

TriMet Title VI and Transit Equity Impacts Assessment

Recommended Service Changes Line 47-Baseline/Evergreen and 48-Cornell

Final Report

May 16, 2013

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EXECUTIVE SUMMARY

This report evaluates Title VI and transit equity impacts of recommended service changes on Line 47-Baseline/Evergreen and Line 48-Cornell in compliance with the Title VI of the Civil Rights Act of 1964 and FTA Circular 4702.1B. The report identifies the presence and magnitude of adverse effects and tests for disparate impacts (minority) and disproportionate burdens (low-income) by comparing the percentages of minority and low-income populations, respectively, for all impacted census tracts to averages for the TriMet service district.

Under TriMet's policies and definitions, changes on each line would be considered a major service change, thus an equity assessment is completed prior to final action on recommended changes.

Line 47-Baseline/Evergreen

A routing change for Line 47-Baseline/Evergreen would impact service at 68 bus stops, including 22 stops in minority tracts. The minority population of all impacted tracts is 20.6 percent, less than the TriMet district average (27.1%). There is an adverse effect on service; however this would not be a disparate impact.

No impacted stops are located in census tracts where poverty population is higher than the TriMet district average (21.9%).

Among all impacted stops there is a high level of alternative service availability, with 92.5 percent of rider ons and offs either directly served by one or more other lines or within one-quarter mile or less. Among bus stops in minority tracts, 58.2 percent of impacted ridership would have a high level of alternative service (46 of 79 daily ons and offs). Added service on Line 48-Cornell further strengthens available alternative service by maintaining am/pm peak frequency at stops presently served by both Lines 47 and 48 along Cornell Rd.

Service frequency on Line 47 will be improved, and more frequent service will benefit all trips within the portions of the route illustrated in this analysis, and will benefit midday and evening trips anywhere on the route. The times of the first trips of the day will be similar to the present, and service will be extended one hour later in the evening for trips to the Hillsboro Transit Center.

Onboard surveys were also administered across all trips in the daily schedule along the impacted section of Line 47 to generate feedback from the community and assess the impact of the potential route change on riders' daily trips. Survey results are provided as an Appendix.

A majority of responding riders said they would continue using TriMet service even with changes to Line 47. Predominantly, these riders said they would use Line 48 to complete their trip. About 10 percent of those surveyed said that they would be without a transportation alternative; these responses generally align with results of the stop-by-stop analysis of alternative service availability.

Findings:

No Title VI impacts on minority population disproportionate to representation within TriMet's service area were found based on this analysis. Likewise, no disproportionate burden impacts on low-income populations were found.

Adverse effects for impacted riders are highly mitigated by availability of alternative service. Some 93 percent of rider ons and offs either directly served by another line or within ¼ mile or less.

Line 48-Cornell

Recommended changes would be an improvement in weekday service on Line 48. The Line would continue to run from Hillsboro Transit Center to Sunset Transit Center on its present routing. There would be four additional trips daily in each direction along the entire line (from 52 to 60 trips per day). In addition, there will be new trips in the a.m. and p.m. peaks and evening in both directions between the Sunset Transit Center and NW Cornell Rd. at NW Stucki Ave. (21 trips per day). These additional trips will improve frequency in the Stucki Ave. to Hillsboro TC segment (from 30-38 minute headways to 15-17 minute headways) during peak commuting hours and reduce evening headways on the entire Line to 45 minutes or less from 55-60 minutes.

The first morning trips from Hillsboro Transit Center and Sunset Transit Center would continue run at 5:10am and 5:23am, respectively. However, the last trip from Hillsboro Transit Center would be at 9:11pm instead of 8:19pm. The last trip from Sunset Transit Center would be at 10:38pm instead of 9:54pm.

Line 48 riders would benefit from improved frequency and span of service on weekdays. Average daily ridership on Line 48 in Fall 2012 was 970 boardings.

Findings:

No adverse effects and no Title VI impacts on minority population disproportionate to representation within TriMet's service area were found based on this analysis. Likewise, no disproportionate burden impacts on low-income populations were found.

TITLE VI AND TRANSIT EQUITY ANALYSIS

TriMet complies with Title VI of the Civil Rights Act of 1964 and FTA Circular 4702.1B to ensure that:

- The level and quality of service is provided without regard to race, color or national origin;
- There is full and fair participation in decision making without regard to race, color or national origin, and;
- There is meaningful access to programs by persons with limited English proficiency.

Definition of Minority and Low-Income Populations

From FTA Circular 4702.1B

“Minority Persons include the following

- (1) American Indian and Alaska Native, which refers to people having origins in any of the original peoples of North and South America (including Central America), and who maintain tribal affiliation or community attachment
- (2) Asian, which refers to people having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent.
- (3) Black or African American Populations, which refers to peoples having origins in any of the Black racial groups of Africa.
- (4) Hispanic or Latino Populations, which includes persons of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race.
- (5) Native Hawaiian and Other Pacific Islander, which refers to people having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.”

For the purposes of this analysis, “low-income” is defined as a person whose median household income is at or below 150% of the federal poverty guidelines as determined by the most recent U.S Census American Community Survey 5-year estimates

TRIMET SYSTEM RIDERSHIP PROFILE

Daily Ridership

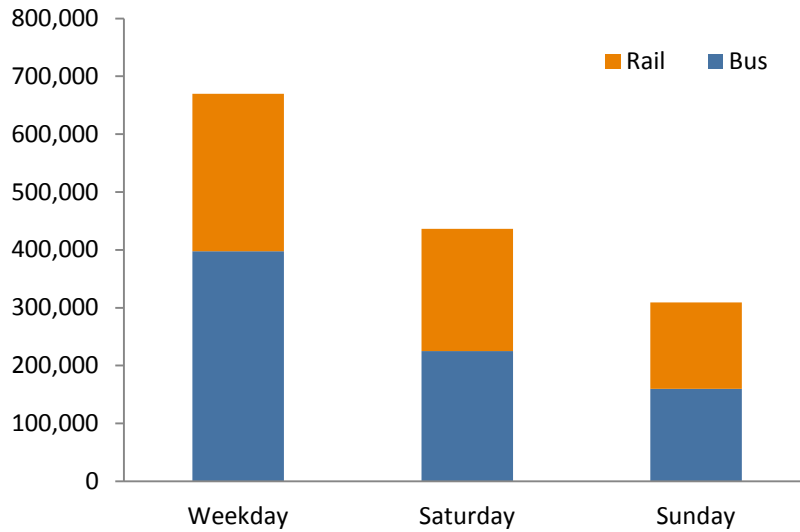
The following data plotted in Figure 1 below illustrate the distribution of ridership between TriMet’s bus and rail systems on weekdays, Saturday, and Sunday. Ridership data is collected on an on-going basis via Automatic Passenger Counters (APCs) on TriMet vehicles and summarized quarterly. The data in Table 1 is from the Fall 2012 summary period.

