

Pierce Transit

# Title VI Fare Equity Analysis

Pursuant to FTA Circular 4702.1B

Senior/Disabled/Youth Proposed Fare Increase

November 13, 2015

# PIERCE TRANSIT TITLE VI FARE EQUITY ANALYSIS

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# PIERCE TRANSIT TITLE VI FARE EQUITY ANALYSIS

## 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 an analysis of Pierce Transit's proposed increase of fares for Senior, Disabled and Youth.

## 2 BACKGROUND

### 2.1 PROPOSED FARE CHANGES

In an effort to offset increased costs and help improve farebox recovery, Pierce Transit is proposing revisions to its fares effective March 1, 2016. The proposed revisions include a \$0.25 increase to senior, disabled, and youth fixed-route fares, and a \$0.50 increase to SHUTTLE fares. Monthly passes would increase from \$27.00 to \$36.00 for senior, disabled and youth riding fixed-route, and from \$27.00 to \$45.00 for SHUTTLE riders. The proposed revisions are an outcome of a comprehensive fare study and data gathered from focus groups with riders, transit operators and service supervisors. In addition, senior, disabled, youth and SHUTTLE fares have not increased in ten years.

The fare study report proposed: more frequent review of fares; setting a farebox recovery goal; and having the SHUTTLE fare ultimately equal the adult fixed route fare. Fare change scenarios were provided at a Board of Commissioners Study Session in June, an Executive Finance Committee meeting in July and a Board of Commissioners meeting in August. A public hearing was held at the November 9, 2015 Board of Commissioners meeting to allow the public to comment on the proposed revisions.

This fare equity analysis analyzes whether the increase in fixed-route fares for Seniors/Disabled/Youth will have a disparate impact on Pierce Transit's minority riders and/or a disproportionate burden on the agency's low-income riders.

## 2.2 FEDERAL TRANSIT ADMINISTRATION REQUIREMENTS

FTA requires that its recipients evaluate the impacts of fixed-route fare changes on minority and low-income populations. If the transit provider finds potential disparate impacts or disproportionate burdens and then modifies the proposed changes in order to avoid, minimize or mitigate those impacts, the transit provider must reanalyze the proposed changes in order to determine whether the modifications actually removed the potential disparate impacts or disproportionate burdens of the changes.

If a transit provider chooses not to alter the proposed fare changes despite the disparate impact on minority ridership or disproportionate burden on low-income ridership, or if the transit provider finds, even after the revisions, that minority or low-income riders will continue to bear a disproportionate share of the proposed fare change, the transit provider may implement the fare change only if:

- the transit provider has a substantial legitimate justification for the proposed fare change, **and**
- the transit provider can show that there are no alternatives that would have a less disparate impact on minority riders but would still accomplish the transit provider's legitimate program goals.

If the transit provider determines that a proposed fare change will have a disparate impact or disproportionate burden, the transit provider shall analyze the alternatives to determine whether alternatives exist that would serve the same legitimate objectives but with less of a disparate or disproportionate effect on the basis of race, color, national origin, or income status. Where disparate impacts are identified, the transit provider shall provide a meaningful opportunity for public comment on any proposed mitigation measures, including any less discriminatory alternatives that may be available.

This fare equity analysis analyzes whether the increase in fixed-route fares for Seniors/Disabled/Youth will have a disparate impact on Pierce Transit's minority riders and/or a disproportionate burden on the agency's low-income riders. Proposed increases to SHUTTLE fares are not analyzed in this report, as Title VI equity analysis requirements only apply to fixed-route fare changes and not to paratransit fare changes.

### 3 TITLE VI POLICIES & DEFINITIONS

Pierce Transit's Board of Commissioners adopted new policies in February 2013 related to Title VI which apply to fare changes: 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 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 population<sup>1</sup> adversely affected by a fare or service change is ten percent more than the average minority population of Pierce Transit's service area.

*(paragraph not relevant to fare changes removed)*

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 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.

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

### 3.2 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-income<sup>2</sup> 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.

*(paragraph not relevant to fare changes removed)*

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.

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<sup>2</sup> **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 2013 the poverty limit was \$23,834 for a family of four.

