

Pierce Transit

Title VI Service Equity Analysis

Pursuant to FTA Circular 4702.1B

New Puyallup Connector - Route 425

January 2015

PIERCE TRANSIT TITLE VI SERVICE EQUITY ANALYSIS

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PIERCE TRANSIT TITLE VI SERVICE 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 new Puyallup Connector service, Route 425, planned to begin operationalized service in June 2015.

2 BACKGROUND

The Puyallup Connector service is proposed to be established following a demonstration project held between June 8, 2014 and June 6, 2015. The service was developed in response to Pierce Transit's Board of Commissioners' Strategic Direction that includes developing innovative services tailored to community needs. The Puyallup Connector Demonstration service is designed to improve fixed route service within the Puyallup community; it is a focused effort emphasizing tailored local service and connections. The key goals were meeting community needs for service, providing access to seasonal activities in the community, and integrating the demonstration with the existing Pierce Transit system. The Puyallup Connector brochure provides additional details and is attached as Appendix A. Appendix B shows the entire Pierce Transit (PT) System Map.

The service proved popular with the Puyallup community, hitting a total ridership of 15,508 during the first 7 months of the demonstration period. Ridership has improved steadily since inception of the demonstration increasing from 1,322 passengers a month to 2,440 passengers in December 2014. The demonstration has not yet achieved the targeted performance objectives established for the demonstration, but key performance indicators such as cost recovery and net cost per passenger have improved since the demonstration started. In December the cost recovery for the route was 1.96% and the net cost per passenger was \$44.48. We anticipate that the ridership trends will continue to improve, but the route will likely not achieve the Pierce Transit system average due to the lower densities in the route area.

The addition of the Route 425 service includes a net addition of approximately 9,266 annual service hours. This service equity analysis examines the impact of the addition of the new Puyallup Connector service on minority and low-income populations.

2.1 Puyallup Connector Service

The Puyallup Connector Demonstration was developed in partnership with a committed Puyallup Community Investment Team (CIT) that has helped guide the design of the demonstration Community Connector service. This CIT represented the local community and included representation from: local bus riders, City of Puyallup, MultiCare-Good Samaritan Hospital, Puyallup Main Street Association, Puyallup/Sumner Chamber of Commerce, Puyallup Senior Center, Pierce College, Washington State Fair, and Senior Housing Assistance Group (SHAG). The Puyallup Connector is operating as a one-year demonstration from June 8, 2014 to June 6, 2015. The service was popular with the community with total ridership of -15,508 during the first seven months of the 12-month demonstration from June through December, 2014. Pierce Transit plans to operationalize the service and make it a regular route beginning June 7, 2015.

Community Needs

The service connects riders to key Puyallup community destinations including medical, shopping, and recreation. The route operates in residential areas and serves multiple senior housing facilities including Senior Housing Assistance Group which has minimum requirements for residents to be 62 or older and have an annual income less than \$30,120. The Puyallup Connector provides a direct connection to Good Samaritan Hospital, a major region medical facility; local activities such as the YMCA, churches, parks, Puyallup Senior Center, and library; community services at City Hall and Courts; shopping at the South Hill Mall (a regional shopping center), and the central business district in Downtown Puyallup; as well as access to Pierce College and Puyallup High School with a short (approximately ¼-mile) walk.

Seasonal Activities

Summertime service is adjusted to provide access to activities along the route during the busy summer season. The schedule operated with extended hours on Thursdays and Saturdays to better serve important community events like Concerts at Pioneer Park, Saturday Farmer's Markets, and local activities in Downtown Puyallup. The seasonal adjustment is planned when the route is operationalized.

Integration with Existing Transit System

Puyallup Connector service also provides easy feeder service connections to local Routes 400, 402, 409, 410, and 495 as well as Sound Transit's Route 578 for ease of use. The Puyallup Connector is integrated with local service for system effectiveness and ease of access to local and regional destinations.

