

Pierce Transit

Title VI Service Equity Analysis

Pursuant to FTA Circular 4702.1B

Proposed NE Tacoma Service Changes for September 2019

May 2019

PIERCE TRANSIT TITLE VI SERVICE EQUITY ANALYSIS
PROPOSED CHANGES TO NE TACOMA SERVICE
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PIERCE TRANSIT TITLE VI SERVICE EQUITY ANALYSIS

PROPOSED CHANGES TO NE TACOMA SERVICE

1 INTRODUCTION

Title VI of the Civil Rights Act of 1964 prohibits discrimination on the basis of race, color, or national origin in programs and activities receiving Federal financial assistance. This analysis was conducted in compliance with Federal Transit Administration (FTA) Circular 4702.1B, which requires any FTA recipient serving a population of 200,000 or greater to evaluate any fare change and any major service change at the planning and programming stages to determine whether those changes have a discriminatory impact. This document is a Title VI analysis of changes to bus service in Northeast Tacoma.

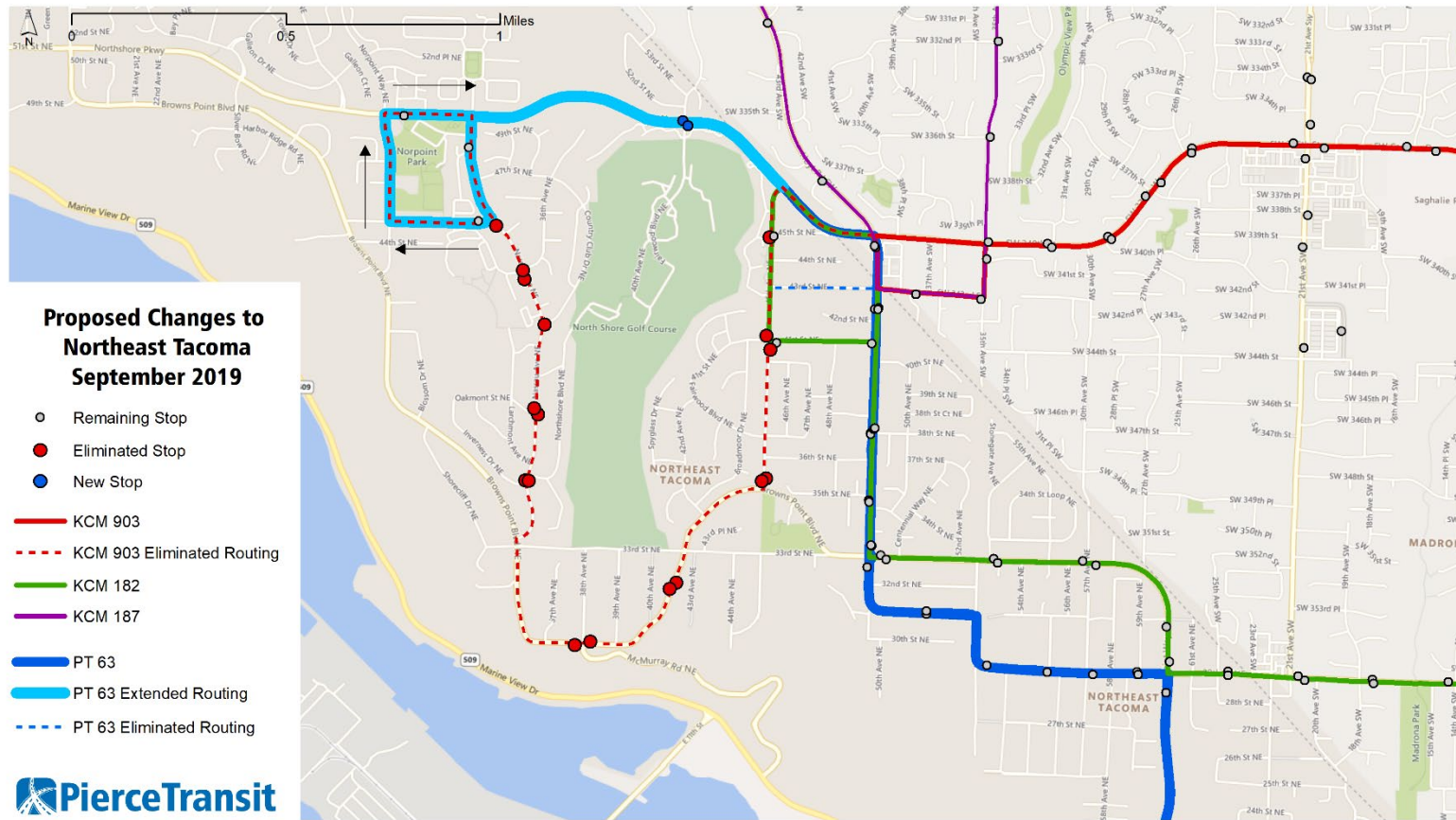
2 BACKGROUND

- In 2015 Pierce Transit sought to re-design the Route 62 NE Tacoma – Federal Way with a partnership with King County.
- Beginning with the September 2015 service change, Pierce Transit entered into a contract with King County to extend the KCM Route 903 into Northeast Tacoma to cover a portion of the eliminated PT Route 62. This improvement enabled a one-seat ride to Federal Way Transit Center.
- Pierce Transit concurrently implemented the Route 63 NE Tacoma Express, with some collocated stops with the 903 enabling transfers.
- Reviewing ridership data from 2018, it was determined that the 903 extension results in **8 average weekday boardings** within Pierce County, or 1.6 boardings per revenue hour. About 2% Route 63 riders transfer from Route 903.
- Ridership has grown steadily on the 63. Average weekday boardings increased from 6 in 2015 to 25 in 2016, to 30 in 2017, to 33 in 2018.

2.1 Action

- Based on low ridership, Pierce Transit intends to terminate the 903 extension contract with King County for the September 2019 service change.
- Pierce Transit will then extend the 63 to the current terminus of 903 extension 45th St NE and Nassau Ave NE (Figure 2-1).
- Pierce Transit will apply cost savings from Route 903 contract to add at least 2 Route 63 northbound trips and 1 southbound trip.
- Because the resulting service will result in a change in over 20% to the miles of the Route 903, and a change in service hours to the 63 greater than 20%, a Title VI Major Service Change analysis is required.