Table 1. Ridership by Mode and Day

Service Day	Bus	Rail*	Total
Weekday	397,778	272,076	669,854
Saturday	225,140	211,109	436,249
Sunday	160,001	149,377	309,378

*Rail includes both MAX light rail and WES commuter rail

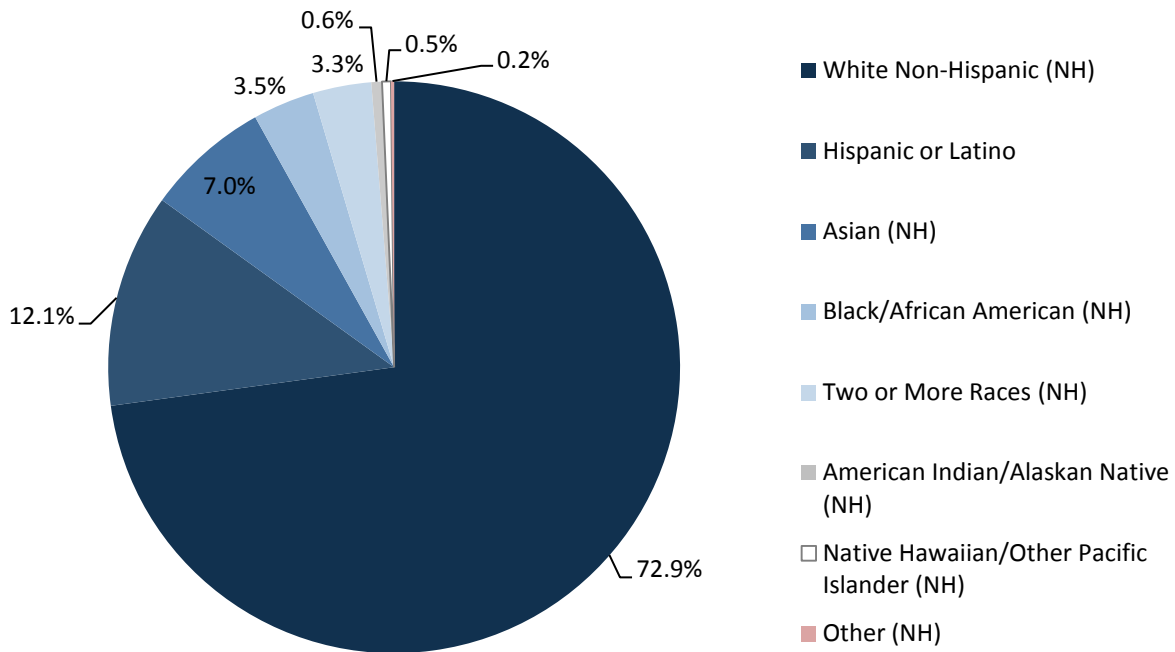
Figure 1. Ridership by Mode and Day



Race and Ethnicity – Service Area Profile

Based on 2010 Census data 27.1 percent of the population within TriMet’s service district is considered minority using the definition provided in the FTA Circular 4702.1B. As shown in Figure 2, minority population within TriMet’s service district includes Hispanic or Latino (12.1%), Asian (7.0%), Black or African American (3.5%), American Indian or Alaskan Native (0.6%), Native Hawaiian or Other Pacific Islander (0.5%), Two or More Races (3.3%) and Other (0.2%).

Figure 2. 2010 TriMet Service Area Population Race/Ethnic Characteristics



Income – Service Area Profile

Based on the 2007-2011 US Census American Community Survey 5-year estimate, 21.9 percent of the population within TriMet’s service district is considered low-income (person whose median household income is at or below 150% of the federal poverty guidelines).

METHODOLOGY

Definition of Major Service Change

TriMet will consider any service changes that qualify for a public hearing under TriMet Code, Section 18.15 as a “major service change” and in need of analysis under Title VI. Service changes that require a public hearing are as follows:

1. A change in service of:
 - a) 25% or more of the number of transit route miles, or;
 - b) 25% or more of the number of transit revenue vehicle miles of a route on a daily basis for the day of the week for which a change is made, or;
2. A new transit route is established.

Quantification of Impacts

Ridership

TriMet regularly collects passenger boarding and alighting data via Automatic Passenger Counters (APCs) installed on many of its buses and rail cars. Every trip is sampled multiple times during each quarterly service period resulting in passenger activity data available at the stop level and aggregated quarterly. This quarterly collection of ridership data is the Passenger Census. This analysis uses Passenger Census data from the Fall 2012 quarter. For route changes, ridership (ons and offs) at bus stops on the affected route segment(s) is used.

Minority and low-Income Populations

Census tract level data is utilized for this analysis. The following data tables were used:

Minority: T55. HISPANIC OR LATINO ORIGIN BY RACE, 2010 Census

Poverty: T117. RATIO OF INCOME TO POVERTY LEVEL, 2007-2011 American Community Survey 5-Year Estimates

Identification of Impacted Census Tracts and Disproportionate Changes

Stops associated with route segments that have potential changes are considered impacted. Any tract containing an impacted stop is considered impacted. If the percentages for impacted minority and/or low-income populations within the impacted tracts exceed those of the District as a whole, the impact of changes to the route will be considered disproportionate.

TriMet service area thresholds for sensitive populations:

Population	Threshold
Minority	27.1%
Low-Income	21.9%

Figure 3 shows census tracts within the TriMet service and indicates those that are above the minority and/or low-income threshold.