Customer Profile

An on-board survey, which resulted in 212 completed surveys, was completed during the demonstration period between September 3, 2014 and November 7, 2014. The survey results showed a high satisfaction rate for the service, with 91 percent of the respondents reporting that their satisfaction was rated 8, 9 or 10 out of 10 (with 10 being "very satisfied"). There was a minimal dissatisfaction rate (rating of 4 or less out of 10) of 3%. About 45% of passengers used the service to go shopping/bank/other errands, 26% for travel to work, and 24% to reach medical/dental appointments. The age of riders on the Route 425 is slightly older than the Pierce Transit system average. Of those surveyed, riders on the Route 425 aged 55+ comprised approximately 31%, while Pierce Transit's 2014 Customer Survey indicates that 19% of the system's riders are aged 55+. About 45% of respondents were between the ages of 18-34. This is similar to the Pierce Transit system average where 51% of riders indicated they were 16-34 years old. Approximately 51% of the riders have a household income less than \$19,999, and

approximately 78% of riders have a household income less than \$34,999. This is higher than the PT system average of 45% with household incomes less than \$19,999. Also, 77% of the Route 425 riders indicated that they ride other Pierce Transit or Sound Transit routes.

PT staff has used the information gained during the demonstration period about ridership trends and has continued to coordinate with the CIT to modify some elements of the service profile. These adjustments include adding additional bus stops at potential new destinations along the route to better serve the community, and also reducing frequency of service on lower utilized Sundays in order to add an additional trip during the early morning weekdays. More early morning trips and later evening trips are one of the most frequent requests from passengers of the Route 425 demonstration.

Outreach and Decision-making

The proposed addition of a new route is considered a major service change under Pierce Transit’s Major Service Change Policy and requires a Title VI Service Equity Analysis and public outreach. After considering feedback and demonstration performance, Pierce Transit’s Board of Commissioners will consider operationalizing the Puyallup Connector service on March 9, 2015. Legal notices will be published on January 27, 2015, 12 days in advance of a Public Hearing on operationalizing the Route 425, scheduled to take place at the Board of Commissioners meeting on February 9, 2015. The legal notice was also published on Pierce Transit’s web site in advance of the public hearing. Rider alerts notifying the public about the hearing and seeking public comment were distributed on buses, and posters were placed in key locations throughout the community. Prior to the public hearing, a public open house is scheduled for January 28, 2015 from 3:00 p.m. to 6:30 p.m. at the Puyallup Library, which is served by Routes 425 and 402. Outreach about the service implementation planned to begin June 8, 2015 will be ongoing and will include information in The Bus Stops Here, Rider Alerts, website notices, and PT staff attendance at various community meetings.

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 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.

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

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 2012 the poverty limit was \$23,050.

4 METHODOLOGY

As a new operationalized route, the Puyallup Connector, Route 425, qualifies as a Major Service Change and thus is subject to a Title VI Service Equity Analysis.

For Route 425, Pierce Transit staff identified the minority and low-income population living within $\frac{1}{4}$ mile of the route, and within the entire service area. GIS mapping and 2010 Census data were used at the census block level for minority data. American Community Survey 2007-2011 data by census tract was used for low-income data³. A $\frac{1}{4}$ mile buffer was placed around the Puyallup Connector route to designate the route access range. The population of each tract or block within or touching that buffer was calculated, and then the percentages of minority and low-income populations of those tracts/blocks were calculated. An additional analysis of the makeup of the population within $\frac{1}{4}$ mile of *all* Pierce Transit routes both with and without the Route 425 provided insight into the impact of the route on the overall population served by Pierce Transit's bus system.

The equity analysis is provided below in Section 5.

³ Pierce Transit's 2010 Customer Survey provides information about our riders' race and income, but does not provide statistically significant data on ridership by route, so Census Data was used to analyze the population along Pierce Transit's routes.

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

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

Figure 5-1 below shows the Puyallup Connector in red with its ¼ mile access area shown as the hatched area around the route. The grey inset map shows the location of the Puyallup Connector within the Pierce Transit Service Area. Table 5-1 below shows the results of the analysis, comparing the minority and low-income proportion of the population living within ¼ mile of Route 425 with the minority and low-income proportion of the service area as a whole. The data shows that the population served by the Route 425 is 15.5% lower in minority population than the service area. The Route 425 serves a 1.4% lower proportion of the area's low-income population.

To look at the impact in a slightly different way, staff analyzed the percentage of minority population served by all Pierce Transit routes both with and without the Route 425. Figure 5-2 shows the entire system area with darker shaded areas showing higher proportion of minority and low-income population in their respective Census Blocks and Tracts. The Route 425 is shown in red in the eastern portion of the service area. Table 5-2 shows that along all of Pierce Transit's routes, 37% of the population within ¼ mile are minorities and 12.7% are low-income. When we add the Route 425 to the system, the minority population served by the routes across the system goes down 1%, from 37% to 36% and the low-income proportion served by all routes stays essentially the same at 12.5%.

