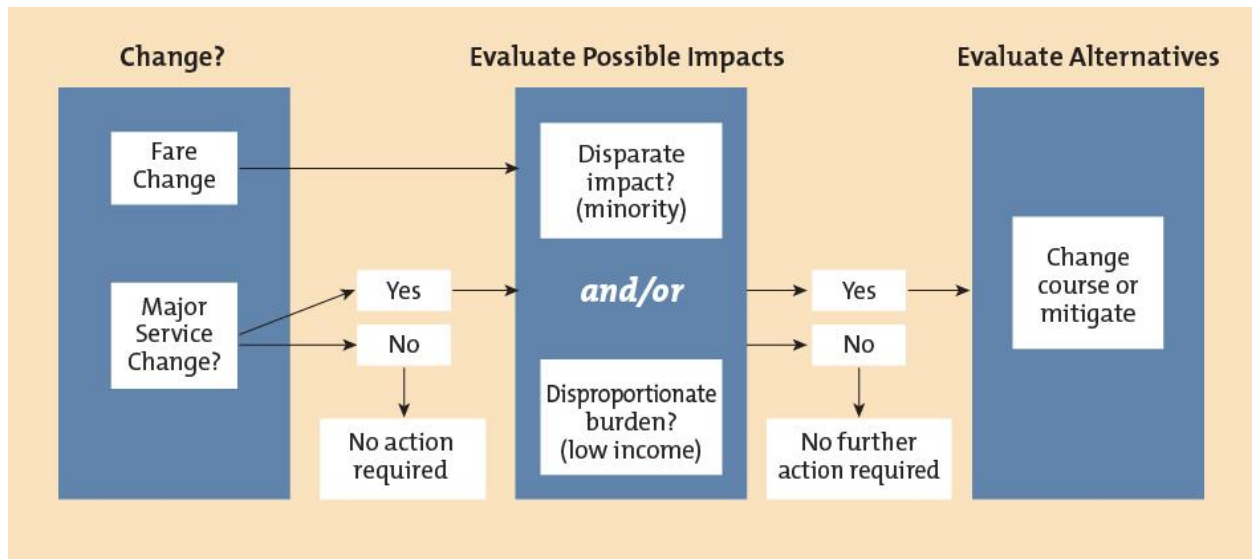


Figure 1: Overview of TriMet's Title VI Equity Analysis process

A Major Service Change is defined as:

1. A change in service of:
 - a. 25 percent or more of the number of route miles, or;
 - b. 25 percent or more of the number of revenue vehicle hours of service on a daily basis for the day of the week for which a change is made, or;
2. A new transit route is established as defined in the Introduction of TriMet's Title VI Program.
3. If changes in service on a route to be effective at more than one date within any fiscal year would equal or exceed 1(a) and/or 1(b) above, the changes in total will be considered a Major Service Change, and an equity analysis will be completed in advance of action on the proposed change.

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 including any populations that are minority and low-income (protected 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 otherwise 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 mitigate the adverse impact of the proposed action; measures that are the least discriminatory alternatives.

The Disparate Impact Policy defines measures for determination of potential disparate impact on protected populations due to adverse effects of a major service change or any change in fares. Adverse effects of service changes are defined as a decrease in the level of transit service (span in days and/or hours, and/or frequency) and/or decreased access to transit service 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.

Major Service Changes – One Line

A Major Service Change to a line will be considered to have a Disparate Impact if condition 1 and either condition 2(a) or 2(b) below is found to be true:

1. 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, and;
- 2.(a) In the event of service reductions, the service change has an adverse effect on the minority population in the service area of the line.
- 2.(b) In the event of service additions, the addition is linked to other service changes that have adverse effects on the minority population in the service area of the line, or; the service addition on the subject line is linked with a service change(s) on other line(s) that have adverse effects on the minority population in the service area of that line or lines.

For lines with Major Service Changes, if the percentage of minority population in block groups² served by the impacted portion of the line (sum of minority population in all impacted block groups divided by the total population in all impacted block groups) exceeds the percentage of minority population in the TriMet District as a whole, the impacts of changes to the line will be considered disparate.

Major Service Changes – System Level

To determine the system-wide impacts of service changes on more than one line, the percentage of impacted minority population (sum of minority population in all impacted block groups divided by the minority population of the TriMet District as a whole) is compared to the percentage of impacted non-

minority population (sum of non-minority population in all impacted block groups divided by the non-minority population of the TriMet District as a whole). Comparisons of impacts between minority and non-minority populations will be made for all changes for each respective day of service — weekday, Saturday, and Sunday.

If the percentage of impacted minority population differs from the percentage of impacted non-minority population by more than 20 percent, the overall impact of changes will be considered disparate.

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 on the next page lists the proposed service changes by the quarter in which they would take effect. Most changes proposed for the next year are service improvements, enabled by the additional revenue TriMet will receive from the payroll and self employment tax rate increases. However, two of the proposed changes – to Line 36 and Line 83 to increase operational efficiencies and eliminate redundancy – qualify as reductions in service .

B. Major Service Change Test

To determine whether individual service changes meet the definition of Major Service Change, current and proposed service are compared. Revenue vehicle hours, or the number of hours buses are serving riders, are used to determine changes in service by route. Changes to route length are also calculated. Changes of 25% or more qualify as Major Service Changes.

Results of the comparison are shown in Tables 2 and 3. To summarize, eight lines meet TriMet’s adopted Title VI Major Service Change definition:

Line 20-Burnside/Stark: Service increase of over 25%

Line 21-Sandy Blvd/223rd: Service increase of over 25%

Line 36-South Shore: Route change of over 25%

Line 63-Washington Park/Arlington Hts: New weekend service

Line 71-60th Ave/122nd Ave: Split route

Line 83-Washington Park Loop: Discontinue route

Line 87-Airport Way/181st: Service increase of over 25%

Line 97-Tualatin-Sherwood Rd: New bus line

Table 1: Proposed service changes, spring 2016-spring 2017

Quarter	Line	Service Change Description
Spring 2016	12-Barbur/Sandy Blvd	➤ Add late night and early morning trips on weekdays.
	57-TV Hwy/Forest Grove	➤ Add late night and early morning trips on weekdays.
	72-Killingsworth/82 nd	➤ Add early morning trips.
	75-Cesar Chavez/Lombard	➤ Extend all southbound weekday evening trips to downtown Milwaukie.
	76-Beaverton/Tualatin	➤ Add earlier and later trips on Sundays.
	78-Beaverton/Lake Oswego	➤ Add trips on Saturdays and Sundays.
	87-Airport Way/181 st	➤ Trips added midday weekdays between 182 nd /Powell and Gateway Transit Center.
Summer 2016	83-Washington Park Loop	➤ Discontinue service (replaced by new Line 63 weekend service).
	97-Tualatin-Sherwood Rd	➤ New bus line between Tualatin and Sherwood along Tualatin-Sherwood Rd.
Fall 2016	4-Division/Fessenden	➤ Add late night and early morning trips weekdays.
	32-Oatfield	➤ Add morning and evening trips weekdays.
	36-South Shore	<ul style="list-style-type: none"> ➤ Change southwestern end of route to stay on Jean Rd, and continue to the Tualatin Park & Ride via Boones Ferry Rd. ➤ Discontinue service to Pilkington, Childs, 65th, and McEwan.
	63-Washington Park/Arlington Hts	➤ Add year-round weekend service (replaces Line 83 summer weekend service).
	71-60 th Ave/122 nd Ave	➤ Split line at Parkrose/Sumner TC and make two separate bus lines. One to continue on the 60th Avenue side and be called 71-60th Ave. The other, on 122nd Ave, to have additional weekday rush hour trips.
Spring 2017	20-Burnside/Stark	<ul style="list-style-type: none"> ➤ Add trips weekdays. ➤ Increase Sunday service to match Saturdays.
	21-Sandy Blvd/223 rd	➤ Trips added weekdays.
	155-Sunnyside	<ul style="list-style-type: none"> ➤ Extend route east to serve new Happy Valley Crossroads mixed use development. ➤ Remove loop at current eastern end of route.