Defining Alternative Service Availability

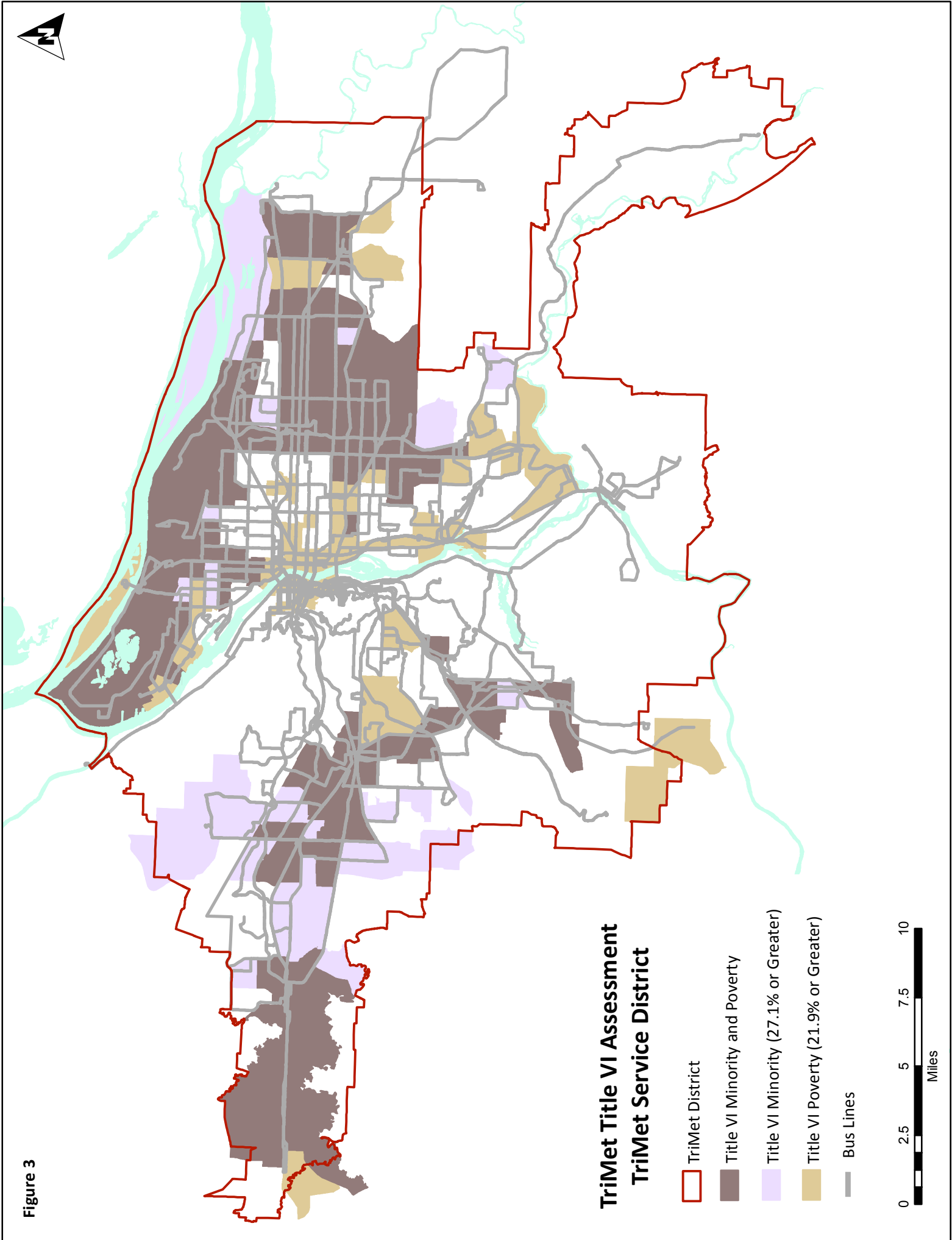
In addition to considering impacts, this analysis will also identify the extent to which there is alternative public transportation service available. Alternative service availability will be rated as fully covered, high,

medium or low according to the criteria described in Table 2. Alternative service is assessed for each stop that Line 47 would no longer serve in the event of the routing change and does not include stops that will be unaffected by the potential route change. Alternative service includes other transit lines directly serving the stop or within ½ mile or less walking distance. For a portion of trips the use of alternative service would include the need to transfer.

Table 2. Alternative Service Availability

Level of Alternative Service Available For Impacted Stops
<p>Fully Covered (All impacted stops directly served by one or more other lines, with similar span of service.)</p>
<p>High (Alternative service within ¼ mile or less walking distance for 75% or more of impacted boardings and alightings.)</p>
<p>Medium (Alternative service within ½ mile or less walking distance for 50% of impacted boardings and alightings.)</p>
<p>Low (Alternative service greater than ½ mile or less walking distance for 50% of impacted boardings and alightings.)</p>

Figure 3



ANALYSIS OF SERVICE CHANGE – LINE 47

Overview

Title VI and Transit Equity Impacts

Line 47-Baseline/Evergreen’s potential route change does impact stops in some census tracts with minority populations higher than the TriMet district average. The minority population of all impacted tracts is 20.6 percent which is less than the TriMet district average of 27.1 percent. No impacted stops are located in a census tract where poverty population is higher than the TriMet district average or where poverty and minority populations are higher than the TriMet district average. A majority of the impacted stops (67.6%) are located in non-minority, non-poverty census tracts (tracts with poverty levels and minority population below the TriMet district average). (See Figure 5). Based on this analysis, there is an adverse effect on some riders but not a disparate impact on minority populations.

Access to Alternatives

Overall, a majority of the impacted stops (77.9%) and ridership (92.5%) are within a ¼ mile of an alternative route; and, only six percent of the stops and 0.5 percent of the ridership are more than ½ mile from an alternative route (Table 3). Though not all stops are within ¼ mile of alternative service, over 90 percent of the impacted boardings and alightings are within ¼ mile of an alternative, so there is a high level of alternative service availability.

Twenty-two of the impacted stops are located in census tracts where the minority population share is greater than the TriMet district average. Of these, about three-quarters (72.7%) of the stops are less than one-quarter mile from alternative service. Of the total ridership at those stops, 58 percent is within one-quarter mile of alternative service. The remaining 46 impacted stops are located in census tracts where the poverty level and minority population share are both less than the TriMet district average. Of these stops, 80 percent are within a quarter mile of alternative service as is 97 percent of the ridership. (See Table 3).

Service Changes

Routing: Line 47 would run from Hillsboro Transit Center to Portland Community College (PCC) Rock Creek Campus instead of going to Sunset Transit Center. This routing change would create a new connection between the Bethany area and Hillsboro Transit Center (See Figure 4).

Frequency: Service frequency on Line 47 will be improved, and more frequent service will benefit all trips within the portions of the route illustrated in this analysis, and will also benefit midday and evening trips anywhere on the route. Service in am/pm peak hours between PCC Rock Creek and Orenco/NW 231st Ave will be every 15 minutes, compared to current service about every 30 minutes. Midday service would not change, with service every 35 minutes along the entire route. Evening service would run about every 30 minutes, an improvement from about every 60 minutes currently.

Span: The times of the first trips of the day will be similar to the present, and service will be extended one hour later in the evening for trips to the Hillsboro Transit Center.