## 4 METHODOLOGY

Staff used data from Pierce Transit's 2014 Customer Satisfaction Survey to assist with the fare equity analysis. This survey of 650 Pierce Transit Riders provides local system-wide representation proportionate to weekday ridership by route and time of day on Pierce Transit's local fixed routes. Respondents were initially intercepted at major transfer and boarding locations as well as onboard key routes and asked to provide contact information in order to participate in a telephone survey. Surveys were completed with 650 respondents (only 557 responded to the question about how they paid their fare). The maximum margin of error for this survey is plus or minus 3.8 percentage points at the 95 percent confidence level. That is, in 95 out of 100 cases, the survey result will not differ from the general population by more than 3.8 percentage points in either direction.

Data collection occurred from April 7 to May 15, 2014. The data from the 2014 survey represents the most current data on our riders available to Pierce Transit.

The 2014 survey provides data on the following:

- Trip purpose (work, home, school, appointment, shopping, recreation)
- Payment method (ORCA Pass, ORCA other, Cash, Other)
- Time of day (peak, mid-day, evening)
- Ridership
  - Occasional (0 to 9 trips per month)
  - Infrequent (10 to 59 trips per month)
  - Frequent (60+ trips per month)
- Overall satisfaction with Pierce Transit (Dissatisfied, Neutral, Satisfied)
- Number of vehicles in household (None, 1, 2+)
- Household size
- Income (less than \$20K, \$20K–\$30K, greater than \$30K)
- Age (16–34, 35–54, 65 and older)
- Gender
- Ethnicity
- English Language Proficiency

The survey provides valuable information about the demographics of the agency's weekday customers and their fare payment methods. In terms of ethnicity, 33% of Pierce Transit's riders identified themselves as non-white. With an average household size of 2.5, 56% of riders have annual incomes of less than \$20,000. The US Department of Health and Human Services' poverty threshold is dependent on household size. Table 4-1 below shows these thresholds for the 48 contiguous states and District of Columbia:

**TABLE 4-1 2013 FEDERAL POVERTY THRESHOLDS**

Size of family unit	Weighted average thresholds	Related children under 18 years								
		None	One	Two	Three	Four	Five	Six	Seven	Eight or more
One person (unrelated individual).....	\$ 11,888									
Under 65 years.....	\$ 12,119	\$ 12,119								
65 years and over.....	\$ 11,173	\$ 11,173								
Two people.....	\$ 15,142									
Householder under 65 years.....	\$ 15,679	\$ 15,600	\$ 16,057							
Householder 65 years and over.....	\$ 14,095	\$ 14,081	\$ 15,996							
Three people.....	\$ 18,552	\$ 18,222	\$ 18,751	\$ 18,769						
Four people.....	\$ 23,834	\$ 24,028	\$ 24,421	\$ 23,624	\$ 23,707					
Five people.....	\$ 28,265	\$ 28,977	\$ 29,398	\$ 28,498	\$ 27,801	\$ 27,376				
Six people.....	\$ 31,925	\$ 33,329	\$ 33,461	\$ 32,771	\$ 32,110	\$ 31,128	\$ 30,545			
Seven people.....	\$ 36,384	\$ 38,349	\$ 38,588	\$ 37,763	\$ 37,187	\$ 36,115	\$ 34,865	\$ 33,493		
Eight people.....	\$ 40,484	\$ 42,890	\$ 43,269	\$ 42,490	\$ 41,807	\$ 40,839	\$ 39,610	\$ 38,331	\$ 38,006	
Nine people or more.....	\$ 48,065	\$ 51,594	\$ 51,844	\$ 51,154	\$ 50,575	\$ 49,625	\$ 48,317	\$ 47,134	\$ 46,842	\$ 45,037

Source: U.S. Census Bureau.



Table 4-2 below shows the proposed changes to fares, by fare type.