Table 2: Change in service hours by line

Line	Current Revenue Vehicle Hours	Proposed Revenue Vehicle Hours (Estimated)	Change in Daily Revenue Hours From Current Quarter	Major Service Change?
4-Division/Fessenden (Weekday)	339	342	+1%	
12-Barbur/Sandy Blvd (Weekday)	173	175	+1%	
20-Burnside/Stark (Weekday)	222	243	+9%	
20-Burnside (Sunday)	106	162	+53%	✓
21-Sandy Blvd/223 rd (Weekday)	48	60	+25%	✓
32-Oatfield (Weekday)	37	40	+8%	
57-TV Hwy/Forest Grove (Weekday)	148	150	+2%	
63-Washington Park/Arlington Hts (Saturday & Sunday)	N/A	9	New Service	✓
71-122 nd Ave* (Weekday)	77	95	+23%	
72-Killingsworth/82 nd (Weekday)	279	281	+1%	
75-Cesar Chavez/Lombard (Weekday)	227	230	+1%	
76-Beaverton/Tualatin (Sunday)	31	37	+21%	
78-Beaverton/Lake Oswego (Saturday)	42	43.5	+4%	
78-Beaverton/Lake Oswego (Sunday)	29	35	+22%	
83-Washington Park Loop (Saturday & Sunday)	13	0	-100%	✓
87-Airport Way/181 st (Weekday)	30	40	+33%	✓
97-Tualatin-Sherwood Rd	N/A	16	New Line	✓

*Only the 122nd Ave portion has a proposed service increase, so current and proposed service hours reflect only that segment.

Table 3: Change in route length by line

Line	Current Route Length	Added (% Change)	Removed (% Change)	Major Service Change?
36-South Shore	7.8 miles*	0.7 miles (+9%)	2.1 miles (-27%)	✓
71-60 th /122 nd Ave	22.7 miles	Split route		✓
155-Sunnyside	5.3 miles	1.1 miles (+21%)	0.6 miles (-11%)	

*Reflects length of most trips, which does not include peak-hour trips to/from downtown Portland

C. Line-level Analyses

Having identified the service changes which meet the definition of Major Service Change, the next step in the Equity Analysis is to look at each line individually to determine potential disparate impacts (minority populations) and/or disproportionate burdens (low-income populations). Both service decreases and service increases are analyzed. For service reductions, the analysis examines whether *adverse effects* are disproportionately borne by minority and/or low-income populations. On the other hand, for service increases the analysis examines the extent to which the *benefits* of the improvements are inclusive of minority and low-income populations.

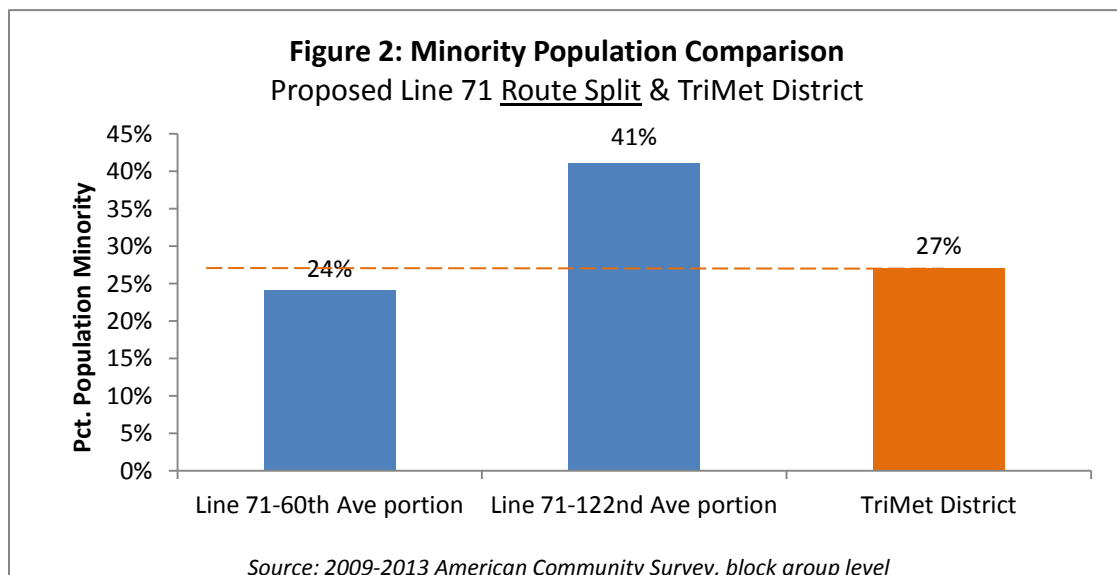
The line-level analysis compares minority and low-income populations for the service area of each line proposed for a Major Service Change to the minority and low-income populations of the TriMet District as a whole. The analysis is separated by type of service change being proposed:

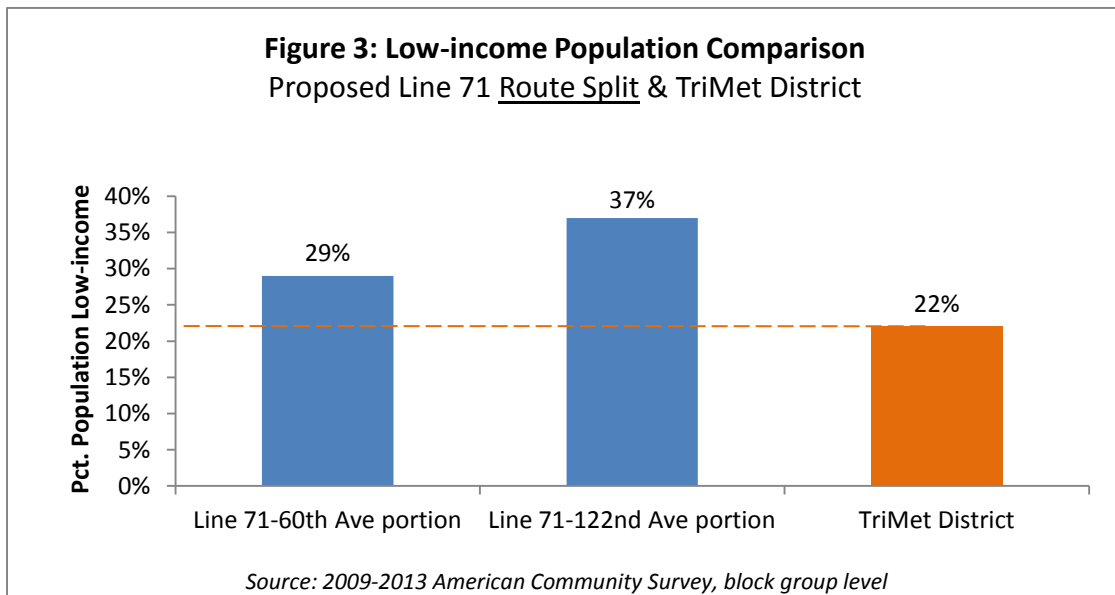
1. **Route Split**
2. **Major Service Reductions**
3. **Major Service Increases**

For a visual representation of the geographic analysis, see the maps in Appendix A.