Ridership Impacts

Line		Ons	Offs	Total
47	Route change	315	349	664

Demographic Impacts

All Impacted Tracts -Current Line 47 Route

Line		Tracts Minority	Minority Threshold	Tracts Poverty	Poverty Threshold
47	Route change	20.6	27.1%	5.4%	21.9%

Available Service Alternatives

There is a high level of alternative service availability (Table 3 and Figure 5). Bus stops on portions of Cornell Road, Cedar Hills Blvd. and Barnes Road that would no longer be served by Line 47 would continue to be covered by Line 48-Cornell. Table 3 enumerates the available service alternatives stop-by-stop and ridership for impacted stops only, which generally includes stops on and to the east of NW 185th Avenue. Seventy-eight percent of impacted stops (53 of 68) are within ¼ mile or less of alternative service. Only four stops are more than ½ mile from alternative service. These stops are in non-minority, non-poverty census tracts (Figure 5). Though some stops are beyond ¼ mile of alternative service, over 92 percent of the impacted boardings and alightings (614 of 664) are within ¼ mile of an alternative (Table 3 following).

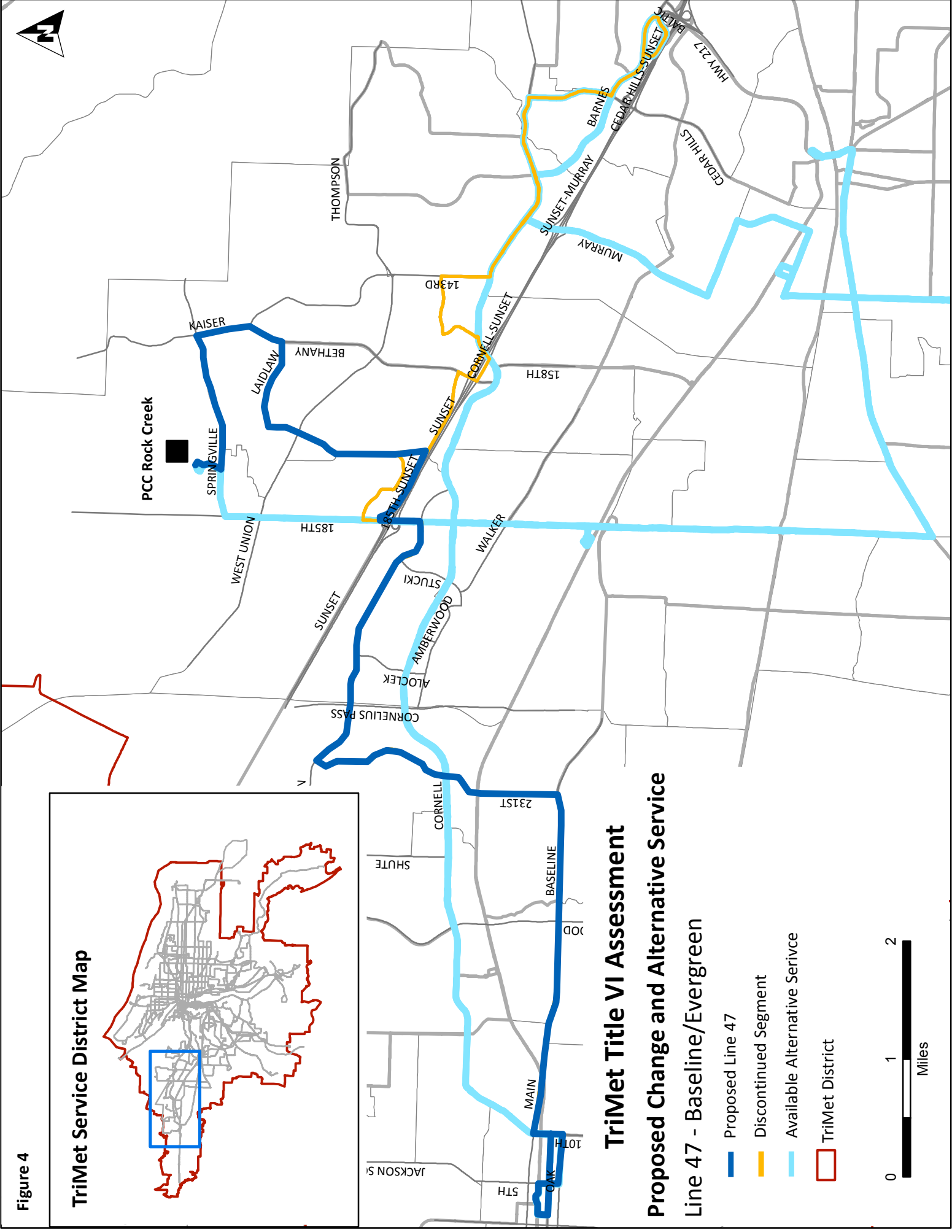
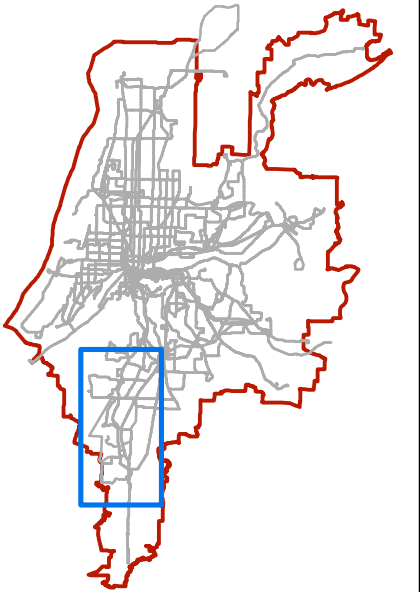
Table 3. Available Service Alternatives by Stop and Ridership

	Stops		Ons		Offs		Total	
Minority	22	32.4%	35	11.1%	44	12.6%	79	11.9%
<i>Alternative Service</i>								
Less than ¼ Mile	16	72.7%	21	60.0%	25	56.8.4%	46	58.2%
Between ¼ and ½ Mile	6	27.3%	14	40.0%	19	43.2%	33	41.8%
Greater than ½ Mile	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Poverty	0	0%	0	0%	0	0%	0	0%
Minority & Poverty	0	0%	0	0%	0	0%	0	0%
Non-Minority, Non-Poverty	46	67.6%	280	88.9%	305	87.4%	585	88.1%
<i>Alternative Service</i>								
Less than ¼ Mile	37	80.4%	272	97.1%	296	97.0%	568	97.1%
Between ¼ and ½ Mile	5	10.9%	7	2.5%	7	2.3%	14	2.4%
Greater than ½ Mile	4	8.7%	1	0.4%	2	0.7%	3	0.5%
Total	68	100%	315	100%	349	100%	664	100%
<i>Alternative Service</i>								
Less than ¼ Mile	53	77.9%	293	93.0%	321	92.0%	614	92.5%
Between ¼ and ½ Mile	11	16.2%	21	6.7%	26	7.4%	47	7.1%
Greater than ½ Mile	4	5.9%	1	0.3%	2	0.6%	3	0.5%

NOTE: Some currently served rides to/from locations east of 185th may require a transfer with implementation of the potential change to Line 47.