- Passengers riding from stops near the Center at Norpoint will still be able to ride to Federal Way Transit Center via a transfer to the remaining King County Metro Route 903 and existing King County Metro Routes 182 and 187.

Figure 2-1 Proposed Changes to Northeast Tacoma September 2019



Customer Profile

Pierce Transit completed a survey of riders on the Route 63 NE Tacoma Express and King County Metro Route 903 during the period from November 2, 2018 to December 18, 2018. Transitional Duty Transit Operators who are working light duty shifts rode both Routes 63 and KCM Route 903 asking riders to complete the survey. They rode on various days of the week and during both the morning and evening periods. A total of 14 surveys were completed; the survey was a random sample of riders. We do not report that this was a statistically valid survey; however, it does provide information on the riders using these two routes.

Those surveyed were 64% male and 36% female. When asked their age, the largest group of riders - 57% - were under 18 years of age, and 43% were 45-64 years of age. Anecdotally, the surveyors reported seeing a number of students travelling to high schools in in the Downtown Tacoma area

as well as the University of Washington. The other noticeable group of riders were individuals travelling to jobs in the Downtown core. The riders indicated their primary trip purpose was to travel to work, school and home.

When asked their ethnic background, the majority of the riders - 79% - indicated their ethnic background as Caucasian, 7% indicated black or African American, indicated 7% Hispanic, and 7% indicated Asian or Pacific Islander. Household income varied slightly amongst those surveyed. The survey indicated that 7% of those surveyed have a household income under \$19,999, 14% of those surveyed have a household income between \$20,000 to \$34,999, 14% of those surveyed have a household income between \$35,000 to \$49,999, 29% of those surveyed have a household income between \$50,000 to \$74,999 and 36% had a household income greater than \$75,000.

Outreach and Decision-making

The proposed elimination of a more than 20% of Route 903 miles and addition of more than 20% of revenue hours to the Route 63 are considered major service changes under Pierce Transit's Major Service Change Policy. Therefore, a Title VI Service Equity Analysis and public outreach is required. Staff attended two meetings of the NE Tacoma Neighborhood Council to let them know that Pierce Transit was considering changes to the routing in their area and to gather feedback.