1. **Route Split**

On its own, splitting a route does not necessarily cause *adverse effects* or benefits for riders. TriMet still analyzed the details of the proposed change to the Line 71 below for potential equity impacts. Figure 2 displays the minority population along each portion of the line as compared to the 27% TriMet District minority population. Figure 3 displays the low-income population along each portion of the line as compared to the 22% TriMet District low-income population. The narrative analysis of the proposed change follows.





Line 71 (Route split)

The Line 71 is proposed to be split into two routes at Parkrose/Sumner Transit Center. This would be done because the portion that currently runs between there and Foster & 94th Ave is proposed for an increase in service, bringing its frequency up to approximately every 15 minutes during weekday peaks. The other segment – between Clackamas Town Center and Parkrose/Sumner Transit Center – does not currently have the demand to warrant the same increase, and would maintain its current level of service running every 16-20 minutes during weekday peaks.

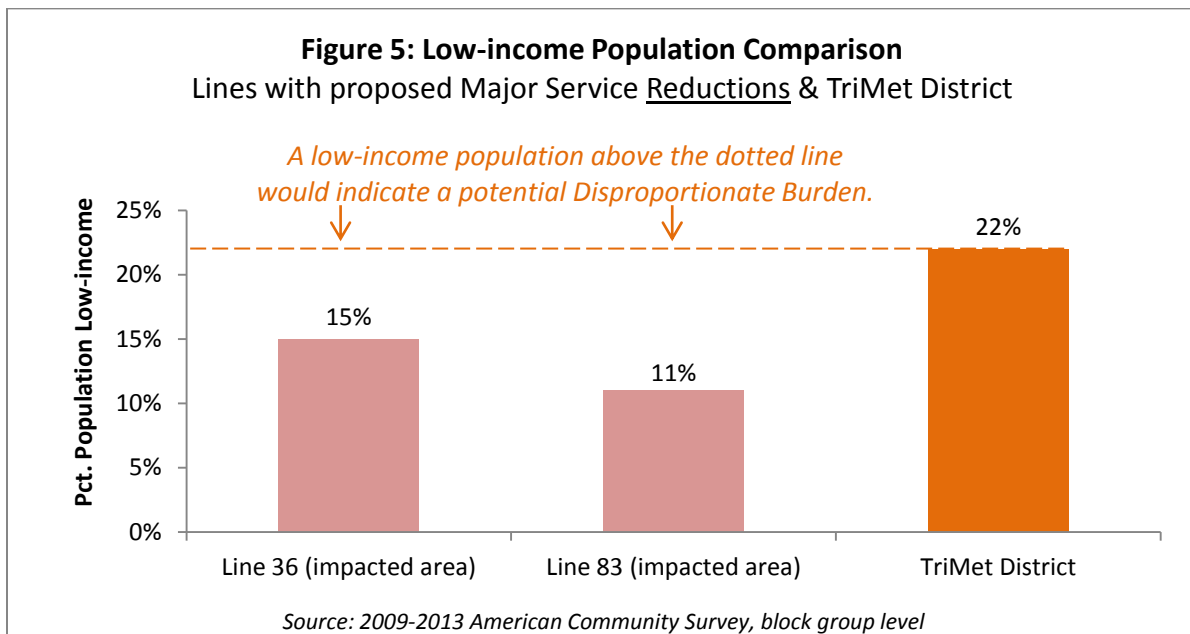
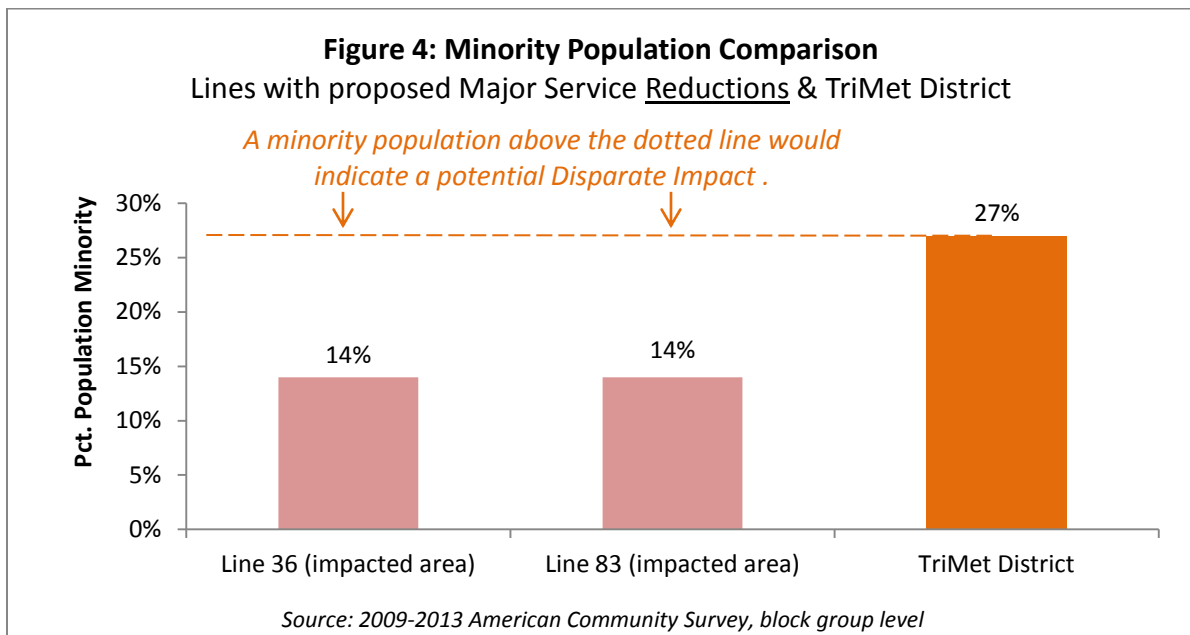
Besides increased frequency on the 122nd Ave portion, the other result of this change is that the route would essentially be “shortened” because it will end at Parkrose for both segments. Riders would need to make a transfer to travel to the other portion of the current route. While impactful for some riders, this proposed route split does not constitute an *adverse effect* under TriMet’s Title VI policies because it would not decrease span or frequency of service, and would not increase access distance to beyond one-quarter mile. Without the presence of an *adverse effect*, there is **no Disparate Impact** and **no Disproportionate Burden**.

Despite these findings, it is still noted that the service area of the Line 71-60th Ave portion has a population that is 29% low-income, which is above-average compared to the TriMet district as a whole. At 24%, the minority population for that portion is below-average for the district.

The service area of the Line 71-122nd Ave portion has a 41% minority population and 37% low-income population – both above average for the TriMet district.

2. Major Service Reductions

For service reductions the analysis examines whether *adverse effects* are disproportionately borne by minority and/or low-income populations. If *adverse effects* are identified and a line's minority or low-income population is higher than the TriMet District as a whole, the proposed change is flagged as a potential Disparate Impact or Disproportionate Burden, respectively. Figure 4 displays the minority population along each line as compared to the 27% TriMet District minority population. Figure 5 displays the low-income population along each line as compared to the 22% TriMet District low-income population. The narrative analysis of each individual line's proposed reduction follows.