Figure 4

TriMet Service District Map



TriMet Title VI Assessment

Proposed Change and Alternative Service

Line 47 - Baseline/Evergreen

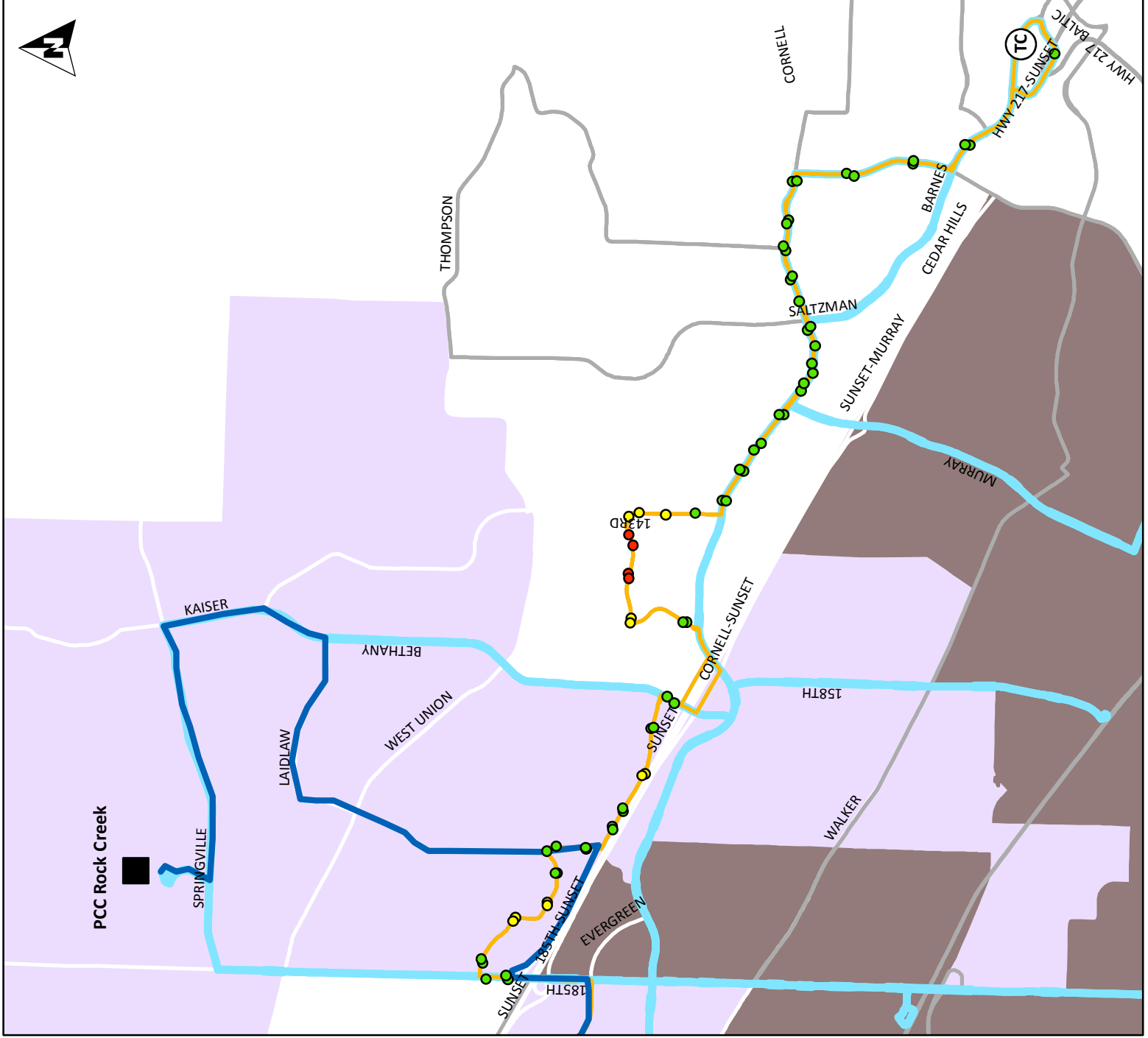
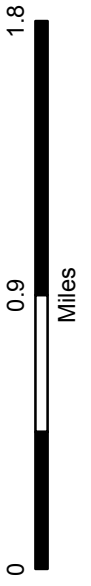
Figure 5

TriMet Title VI Assessment

47 - Baseline/Evergreen

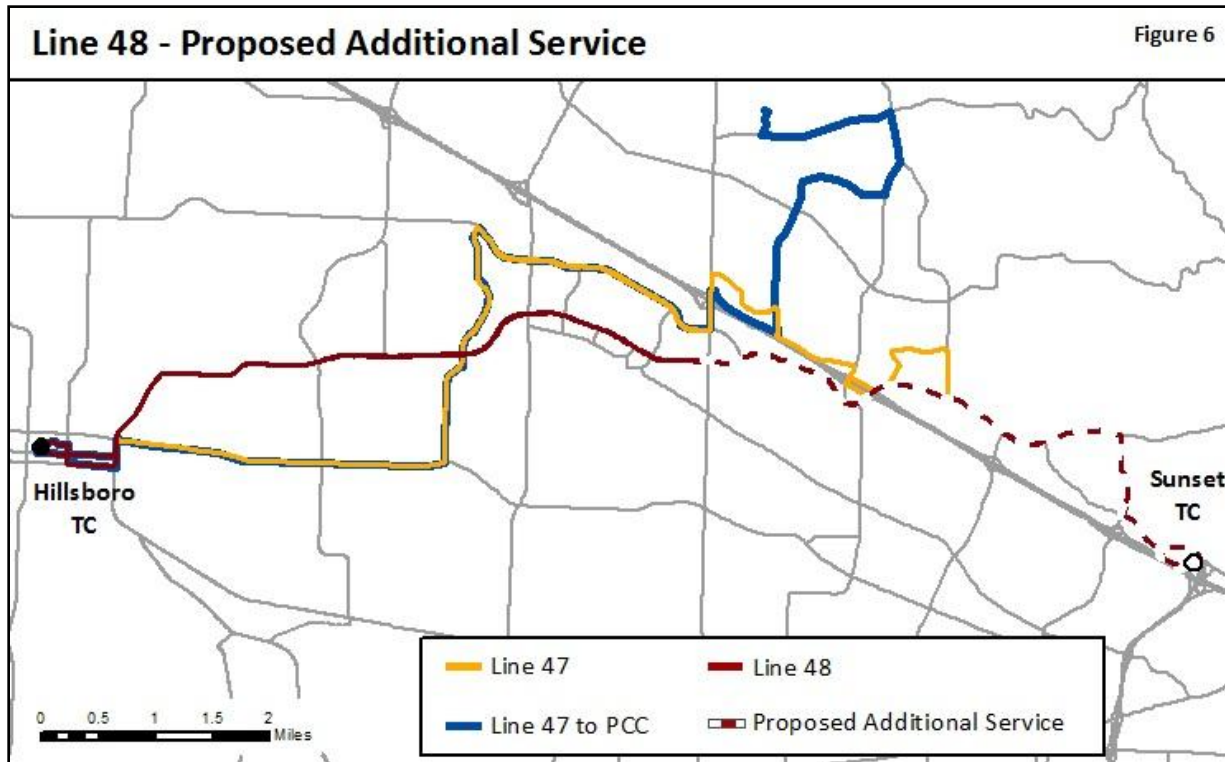
- █ Proposed Line 47
 - █ Discontinued Segment
 - █ Available Alternative Service
- Alternative Stop Walking Distance
- Less than 1/4 Mile
 - Between 1/4 and 1/2 Mile
 - Greater than 1/2 Mile
- Other Bus Lines
 - TC Transit Center
 - Title VI Minority and Poverty
 - Title VI Minority (27.1% or Greater)
 - Title VI Poverty (21.9% or Greater)