Pierce Transit's Board of Commissioners will hold a public hearing on the new NE Tacoma service configuration at their meeting on June 10th 2019 to gather input from the public. Legal notices were published on May 31, 2019, 10 days in advance of the public hearing, in the Tacoma News Tribune, and the Tacoma Daily Index, as well as on Pierce Transit's web site. Rider alerts notifying the public about the hearing and seeking public comment were also displayed on Pierce Transit's website and posted on social media. The Board will consider implementing the new NE Tacoma service configuration at its meeting on July 8, 2019.

3 TITLE VI POLICIES & DEFINITIONS

Pierce Transit's Board of Commissioners adopted three new policies in February 2013 related to Title VI that guide this analysis: Major Service Change Policy; Disparate Impact Policy; and Disproportionate Burden Policy. The requirement for these policies comes from Federal Transit Administration (FTA) Circular 4702.1B, "Title VI Requirements and Guidelines for Federal Transit Administration Recipients" which became effective October 1, 2012. The Circular requires any FTA recipient that operates 50 or more fixed route vehicles in peak service and serving a population of 200,000 persons or greater to evaluate any fare change and any major service change at the planning and programming stages to determine whether those changes have a discriminatory impact.

3.1 PIERCE TRANSIT MAJOR SERVICE CHANGE POLICY

The purpose of this policy is to establish a threshold that defines a major service change and to define an adverse effect caused by a major service change.

A major service change is defined as any change in service on any individual route that would add or eliminate more than twenty percent of the route revenue miles or twenty percent of the route revenue hours. All major service changes will be subject to an equity analysis which includes an analysis of adverse effects on minority and low-income populations.

An adverse effect is defined as a geographical or time-based reduction in service which includes but is not limited to: span of service changes, frequency changes, route segment elimination, re-routing, or route elimination.

3.2 PIERCE TRANSIT DISPARATE IMPACT POLICY

The purpose of this policy is to establish a threshold which identifies when adverse effects of a major service change or any fare change are borne disproportionately by minority populations.

A disparate impact occurs when the minority population¹ adversely affected by a fare or service change is ten percent more than the average minority population of Pierce Transit's service area.

Disparate impacts on routes with either span of service changes and/or frequency changes will be determined by analyzing all routes with such changes together. Disparate impacts on routes with segment elimination, re-routing, or route elimination will be determined on a route by route basis.

If Pierce Transit finds a potential disparate impact, the agency will take steps to avoid, minimize or mitigate impacts and then reanalyze the modified service plan to determine whether the impacts were removed. If Pierce Transit chooses not to alter the proposed changes, the agency

¹ **Minority Population** – Persons identifying themselves as a race other than white or of Hispanic origin, self-reported in the U.S. Census.

may implement the service or fare change if there is substantial legitimate justification for the change AND the agency can show that there are no alternatives that would have less of an impact on the minority population and would still accomplish the agency's legitimate program goals.

3.3 PIERCE TRANSIT DISPROPORTIONATE BURDEN POLICY

The purpose of this policy is to establish a threshold which identifies when the adverse effects of a major service change or any fare change are borne disproportionately by low-income² populations.

A disproportionate burden occurs when the low-income population adversely affected by a fare or service change is five percent more than the average low-income population of Pierce Transit's service area.

Disproportionate burden on routes with either span of service changes and/or frequency changes will be determined by analyzing all routes with such changes together. Disproportionate burden on routes with segment elimination, re-routing, or route elimination will be determined on a route by route basis.

If Pierce Transit finds a potential disproportionate burden, the agency will take steps to avoid, minimize or mitigate impacts and then reanalyze the modified service plan to determine whether the impacts were removed. If Pierce Transit chooses not to alter the proposed changes, the agency may implement the service or fare change if there is substantial legitimate justification for the change AND the agency can show that there are no alternatives that would have less of an impact on low-income population and would still accomplish the agency's legitimate program goals.

² **Low-Income Population** – Persons reporting as being under the federal household poverty limit as defined by the U.S. Department of Health and Human Services. In 2016 the poverty limit was \$24,250 for a family of four.

4 METHODOLOGY

Pierce Transit currently pays for 100% of the 903 service operating within Pierce County. Therefore for the purposes of Title VI, elimination of the service here constitutes a major service change. The changes to the Route 63 also constitute a major service change through the addition of more than 20% service hours.