Line 36 (Route streamlining, including stop removals)

The re-route to the Line 36 to improve travel times and operational efficiency would remove service from a total of 25 stops, including both directions of service. Only two of these stops would still have service within one-quarter mile, meaning that this is considered an *adverse effect* related to the removal of the other 23 stops. However, at 14% people of color and 15% low-income, the impacted area of the Line 36 – the block groups where service would be discontinued – has minority and low-income populations that are below-average for the TriMet district. At the line level, this leads to findings of ***no Disparate Impact*** and ***no Disproportionate Burden***.

It should also be noted that these stops see very little activity, with a total of 26 ons/offers per weekday, or an average of about one on/off per stop per day as of fall 2015.

Line 83 (Merge with Line 63)

Line 83, which provides weekend service in Washington Park from May through October, is proposed to be discontinued, with service hours reinvested into the nearly-identical Line 63. This would enable TriMet to provide year-round weekend service in Washington Park, while saving resources to invest elsewhere in the system. The proposal would remove TriMet service from four stops in the park. Each of these stops will be served by the free Washington Park TMA shuttle, and three of the four are less than one-quarter mile from TriMet Line 63 service. However, the fourth is one-third mile away from TriMet service, which constitutes its removal as an *adverse effect*.

The impacted area of the Line 83 is 14% minority and 11% low-income, which are below-average for the TriMet district. At the line level, this leads to findings of ***no Disparate Impact*** and ***no Disproportionate Burden***.

3. 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. The narrative analysis of each individual line is below. On the next page Figure 6 displays the minority population along each line as compared to the 27% TriMet District minority population, and Figure 7 displays the low-income population along each line as compared to the 22% TriMet District low-income population.

Line 20 (Frequency increase on Sundays)

Increasing Sunday service on the Line 20 to match what is currently provided on Saturdays would potentially benefit a service area population that is 32% minority and 32% low-income, which are both above-average compared to the TriMet district as a whole. At the line level, this leads to a finding of ***no Disparate Impact*** and ***no Disproportionate Burden***.

Line 21 (Frequency increase on weekdays)

Increasing weekday peak frequency on the Line 21 would potentially benefit a service area population that is 39% minority and 36% low-income, which are both above-average compared to the TriMet district as a whole. At the line level, this leads to a finding of ***no Disparate Impact*** and ***no Disproportionate Burden***.

Line 63 (New weekend service)

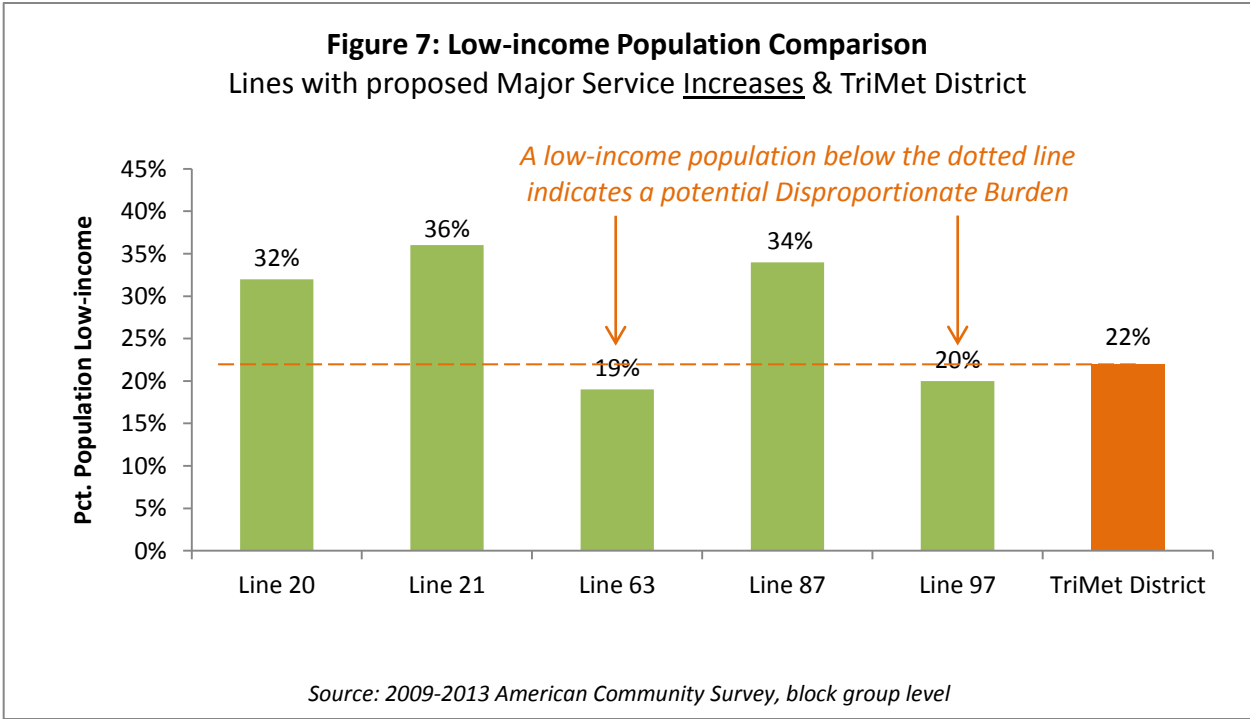
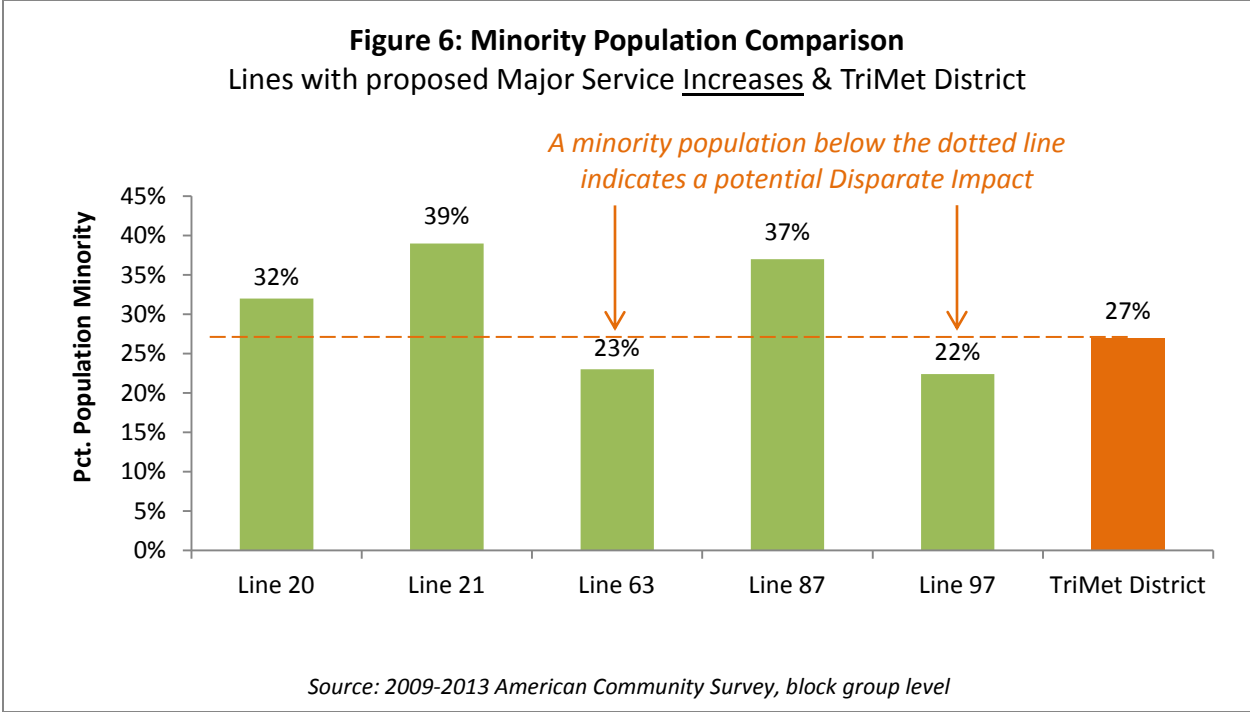
The discontinuation of the Line 83 would enable TriMet to expand service on the Line 63 by adding year-round weekend service (Note: the Line 83 currently provides weekend service only from May through October). The service area population of the Line 63 is 23% minority and 19% low-income, which are below-average for the TriMet district. At the line level, this indicates a ***potential Disparate Impact*** and a ***potential Disproportionate Burden***, calling for further examination of the context, goals, and alternatives considered. The system-level analysis provided in the next section is also a key consideration.