Data: TriMet, US Census Bureau



Other Mitigation – Changes on Line 48-Cornell

Service changes are also recommended on Line 48-Cornell including added weekday trips and service ending about 45 minutes later in the evening. During am and pm peaks there would be more trips between NW Stucki Place and the Sunset Transit Center where segments of the present Line 47 overlaps the Line 48 routing (Figure 6). (See *Equity Analysis – Line 48* for more detail.)



More frequent service on Line 48 would provide additional alternative service at 31 of the 68 stops on Line 47 impacted by the Line 47 routing change. This added service on Cornell would offer increased alternative service for approximately 68 percent of total ridership impacted by the Line 47 routing change (Table 4).

Table 4. Impacted Line 47 Stops and Ridership Benefitted By Additional Line 48 Service

	Stops	Ons	Offs	Total
Line 47 Impacted Stops and Rides that would benefit by Line 48-Cornell improvements	31 45.6%	265	186	451 67.9%
All Line 47 Impacted Stops and Rides	68	315	349	664

There would be more frequent service in the am/pm peaks under the proposed change and during the evenings (Table 5).

Table 5. Frequency of Service Between NW Stucki and Sunset Transit Center

Headways by Period	Current (Line 47 Only)	Current (Lines 47 and 48 shared segments)	Proposed (Line 48 Only)
AM Peak (7-9am)	30-32	14-16	15
Midday	35-40	16-35	35-40
PM Peak (4-6 pm)	36-38	19-20	16-17
Evening	55	20-45*	30-45*

*45 minutes after 9:00pm

This additional Line 48 service would directly respond to rider feedback expressed in the Line 47 passenger survey (see *Appendix*). Of those surveyed, 76 percent said that they would adjust to the Line 47 route change by taking another transit line, and 62.1 percent would be choosing the Line 48 as their alternative route. This finding supports the idea that, if Line 47 changes its route, there will be additional demand for service on Line 48. Furthermore, 75 percent of those surveyed were commuting to work, which suggests that a substantial share of impacted trips along the route is within peak commuting hours.

ANALYSIS OF SERVICE CHANGE – LINE 48

Title VI and Transit Equity Impacts

Census tracts served by Line 48 have minority population of 35.1%, above the district average of 27.1%. The Line serves tracts with a poverty population 20.0%, somewhat below the district average of 21.9%.

Based on the analysis of proposed changes, no Line 48-Cornell riders would be adversely affected. In the absence of adverse effect there is no disproportionate impact. Likewise, no disproportionate burden impacts on low-income populations were found. The benefits of improved service would generally be available to populations including protected populations in areas served by Line 48.

Service improvements in the segment between the Sunset Transit Center (STC) and Cornell Rd. at NW Stucki Ave. would include:

- Frequency: additional trips during a.m. peak, p.m. peak and evening, with a.m./p.m. peak headways going from 30/36 mins. to 15/16 mins. and evening headways going from 55 to 30-45 mins.
- Span : the last trip of the day in each direction would be about 50 minutes later than at present.

Service improvements in the segment between Cornell Rd. at NW Stucki Ave. and Hillsboro Transit Center (HTC) would include:

- Frequency: additional trips during p.m. peak and evening, with p.m. peak headways going from 36/38 mins. to 32/34mins. and evening headways going from 55 to 30-45 mins.
- Span: the last trip of the day to STC would be about 50 minutes later than at present.

Figure 7 indicates the portion of Line 48 between NW Stucki Ave. and the Sunset Transit Center that would receive most of the additional trips and the demographic make-up of the area Line 48 serves.

Service Changes:

Line 48 would continue to run from Hillsboro Transit Center to Sunset Transit Center on its present routing. However, Line 48 will make 4 additional trips in each direction along the entire line (from 52 to 60 trips per day). In addition, there will be new trips in the a.m. and p.m. peaks and evening in both directions between the Sunset Transit Center and NW Cornell Rd. at NW Stucki Ave. (21 trips per day). These additional trips will double the frequency (from 30-38 minute headways to 15-17 minute headways) during peak commuting hours and reduce evening headways to 45 minutes or less where it currently averages 55-60 minutes.