Figure 5-1 Route 425 – Local Minority and Low-Income Census Blocks/Tracts

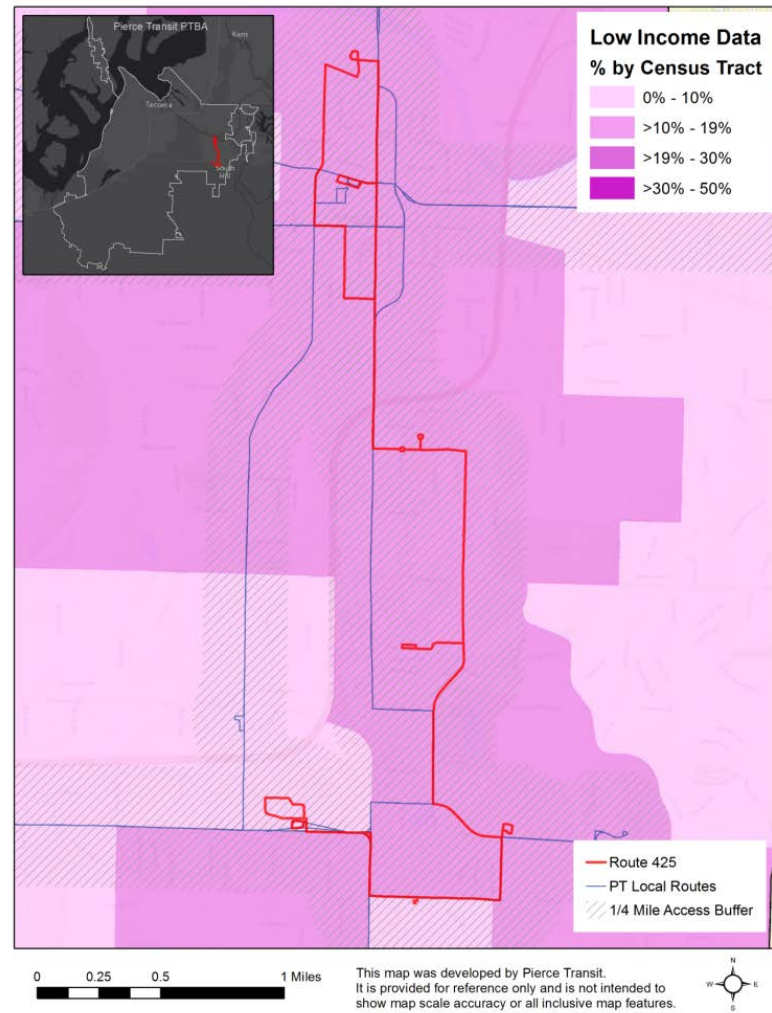