Line 87 (Frequency increase)

The service increase on the Line 87 would potentially benefit a service area population that is 37% minority and 34% low-income, which are both above-average compared to the TriMet District as a whole. At the line level, this leads to a finding of ***no Disparate Impact*** and ***no Disproportionate Burden***.

Line 97 (New line)

The new Line 97 would potentially benefit a service area population that is 22% minority and 20% low-income, which are below-average compared to the TriMet District. At the line level, this indicates a ***potential Disparate Impact*** and a ***potential Disproportionate Burden***, calling for further examination of the context, goals, and alternatives considered. The system-level analysis provided in the next section is also a key consideration.



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.

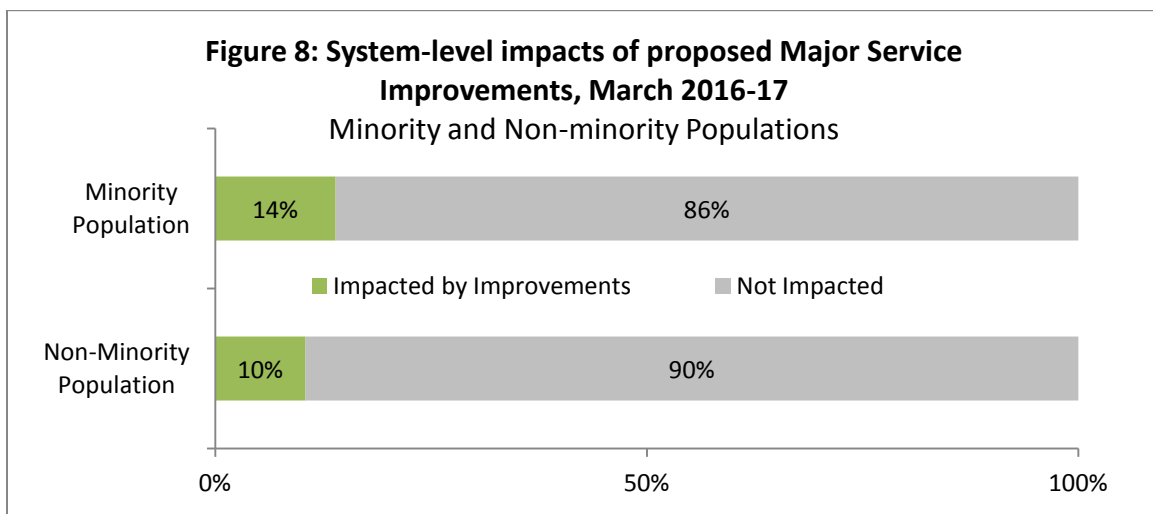
Disparate Impact Analysis: Major Service Increases

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 20% less (or 4/5) of the District’s minority than non-minority population stood to benefit from the improvements, per TriMet’s adopted Title VI policies.

Table 4 and Figure 8 compare the positively impacted minority and non-minority populations. A greater percentage of the District’s minority population stands to benefit from the proposed Major Service Increases as compared to the non-minority population (14% vs. 10%, respectively). Given the 10% of non-minorities positively impacted by the improvements, the percentage of minorities impacted would have to be below 4/5 of that figure (or 8%) to meet the definition of a system-level Disparate Impact. Therefore, ***no system-level Disparate Impact is found related to proposed Major Service Increases.***

Table 4: System-level Disparate Impact Analysis of Major Service Increases

Pct. of TriMet District Non-Minority Pop Impacted	Minority Pop Disparate Impact Threshold	Pct. of TriMet District Minority Pop Impacted	Potential Disparate Impact?
10%	Less than 8%	14%	No



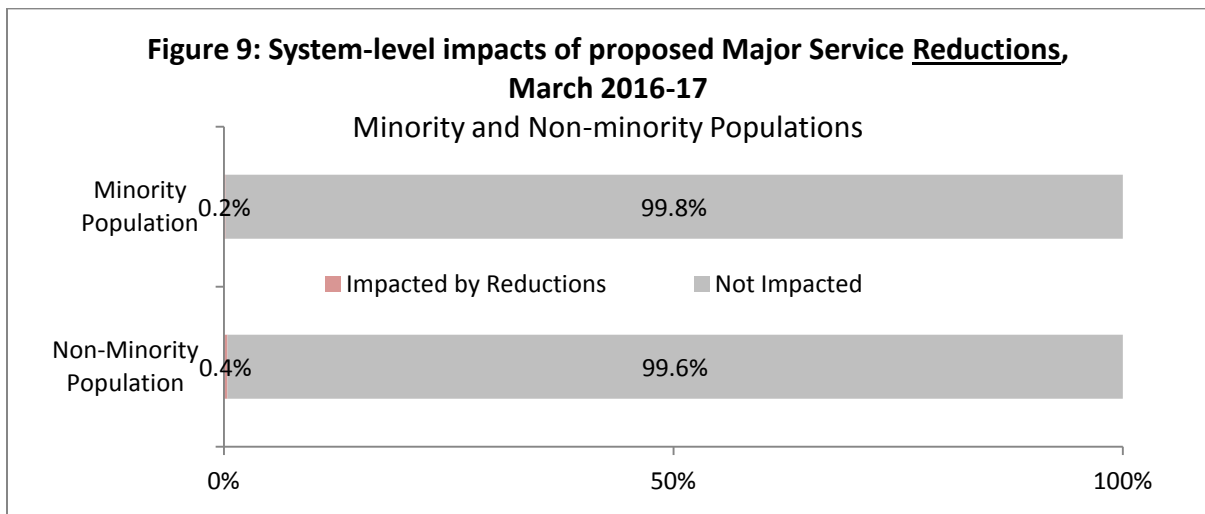
Disparate Impact Analysis: Major Service Reductions

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 20% more of the District’s minority than non-minority population was impacted by the service reductions, per TriMet’s adopted Title VI policies.