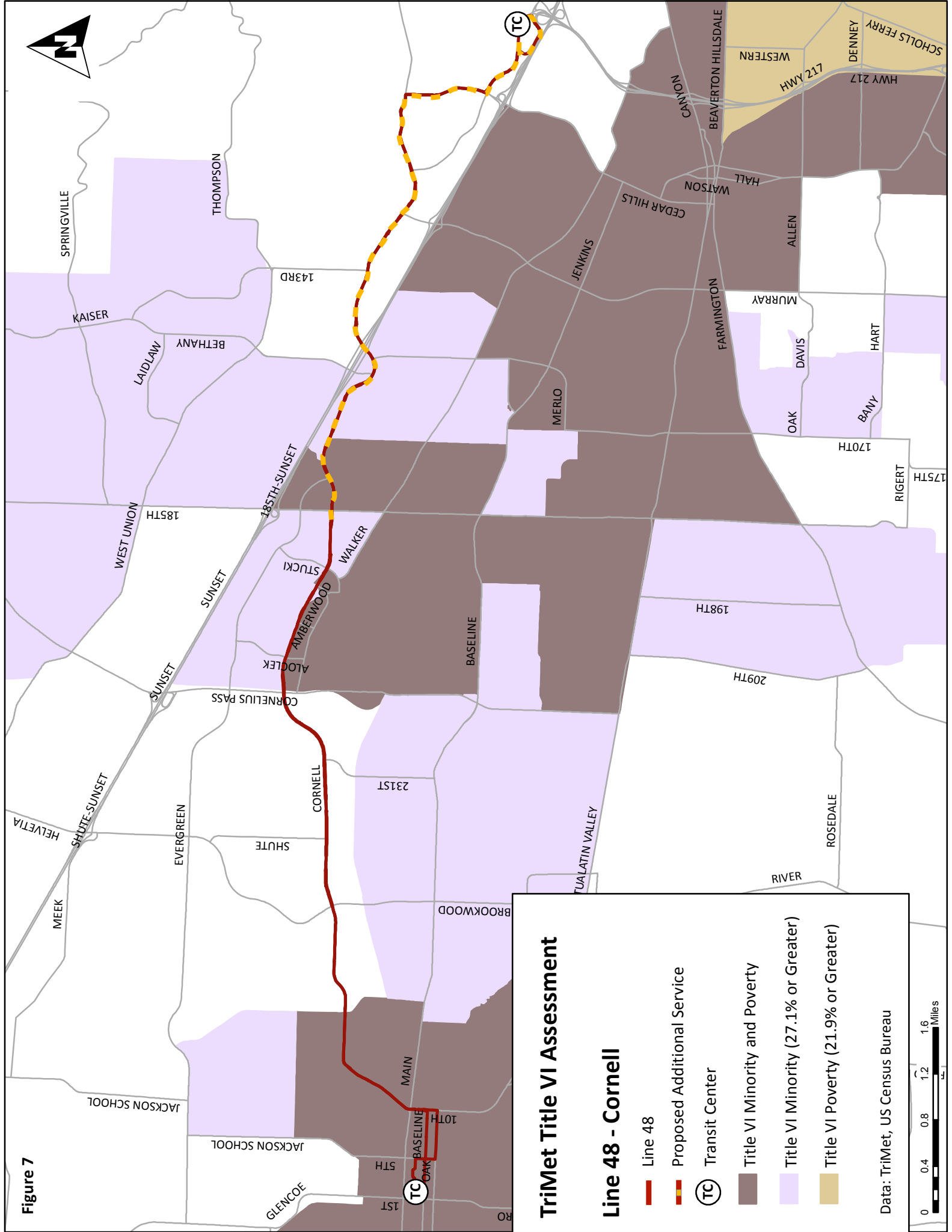
Weekday: The first morning trips from Hillsboro Transit Center and Sunset Transit Center would continue run at 5:10am and 5:23am, respectively. However, the last trip from Hillsboro Transit Center would be at 9:11pm instead of 8:19pm. The last trip from Sunset Transit Center would be at 10:38pm instead of 9:54pm.

In the Sunset TC to Stucki Ave. segment, frequency during the peaks (defined as 7:00am-9:00am and 4pm-6:00pm) would be increased so that buses run every 15-20 minutes instead of every 30-40 minutes. Mid-day frequency remains at 35-40 minutes. With the added trips, frequency in the evening is 30-45 minutes; whereas, currently, trips after 6pm only run about every 55-60 minutes..

In the Stucki Ave. to Hillsboro TC segment frequency during the p.m. peak and evening would be improved to every 32-34 mins. from every 36-38 and evening frequency would be every 30-45 minutes.

Line 48 riders would benefit from improved frequency and span of service on weekdays. Average daily ridership on Line 48 in Fall 2012 was 970 boardings.

Figure 7



TriMet Title VI Assessment

Line 48 - Cornell

- Line 48
- Proposed Additional Service
- TC Transit Center
- Title VI Minority and Poverty
- Title VI Minority (27.1% or Greater)
- Title VI Poverty (21.9% or Greater)

Data: TriMet, US Census Bureau



CONCLUSIONS

Line 47-Evergreen/Baseline

Considering recommended changes for Line 47, no Title VI impacts on minority population disproportionate to representation within TriMet's service area were found based on this analysis. Likewise, no disproportionate burden impacts on low-income populations were found.

The recommended routing change for Line 47-Baseline/Evergreen would impact service at 68 bus stops, including 22 stops in minority tracts. This creates an adverse effect on service at some stops including stops in minority tracts; however, it is not a disparate impact. The percentage of minority population among all impacted tracts (20.6 percent) is below the threshold for the TriMet district (27.1%).

In general, most adverse effects for impacted riders are mitigated by alternative service availability. There is a high level of alternative service availability, with some 93 percent of rider ons and offs either directly served by another line or within ¼ mile or less.

Among bus stops in minority tracts, 58 percent of impacted ridership would have a high level of alternative service availability (46 of 79 daily ons and offs). All of the remaining ridership in minority tracts (33 daily ons and offs) would have alternative service available between ¼ and ½ mile.

Added service being recommended on Line 48-Cornell would further reinforce mitigation, resulting in service at impacted stops on Cornell (presently served by Lines 47 and 48) as frequent or better during am/pm peak periods and improved in the evening over present schedules.

It should also be noted that the new alignment for Line 47 would add service and benefit tracts with an above-average concentration of minority population (35.9%) relative to the TriMet district average of 27.1 percent. The revised routing would provide new connectivity between the Hillsboro Transit Center and the Bethany area and Portland Community College at Rock Creek, expected to serve increased ridership overall and benefit all populations along the entirety of Line 47.

Line 48-Cornell

Based on the analysis of proposed changes, no Line 48-Cornell riders would be adversely affected. In the absence of adverse effect there is no disproportionate impact. Likewise, no disproportionate burden impacts on low-income populations were found. The benefits of improved service would generally be available to populations including protected populations in areas served by Line 48.

APPENDIX

Line 47 – Survey

Passenger intercept surveys were conducted on Line 47 along the impacted area. Passengers were asked to answer eight questions about their starting point, destination, purpose, extent to which they would be affected by the Line 47 route change, and possible alternatives if that change occurred. In total 190 riders were surveyed over three days at which point surveyors were starting to encounter people they had already surveyed.

Results

Of the 190 riders surveyed 61 percent reported that they ride the bus every day and 75 percent were commuting to work (Figures 8 and 9).