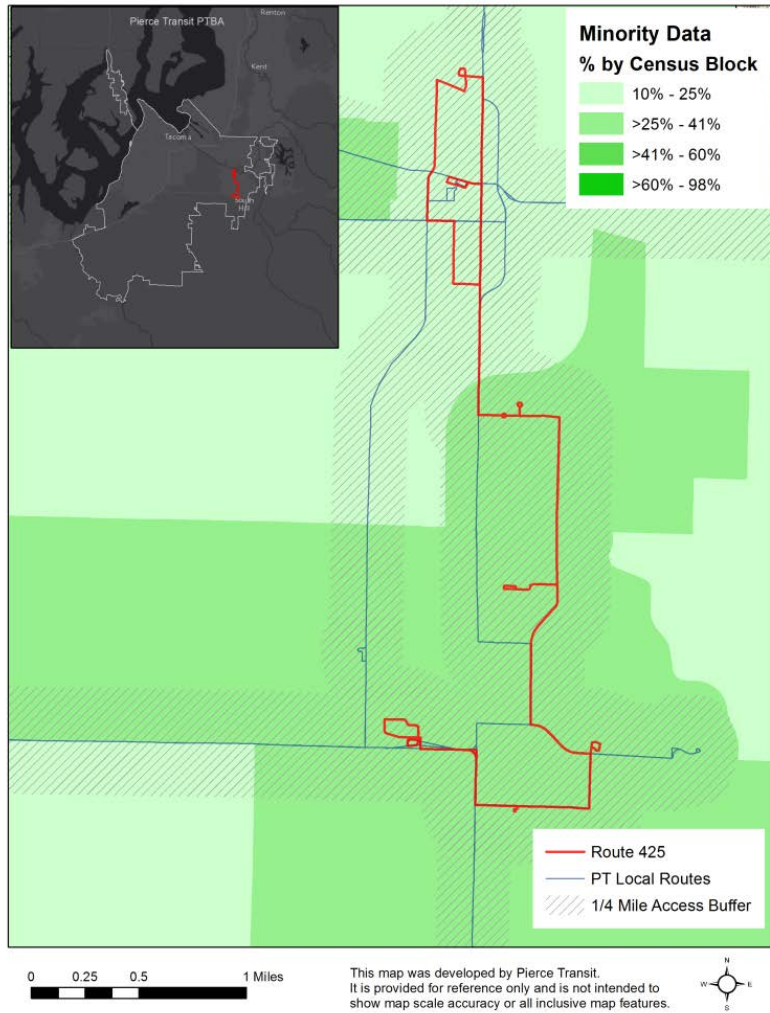
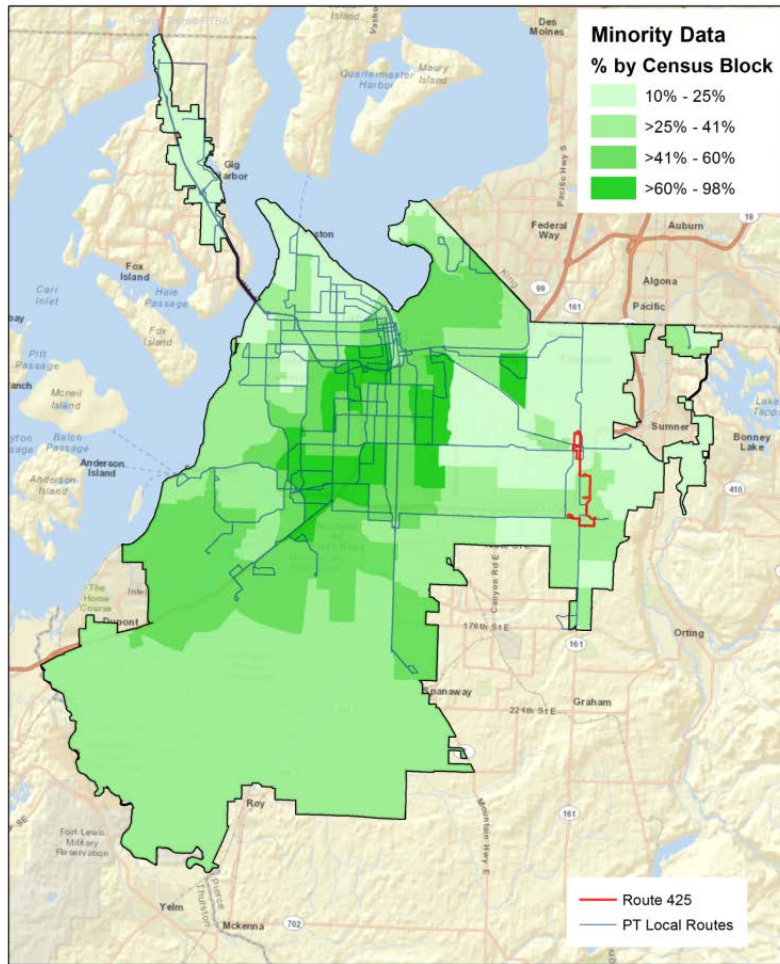