Table 5 and Figure 9 compare the impacted minority and non-minority populations. In both cases, the percentage of the population impacted is less than 1%. A slightly greater percentage of the District’s non-minority population is potentially impacted by the proposed Major Service Reductions as compared to the minority population (0.4% vs. 0.2%, respectively). Given the 0.4% of non-minorities impacted by the reductions, the percentage of minorities impacted would have to be over 20% greater than that figure (or 0.48%) to meet the definition of a system-level Disparate Impact. Therefore, ***no system-level Disparate Impact is found related to proposed Major Service Reductions.***

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

Pct. of TriMet District Non-Minority Pop Impacted	Minority Pop Disparate Impact Threshold	Pct. of TriMet District Minority Pop Impacted	Potential Disparate Impact?
0.4%	Greater than 0.48%	0.2%	No



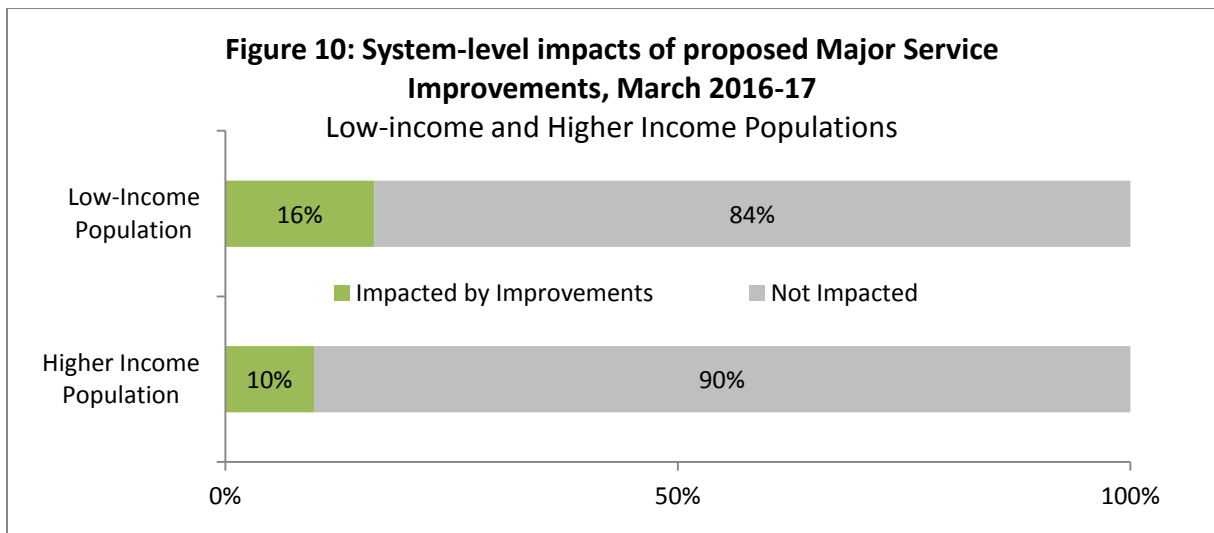
Disproportionate Burden Analysis: Major Service Increases

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 Change improvements, 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 20% less (or 4/5) of the District’s low-income than higher income population stood to benefit from the improvements, per TriMet’s adopted Title VI policies.

Table 5 and Figure 5 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 Change improvements as compared to the higher income population (16% vs. 10%, respectively). Given the 10% of higher income persons positively impacted by the set of Major Service Changes, the percentage of low-income persons impacted would have to be below 4/5 of that figure (or 8%) to meet the definition of a system-level Disproportionate Burden. Therefore, ***no system-level Disproportionate Burden is found related to proposed Major Service Increases.***

Table 6: 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 Impacted	Potential Disproportionate Burden?
10%	Less than 8%	16%	No



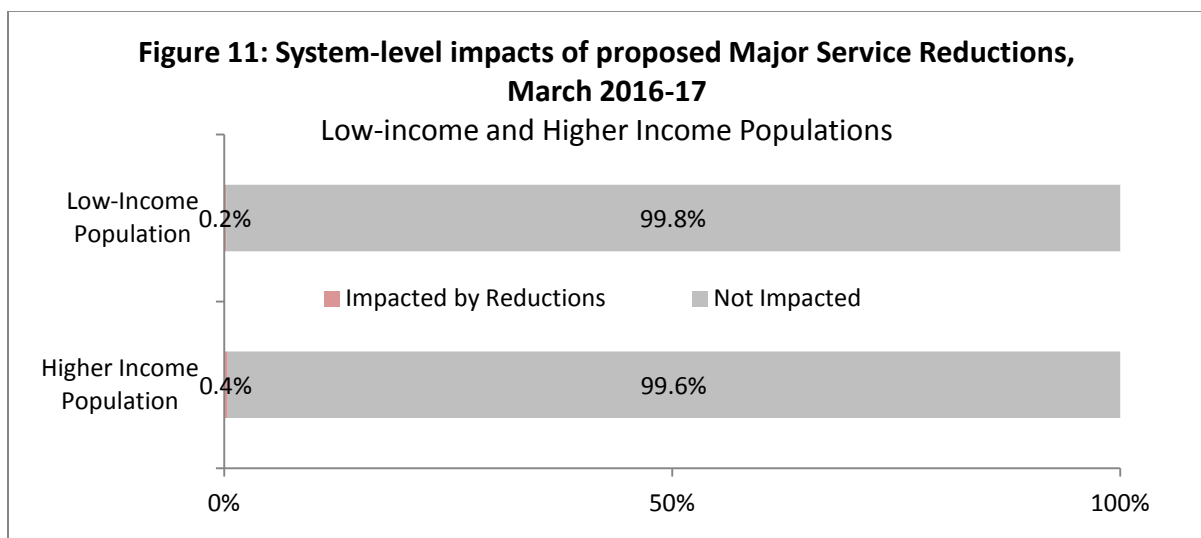
Disproportionate Burden Analysis: Major Service Reductions

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 20% more of the District’s low-income than higher income population was impacted by the service reductions, per TriMet’s adopted Title VI policies.

Table 7 and Figure 11 compare the impacted minority and non-minority populations. In both cases, the percentage of the population impacted is less than 1%. A slightly greater percentage of the District’s higher income population is potentially impacted by the proposed Major Service Reductions as compared to the low-income population (0.4% vs. 0.2%, respectively). Given the 0.4% of higher income population impacted by the reductions, the percentage of the low-income population impacted would have to be over 20% greater than that figure (or 0.48%) to meet the definition of a system-level Disproportionate Burden. Therefore, ***no system-level Disproportionate Burden is found related to proposed Major Service Reductions.***

Table 7: System-level Disproportionate Burden Analysis of Major Service Reductions

Pct. of TriMet District Higher Income Pop Positively Impacted	Low-income Pop Disproportionate Burden Threshold	Pct. of TriMet District Low-income Pop Impacted	Potential Disproportionate Burden?
0.4%	Greater than 0.48%	0.2%	No



IV. Public Outreach

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. The plans include dozens of bus service improvements beyond those proposed for implementation over the next year.³

TriMet also engaged the public with the specifics of these service proposals in February 2016. The agency received comments via email, targeted community and onboard outreach, and a public open house. Input was largely positive about proposed changes and TriMet’s efforts to invest in additional bus service. Both those who emailed and those who attended the open house had suggestions for additional improvements throughout the TriMet service district, which were directed to planning staff.

The proposed route change to the Line 36 (which includes several stop removals) did raise concerns for some. In order to hear from potentially impacted community members about this change, staff presented the proposal at a meeting of the Rosewood Neighborhood Association board. Attendees expressed a desire to maintain service in the Rivergrove area, especially for the few people who have no other options and would need to walk much farther to continue riding (summary of discussion provided as Appendix B). However, TriMet intends to pursue the route change because ridership on this portion of the line has been very low for many years – even when TriMet offered 12 more trips than today. The new route has the potential to attract more riders by serving more employment, having shorter travel time, and improving reliability. To reiterate the finding of the data analysis, the proposed change does not present any apparent Title VI-related concerns.