Figure 8. Survey Response – Ridership Frequency

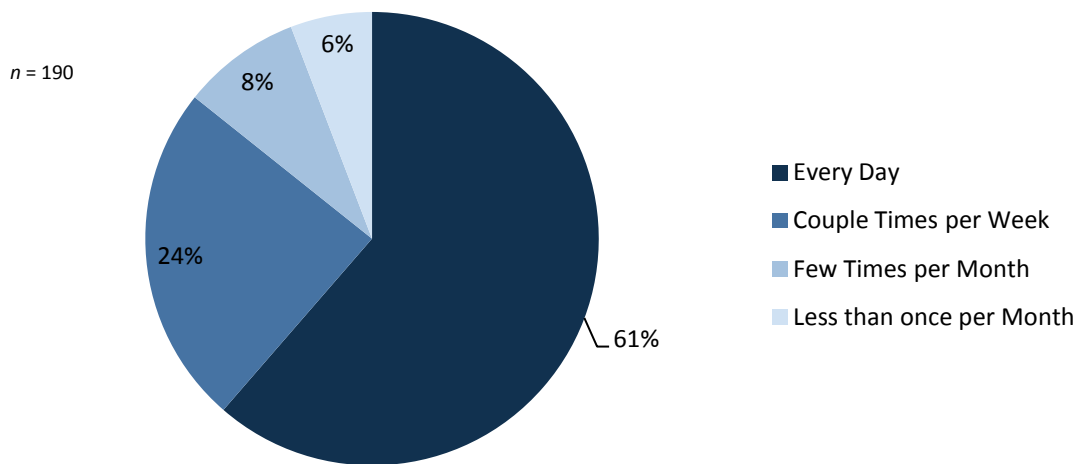
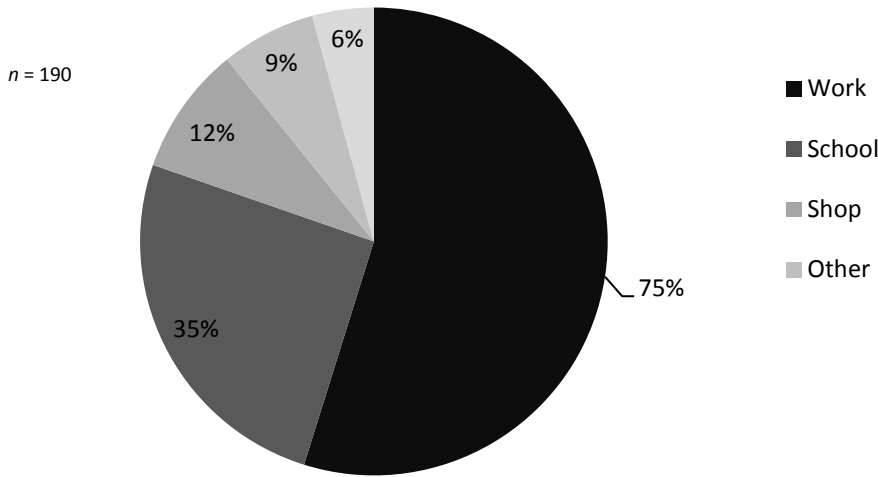


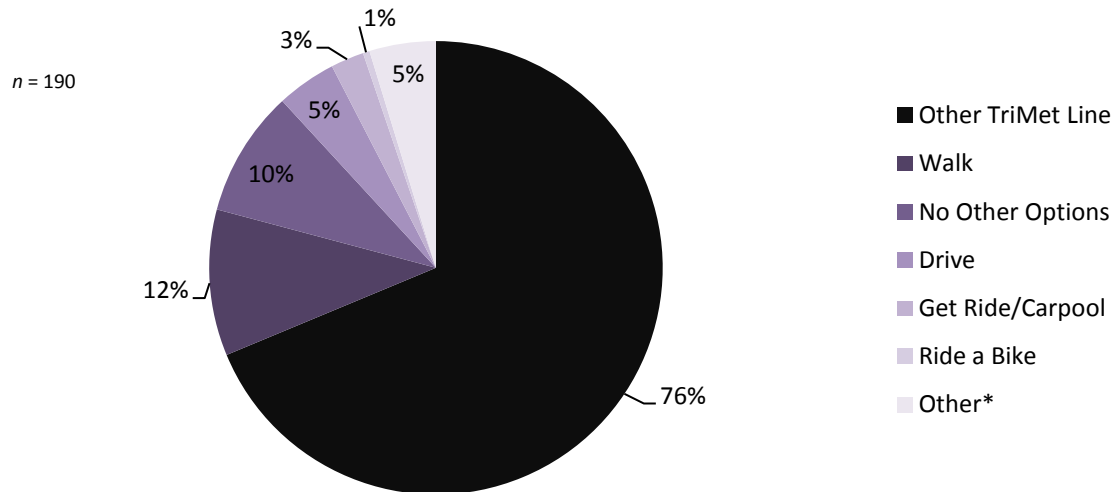
Figure 9. Survey Response – Purpose of Trip



NOTE: Respondents were able to specify more than one reason for riding, so total may sum more than 100%

In response to Question 6: “Due to low ridership, TriMet is considering changing this line so it doesn’t serve this area or go to Sunset TC. How would you make this trip if TriMet made this change?” a majority of respondents (76%) reported that they would take another TriMet line and 5 percent said that they would still be able to use Line 47 (see Figure 10). Of those who would switch to another line, most (62.1%) would take Line 48-Cornell; whereas, only 19 respondents (10%) said they would have no alternative transportation. Question 8 asked respondents to categorize their concerns regarding changes to Line 47. The most common responses were reported concerns about loss of service (49%) and frequency (43%); see Table 6.

Figure 10. Survey Response – Alternative Way to Complete Trip



*Included in other (n=10) were 9 responses reporting they could still take Line 47

NOTE: Respondents were able to report more than one alternative trip method, so total may sum more than 100%

Table 6. Survey Response – Concerns About Service Change

Concern	
Loss of Service	49%
Frequency	43%
Walking Distance	24%
Not Concerned	8%
Other	6%
Number of Transfers	4%

Analysis

Generally, a majority of surveyed riders commute using Line 47 on a daily basis and are commuting to work. In response to a route change in which Line 47 travels to Portland Community College at Rock Creek instead of going to the Sunset Transit Center, over three-quarters of respondents said that they would complete their trip by using a different TriMet line. Of the 190 respondents, nineteen said they would have no other transit option. Most of the concern about the proposed route change was in regards to loss of service and frequency. Survey comments revealed that riders were concerned about the frequency of Line 48 since it would no longer overlap with Line 47 and about walking conditions between the current Line 47 stops and alternative service. When looking only at responses from riders whose trips occurred only in the impacted area where Line 47 and Line 48 currently overlap, 92 percent report that they would continue to make their trip using TriMet service, mostly via Line 48.