TABLE 5-1 Impact of New Service on Minority and Low-Income Populations

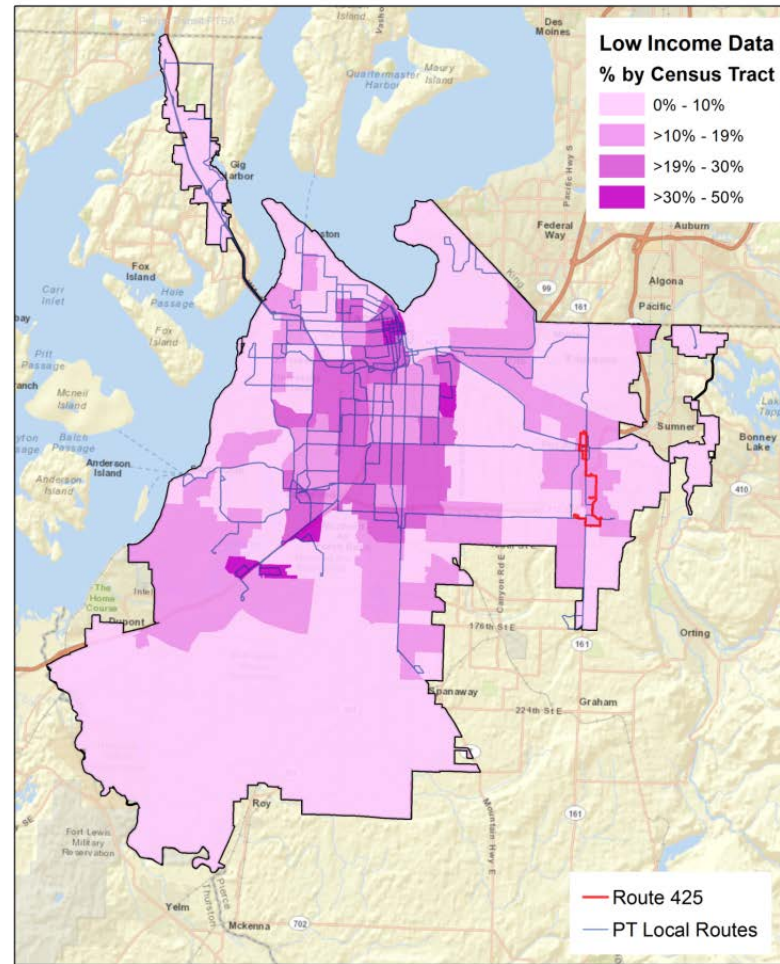
Summary of Service Change	Minority Proportion of Population			Low-income Proportion of Population		
	Census Blocks Along Route	Average Population in Service Area	Difference	Census Tracts Along Route	Average Population in Service Area	Difference
New Route 425	25.5%	41.0%	-15.5%	11%	12.4%	-1.4%

Figure 5-2 Route 425 – System-wide Minority and Low-Income Census Blocks/Tracts



0 2.25 4.5 9 Miles

This map was developed by Pierce Transit. It is provided for reference only and is not intended to show map scale accuracy or all inclusive map features.



0 2.25 4.5 9 Miles

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

Area of Analysis	Minority Proportion of Population			Low-income Proportion of Population		
	Census Blocks Along Routes	Average Population in Service Area	Difference	Census Tracts Along Routes	Average Population in Service Area	Difference
¼ Mile Access of All Pierce Transit Local Routes without the 425	37%	41.0%	-4%	12.7%	12.4%	0.3%
¼ Mile Access of All Pierce Transit Local Routes including the 425	36%	41.0%	-5%	12.5%	12.4%	0.1%

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 10% 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. In this case, there is no adverse effect because new service is being added. The analysis shows that the new route is serving just 25.5% minorities, which is 15.5% fewer minorities than the service area minority population (41%). This is greater than the disparate impact threshold of 10%, but since this population is not adversely affected by the additional service, a determination of disparate impact is not warranted.

However, since minority populations are not expected to benefit from this service expansion as much as non-minority populations, FTA requires Pierce Transit to explain how the agency plans to improve service to minority populations. Pierce Transit's Board recently approved an addition of 16,000 service hours to the existing 427,716 system service hours; these will be applied mainly on productive routes that lost service hours during previous service reductions. Many of these hours will be applied to routes that serve the core of Pierce Transit's service area which is where most of the concentrations of minority populations reside (Figure 5-2). The application of these hours is still in the planning stages so detailed analysis of population served by those routes is not possible at this time. In general, Pierce Transit is successful at providing service to areas with higher minority populations. The bulk of Pierce Transit's existing 38 routes (shown in blue on the maps in Figure 5-2) serve the more urban core which contains mainly census tracts with higher than the average minority populations.

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. In this case, there is no adverse effect because service is expanding, not reducing. The low-income population along the Route 425 is 11%, which is just 1.4% lower than the service area low-income population (12.4%). This is both within the threshold of 5% and there is no adverse effect on the population, so a determination of disproportionate burden is not warranted.

6 APPENDICES

APPENDIX A	PUYALLUP CONNECTOR ROUTE 425 FACT SHEET
APPENDIX B	SEPTEMBER 2014 PIERCE TRANSIT SYSTEM MAP