³ For more information, go to <http://future.trimet.org>

V. Summary & Discussion

Table 8 summarizes the results of the line-level and system-level Disparate Impact and Disproportionate Burden analyses.

Table 8: Summary of Disparate Impact and Disproportionate Burden analysis results

	Potential Disparate Impact?	Potential Disproportionate Burden?
Route Split		
71-60 th /122 nd Ave	No	No
Service Reductions		
36-South Shore	No	No
83-Washington Park Loop	No	No
Combined Reductions (System-level)	No	No
Service Improvements		
20-Burnside/Stark	No	No
21-Sandy Blvd/223 rd	No	No
63-Washington Park	Yes	Yes
87-Airport Way/181 st	No	No
97-Tualatin-Sherwood Rd	Yes	Yes
Combined Improvements (System-level)	No	No

The two service proposals flagged for potential Disparate Impact and Disproportionate Burden – Lines 63 and the new Line 97 – are improvements in areas with below-average minority and low-income populations. However, the rest of the proposed improvements serve areas of above-average minority and low-income populations, thereby countering concerns about an inequitable distribution of benefits related to the package of proposed service changes. Even so, the context of the Line 63 and Line 97 help explain why TriMet is proposing these improvements despite the below-average minority and low-income populations along the route.

The addition of weekend service on the Line 63 is possible due to the removal of the seasonal Line 83, which is providing redundant service now that the Washington Park TMA has introduced the free Washington Park shuttle serving the same route and funded by parking revenues within Washington Park. The 63 serves largely the same route, but also serves the nearby Arlington Heights neighborhood. Reinvesting the savings from Line 83 elimination into year-round weekend service in the area utilizes existing resources without reducing service

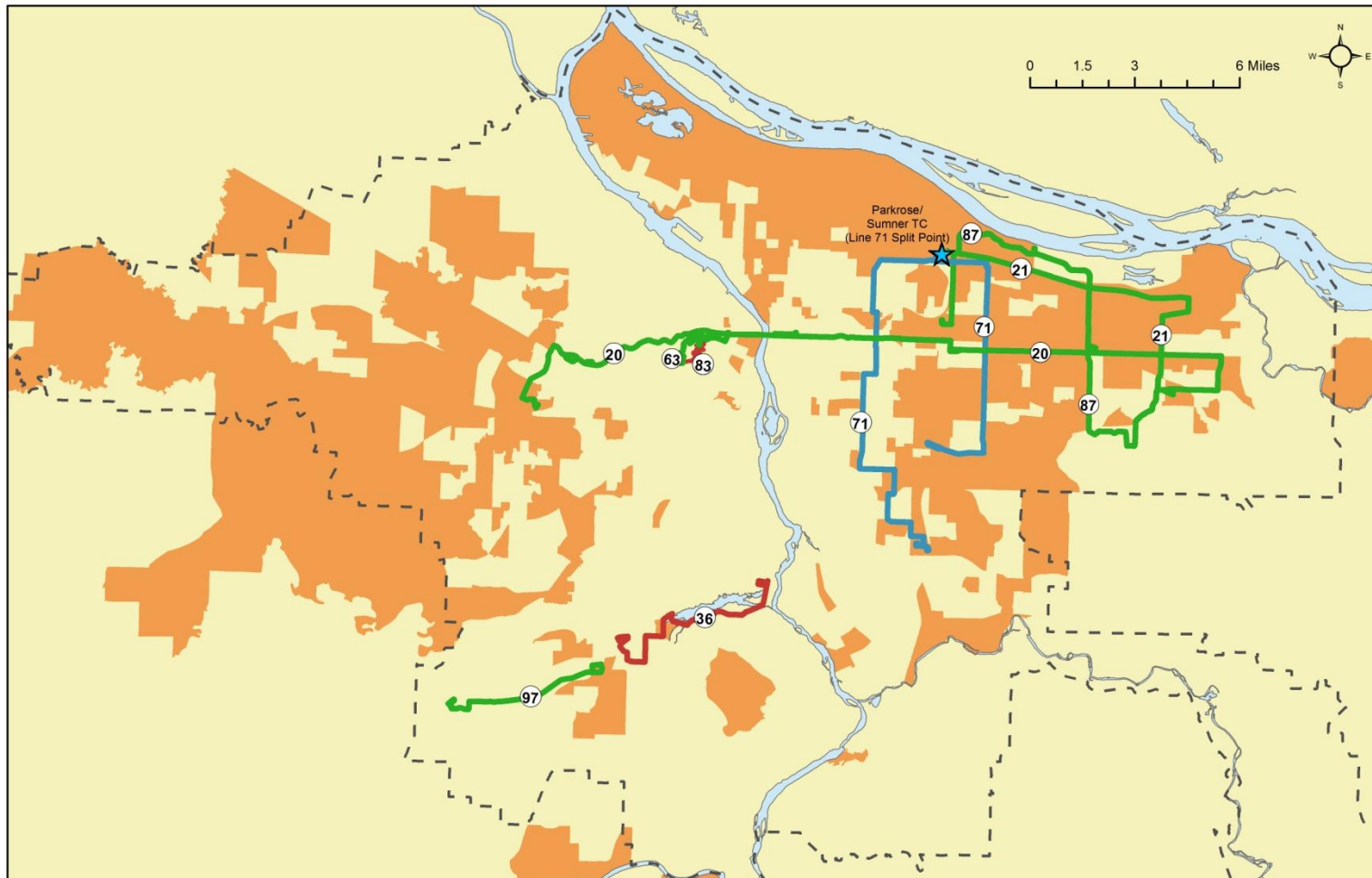
elsewhere and results in a net savings of vehicle hours that is going into some of the other improvements proposed.

Regarding the new Line 97, service on Tualatin-Sherwood Rd. was identified after significant community outreach to the southwest portion of the TriMet service District (where the communities of Tualatin and Sherwood are located), as part of TriMet's Future of Transit planning efforts. This outreach included stakeholder meetings, community workshops, and specific outreach to communities of concern. Line 97 will serve an area that currently lacks TriMet service, yet has over 20,000 jobs, many of which are entry level. The line will provide a vital connection to WES Commuter Rail Service to Beaverton, Tigard, and Wilsonville, Line 96 express service to downtown Portland, and Line 76, a future Frequent Service Line. And service on Tualatin-Sherwood Rd. is the first step towards creating a longer line that will stretch north of downtown Tualatin to serve the many jobs at Bridgeport Village, the SW 72nd Ave. corridor, the Tigard Triangle, and downtown Tigard.

One final note is that two proposed service improvements, while not reaching the threshold of Major Service Changes, stand out as significant: Line 71-122nd Ave portion (23% increase in service hours), and the Lines 76 and 78 on Sundays (21% and 22% increase in service hours, respectively). All three of these lines serve above-average minority and low-income populations, and the Line 71 improvement responds directly to recommendations from by several East Portland community organizations as well as TriMet's Transit Equity Advisory Committee for better north-south service in that area of the region.

Thus, given the results of this analysis and the context of the proposed service changes, the investments in service proposed to roll out over the next year appear to benefit minority and low-income populations equitably, without any apparent disproportionate and adverse impacts.