**TABLE 4-2 PROPOSED FARE CHANGES**

Fare Type	Cost		Change	
	Existing	Proposed	Absolute	Percentage
Adult ORCA Pass	\$ 72.00	\$ 72.00	\$ -	0%
Adult Cash	\$ 2.00	\$ 2.00	\$ -	0%
Adult e-purse	\$ 2.00	\$ 2.00	\$ -	0%
Adult Ticket	\$ 2.00	\$ 2.00	\$ -	0%
Youth ORCA Pass	\$ 27.00	\$ 36.00	\$ 9.00	33%
Youth Cash	\$ 0.75	\$ 1.00	\$ 0.25	33%
Youth e-purse	\$ 0.75	\$ 1.00	\$ 0.25	33%
Youth Ticket	\$ 0.75	\$ 1.00	\$ 0.25	33%
Senior/Disabled ORCA Pass	\$ 27.00	\$ 36.00	\$ 9.00	33%
Senior/Disabled Cash	\$ 0.75	\$ 1.00	\$ 0.25	33%
Senior/Disabled e-purse	\$ 0.75	\$ 1.00	\$ 0.25	33%
Senior/Disabled Ticket	\$ 0.75	\$ 1.00	\$ 0.25	33%

Table 4-3 below provides the data on how Pierce Transit’s riders paid their fares. Data from survey respondents is extrapolated to provide data on all Pierce Transit riders, based on 2014 total ridership of 10,273,922 boardings.

**TABLE 4-2 PIERCE TRANSIT SYSTEM BOARDINGS BY FARE PAYMENT TYPE**

Fare Type	Usage by Group (#)			Usage by Group (%)				
	Overall	Minority	Low-income	Overall	Minority	Difference (> +10%?)	Low-income	Difference (> +5%?)
Adult ORCA Pass	2,001,213	645,130	903,181	19.5%	18.6%	-0.9%	17.8%	-1.7%
Adult Cash	3,630,008	1,363,988	1,437,717	35.3%	39.4%	4.0%	28.3%	-7.1%
Adult e-purse	1,324,441	571,400	755,723	12.9%	16.5%	3.6%	14.9%	2.0%
Adult Ticket	74,049	18,432	-	0.7%	0.5%	-0.2%	0.0%	-0.7%
Youth ORCA Pass	573,395	129,026	313,349	5.6%	3.7%	-1.9%	6.2%	0.6%
Youth Cash	313,781	165,890	92,161	3.1%	4.8%	1.7%	1.8%	-1.2%
Youth e-purse	86,405	36,865	18,432	0.8%	1.1%	0.2%	0.4%	-0.5%
Youth Ticket	17,636	18,432	-	0.2%	0.5%	0.4%	0.0%	-0.2%
Senior/Disabled ORCA Pass	1,349,561	350,213	903,181	13.1%	10.1%	-3.0%	17.8%	4.6%
Senior/Disabled Cash	197,571	36,865	73,729	1.9%	1.1%	-0.9%	1.4%	-0.5%
Senior/Disabled e-purse	705,861	129,026	589,833	6.9%	3.7%	-3.1%	11.6%	4.7%
Senior/Disabled Ticket	-	-	-	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Total</b>	<b>10,273,922</b>	<b>3,465,267</b>	<b>5,087,307</b>	<b>100%</b>	<b>100%</b>		<b>100%</b>	

The data provided in Table 4-3 provides the basis for the equity analysis which is provided below in Section 5.

## 5 EFFECTS OF PROPOSED FARE CHANGES ON MINORITY AND LOW-INCOME RIDERS

Pierce Transit's Disparate Impact (DI) and Disproportionate Burden (DB) policies are stated such that only fare types and media that are used by more than 10% of minority riders and 5% of the low-income riders could be subject to a finding of DI or DB.

### 5.1 Disparate Impact Analysis

Pierce Transit's policy (see Section 3.2) states that a disparate impact occurs when the minority population adversely affected by a fare or service change is 10% more than the average minority population of Pierce Transit's service area. In the case of a fare change, the intent of the policy is to compare the difference between the percentage of all boardings using that fare type and the percentage of minority boardings using that fare type. Table 4-3 provides this data in the darker green column entitled "Difference > +10%?". In this column we see that none of the fare types proposed for increase have a 10% or higher use by minority riders than the system's riders, so there is no disparate impact to minority riders of the proposed changes.

### 5.2 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. In the case of a fare change, this means that we must examine the difference between the percentage of all boardings using that fare type and the percentage of low-income boardings using that fare type. Table 4-3 provides this data in the final darker blue shaded column entitled "Difference > +5%?". In this column we see that none of the fare types proposed for increase have a 5% or higher use by low-income riders than the system's riders, so there is no disproportionate burden to low-income riders of the proposed fare changes.