Pierce Transit staff used Remix (www.remix.com) to undertake the Title VI analysis for this project. Remix allows you to automatically generate a Title VI report (based on Census data) by comparing existing service to a set of proposed changes. The methodology used by Remix to achieve this includes the following steps:

1. Get the population near a route, including its low income and minority percentage.
 - For each route, build a shape that represents the area within quarter mile of any of its stops.
 - Intersect the catchment area with 2011-2016 ACS Census data. Get a list of block groups and the percentage overlap with each.
 - For each block group, take the percentage of overlap and multiply it by the block group's statistics.
 - Get the population, minority population, and low income population for each group and sum them together. This is the total population a route could serve.
2. Compare the number of people-trips, before and after.
 - Multiply the population near a route times the number of trips it makes (per year) to get "people-trips".
 - Repeat for low-income and minority populations to get "low income people-trips" and "minority people trips".
 - Compare these numbers between the before and after versions of the route, to get a set of people-trip differences. We match before and after using routes that have the same name.
3. Get the total difference in people-trips across the transit system.
 - Repeat the process above for every route in the transit system.
 - Sum together the difference in people trips. This will return three numbers: total difference in people-trips, total difference in low-income people-trips, and total difference in minority people trips.
4. Calculate the change borne by low-income and minority populations.
 - Divide the total difference in low-income people trips by the total difference in people-trips to get the percentage of change borne by those with low incomes.
 - Repeat for minority people-trips.
5. Compare the percentage change to the average in the service area.
 - Calculate the average percentage of low-income and minority populations across the entire service area.
 - Subtract from the change borne by those populations.

- Get two final numbers: the delta between the impact this set of transit changes had on low income and minority populations compared to any average change.

The equity analysis is provided below in Section 5.

5 EFFECTS OF PROPOSED SERVICE CHANGE ON LOW-INCOME AND MINORITY POPULATIONS

5.1 Impact of Service Change on Low-Income and Minority Populations

Table 5-1 describes the changes in service levels following elimination of the Route 903 extension into Pierce County and the addition of the Route 63. The table estimates populations within a quarter-mile of stops, and then multiplies those populations by the number of trips added or reduced by the service change. Totalling people-trips, a weighted average is calculated to determine the net impact to minority and low-income populations. Only the portion of the Route 903 trips and corridor serving Pierce County is included in this analysis; the remaining portion serving King County will be unaffected and is outside of Pierce Transit’s public transportation benefit area (PTBA).

Table 5-1: Analysis of Service Change on Low-Income and Minority Populations

| Route | Impacts to Communities Borne by Change in Service | | | | |
|-----------------|---|-------------------------|-----------------------|----------------------------|----------------------------|
| | People-Trips (Population * Trips) | Low Income People-Trips | Minority People-Trips | Change Borne by Low Income | Change Borne by Minorities |
| 63 Proposed | 17,601,630 | 2,676,732 | 7,295,805 | 15.2% | 41.4% |
| 63 Existing | -9,988,605 | -1,654,601 | -4,339,080 | 16.6% | 43.4% |
| 903 Pierce Only | -28,649,250 | -2,215,055 | -10,704,900 | 7.7% | 37.4% |
| Total | -21,036,225 | -1,192,924 | -7,748,175 | 5.7% | 36.8% |

Table 5-2 Impact of New Service on Minority and Low-Income Populations

| | Low Income | Minority |
|-----------------|--------------|-------------|
| Change Borne By | 5.7% | 36.8% |
| PTBA Average | 14.6% | 36.8% |
| Delta | -8.9% | 0.1% |

According to the table, the Route 903’s quarter-mile stop transit shed includes 7.7% low-income population and 37.4% minority population. This route will be partially replaced by the Route 63, with a quarter-mile stop transit shed of 16.6%/43.4%. The quarter-mile stop transit shed of the Route 903 within Pierce County is 7.7% low-income and 37.4% minority. Figures 5-1 and 5-2 below provide maps of the routes and show areas with low-income and minority populations higher than the service area averages.