Appendix A: Overlay Maps showing proposed Major Service Changes and demographics

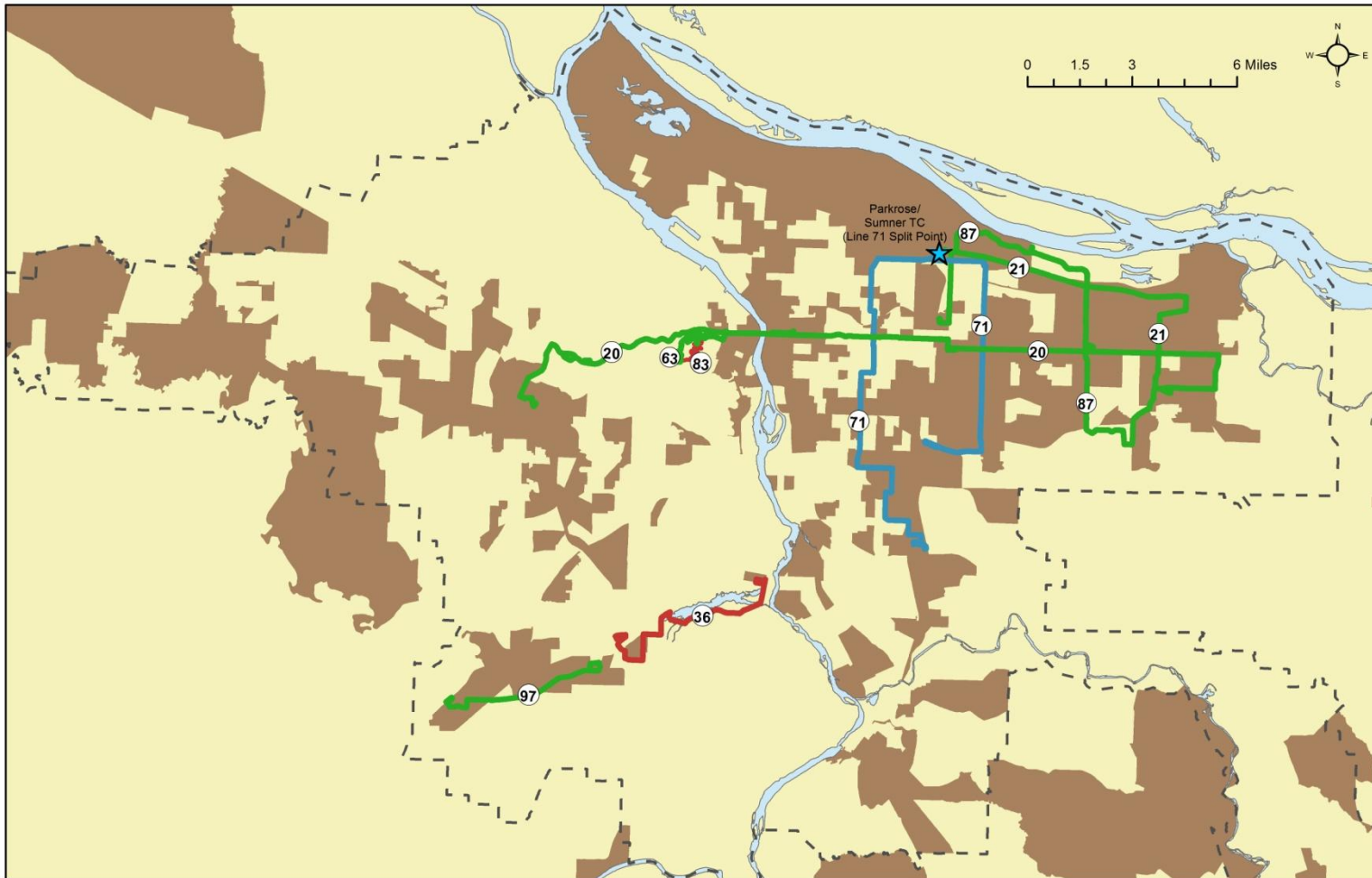


Proposed Major Service Changes & Minority Population

March 2016 - March 2017

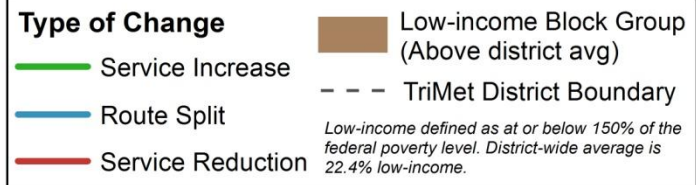
Source: 2009-2013 American Community Survey

Type of Change	Minority Block Group (Above district avg)
Service Increase	Minority Block Group (Above district avg)
Route Split	TriMet District Boundary
Service Reduction	<i>Minority defined as all races/ethnicities except white non-Hispanic. District-wide average is 27.4% minority.</i>



Proposed Major Service Changes & Low-income Population March 2016 - March 2017

Source: 2009-2013 American Community Survey



Appendix B: Summary of discussion with Rosewood Neighborhood Association regarding proposed route change to Line 36-South Shore

Discussion of the Line 36-Southshore Blvd. Route Change Proposal – Rosewood Neighborhood Association Board Meeting

7:00 p.m. to 8 p.m. February 18, 2016

River Grove Elementary School

Attendees: 18 + 5 Rosewood NA Board Members; 23 total

Comments:

1. Proposal would result in a long walk for riders – especially from Rivergrove.
2. Concern about the businesses on McEwan Rd.
3. One of the motels on McEwan Rd. is for long-term housing for homeless people.
4. The Boones Ferry Rd. intersection is too big to cross. Vehicles move too quickly through it.
5. Line 36 provides access to the neighborhood. It is the only means of transportation for some.
6. One person takes the bus to work at OHSU every day. Can't drive to work because of limited parking at OHSU.
7. Tualatin P&R is not a good option for some people. It is sometimes full. P&R's are subject to crime. On cold evenings, one's car may not start at the P&R.
8. Walking to the Tualatin P&R is not a good option. The walk is long and unpleasant.
9. Would like to take Line 36 to PCC.
10. The bus doesn't run frequently enough, early enough, or late enough.
11. Want weekend service on Line 36.
12. What about routing Line 36 down Lakeview Rd. to get closer to Micro Systems/Biotronik. It may increase rides.
13. Improve connectivity with other bus lines.
14. There must be a middle ground. Look at data better. Find efficiencies elsewhere.
15. Public transportation makes life better for this community.
16. This proposal would make our trips longer.
17. Pull out some of the stops so the bus can serve the community, but do it faster.
18. There is a yard helper who comes to the neighborhood to work on one or more properties up to 5 days/week in the summer. Line 36 is his only means to work.
19. Rivergrove is growing (30%, doubling), especially in the last couple of years. Much of the growth is along Childs Rd. Transit is what makes Rivergrove attractive.
20. A lot of people would rather go to the Tualatin P&R and connect with Line 96 than through downtown LO. The schedule doesn't make it convenient to do this during rush hour.
21. Many in the community pay the TriMet payroll tax. Many feel even if they don't pay the tax directly, they pay the tax indirectly via increased prices.
22. Serve Childs Rd. to Bryant Rd. More ridership potential.
23. How many people are a ¼ mile from the existing line?
24. Pop. in Rivergrove has grown from 275 to 595 people.
25. There is a real community on the bus.
26. The current schedule is not realistic. That is why ridership is low.
27. Start the bus earlier in the morning.
28. Historically, communities have formed around transit. Transit has helped communities grow. This proposal would hurt this community.
29. This is a mixed income community. Consider Piper's Run apartments.
30. River Grove Elementary is the only Title X elementary school in the LO School District.