Figure 5-1: NE Tacoma Demonstration – Local Low-Income Blocks/Tracts

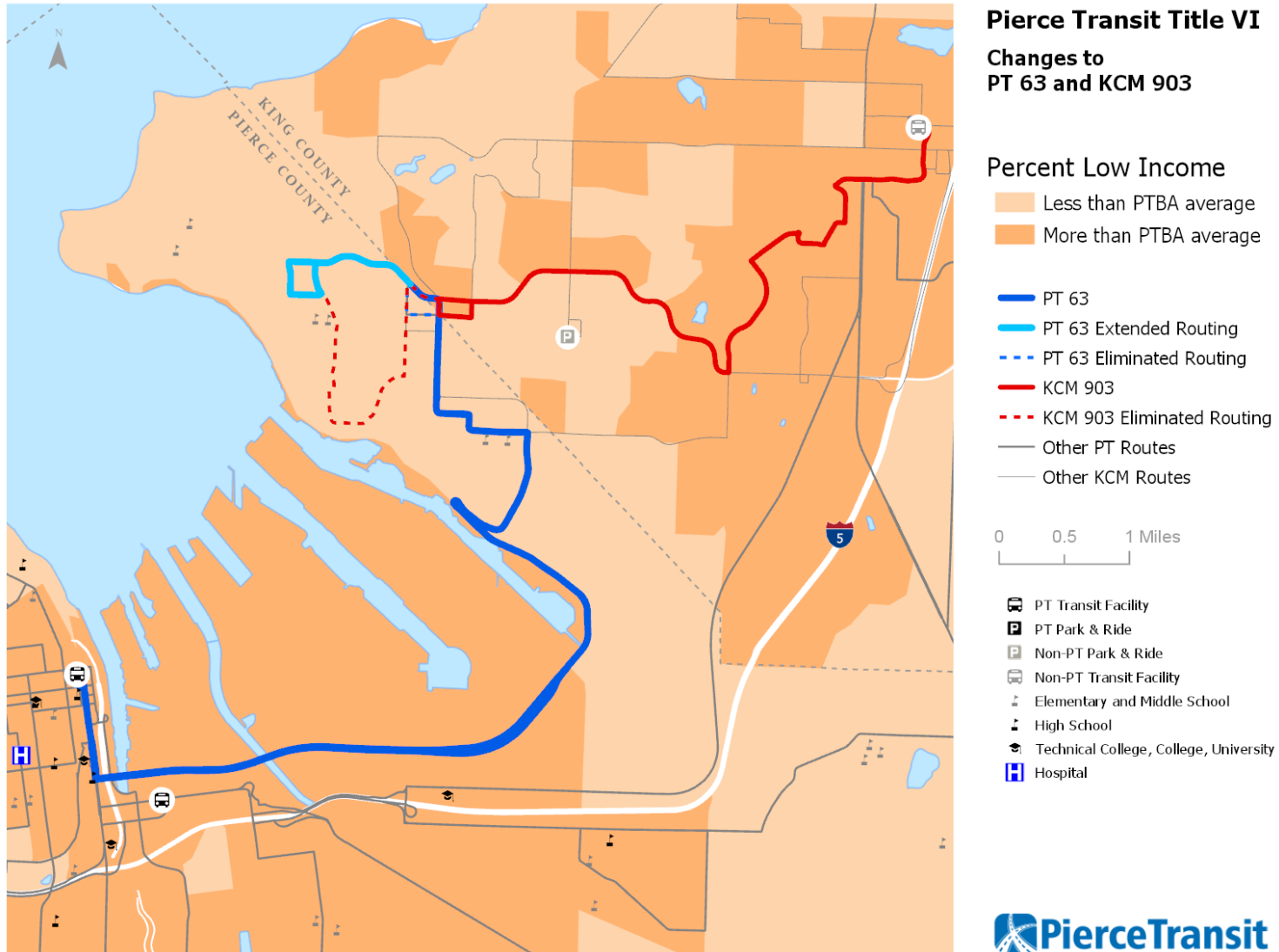
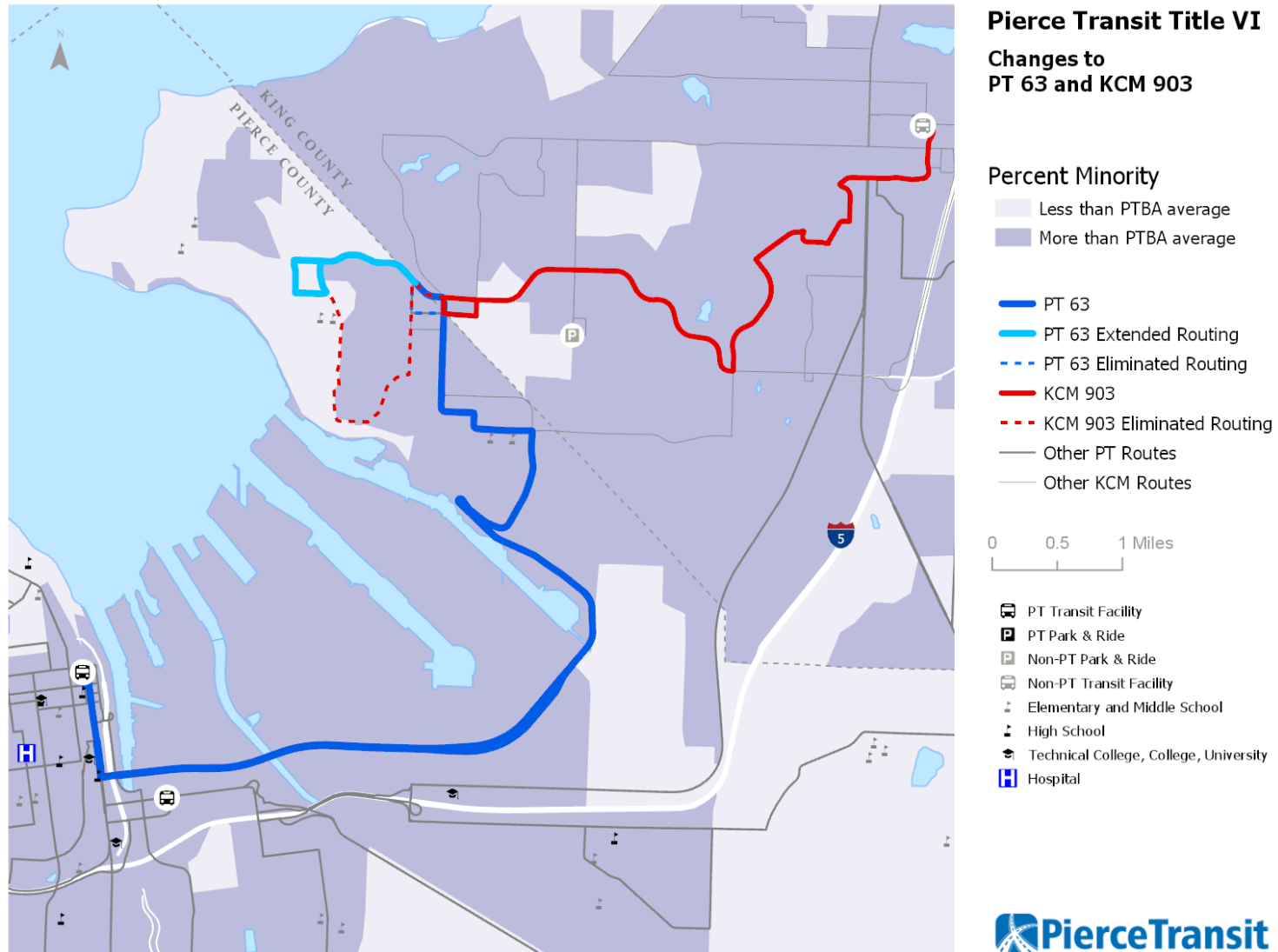


Figure 5-2 NE Tacoma Demonstration – Local Minority Blocks/Tracts



5.2 Disparate Impact Analysis

Pierce Transit's policy states that a disparate impact occurs when the minority population adversely affected by a fare or service change is 5% more than the average minority population of Pierce Transit's service area. An adverse effect is defined in the Major Service Change Policy as a geographical or time-based reduction in service which includes but is not limited to: span of service changes, frequency changes, route segment elimination, re-routing, or route elimination. The proposed changes to service in NE Tacoma impact 36.8% minorities, the same as the system average minority population of 36.8%. Because this difference is less than 10% there is no Disparate Impact.

5.3 Disproportionate Burden Analysis

Pierce Transit's policy states that a disproportionate burden occurs when the low-income population adversely affected by a fare or service change is 5% more than the average low-income population of Pierce Transit's service area. An adverse effect is defined in the Major Service Change Policy as a geographical or time-based reduction in service which includes but is not limited to: span of service changes, frequency changes, route segment elimination, re-routing, or route elimination. When comparing the weighted impacts in people trips to system averages, it is found that the 5.7% of those impacted are considered low-income vs. 14.6% for the system average. Because the low-income fraction is less than the system average, there is no Disproportionate Burden.