

AUG 16

LIFE

Low-Income Fare Equity

Campaign



A Proposal To Reduce Fares For Low-Income Riders

OPAL Environmental Justice Oregon August 2016

Bus Riders Unite (BRU) is a grassroots initiative that collectively organizes low-income people and people of color for public transit justice in the Portland metropolitan area. Bus Riders Unite is part of OPAL Environmental Justice Oregon, a 501(c)(3) nonprofit organization. OPAL's mission: building power for Environmental Justice and Civil Rights in our communities.



Table of Contents

1-2	Executive Summary
3-4	Part 1: Introduction
5-6	Part 2: The Reality of Transit Costs
7-8	Part 3: Examples from other cities
	<ul style="list-style-type: none">• San Francisco Municipal Transportation Agency (SFMTA or MUNI)• Seattle King County Metro
9-16	Part 4: BRU's Proposal for TriMet
	<ul style="list-style-type: none">• Why Did We Choose This Income Level?• Cost Estimates
17-20	Part 5: How to Meet the Need
	<ul style="list-style-type: none">• Impose an Additional Tax Within the Service District• Increase Advertising Revenue• Premium Fares for Premium Service• Charge for Parking at TriMet Park & Ride Facilities



OPAL
ORGANIZING PEOPLE / ACTIVATING LEADERS

Acknowledgements

Bus Riders Unite Research & Advisory Committee:

David Bouchard, Jonathan Gates, Allison Giffin, Eavan Moore, Madeleine Moore, Nicole Phillips

Jared Franz Amalgamated Transit Union Local 757

Aaron Golub Toulan School of Urban Studies and Planning, Portland State University

Orlando Lopez OPAL Environmental Justice Oregon

Andrew Riley 1000 Friends of Oregon

21-22 Appendix A: Bus Riders Unite's History of Success

- Testimony Before, Not After, Board Votes
- Bus Stop Improvements
- Transit Equity Advisory Committee (TEAC)
- Campaign for a Fair Transfer
- Civil Rights Complaint to Federal Transit Administration
- YouthPass

23-30 Appendix B: Methodology Used for Program Cost

Estimate Calculations

- Step 1: Data Cleaning
- Step 2: Determining Poverty Status
- Step 3: Counting Riders in Each Category
- Step 4: Estimating Revenue Generated Per Rider Type and Lost Per Adoption
- Step 5: Estimating the Adoption Rates for Each Rider Type
- Step 6: Estimating New Riders and Revenue Due to Lower Pass Costs

EXECUTIVE SUMMARY

Transportation is the second-largest household expense in the U.S., and is an absolute necessity for participation in society. Portland's sharply increasing cost of living disproportionately affects low-income individuals and families, many of whom are also dependent on public transit as their sole means of getting around. Many large American cities have already implemented a reduced fare program for low-income transit riders, and we urge Portland to follow their example. A low-income pass will be TriMet's contribution to "making our community the best place to live in the country."¹

Our analysis uses income and ridership pattern data from TriMet's onboard rider surveys, population income data from within the TriMet service district, three different program eligibility thresholds based upon Federal Poverty Line (FPL) figures, and the adoption rates of similar programs in other cities. We account for potential losses in fare revenue due to the program, as well as potential increases in fare revenue due to new riders choosing TriMet because of the availability of reduced-cost fares. We project a range of cost scenarios associated with our proposal. Costs vary depending upon eligibility, level of subsidy, and level of adoption for the program, ranging between \$2.5 million and \$9 million per year.

¹TriMet's vision statement is: "To do our part in making our community the best place to live in the country" <https://trimet.org/about/mission.htm>

Table ES-1. Overall annual cost estimates (millions of dollars)

	Low Adoption Scenarion			High Adoption Scenarion		
Threshold	<150% FPL	<185% FPL	<200% FPL	<150% FPL	<185% FPL	<200% FPL
\$50 Pass	\$2.43	\$2.191	\$2.98	\$4.86	\$5.81	\$5.97
\$28 Pass	\$3.66	\$4.38	\$4.50	\$7.32	\$8.76	\$8.99

The expenses associated with this proposal can and should be offset without increasing fares, reducing service, or cutting transit employee wages and benefits. We recommend that TriMet impose taxes on investment income and corporate profit within the service area (as a less regressive alternative to additional payroll taxes), aggressively pursue additional revenue from advertising on transit vehicles and stops, add a fare surcharge for WES Commuter Rail, and reconsider a paid parking scheme at high-demand TriMet park-and-ride facilities.

"Transportation is the second-largest household expense in the U.S., and is an absolute necessity for participation in society."

Part 1

Introduction

Access to affordable, reliable transportation is essential for our education, our health and nutrition, our employment opportunities, and our participation in community life. Accessing the places we live, work, learn, play, and pray is barely an afterthought for those who have easy access to a personal vehicle. However, for those who do not, public transit systems are a critical lifeline. The people who rely on public transit – those who cannot own or operate a car for reasons of age, health or poverty – are disproportionately likely to be living on low incomes.

According to the Center for Transit-Oriented Development, transportation represents the second-largest household expense after housing.² While mass transit is often promoted as a less-expensive alternative to car ownership, the truth is that Portland's transit system is not eminently affordable. With Portland's rapidly increasing cost of living, low-income residents are feeling the pinch more than ever. Paying \$5 for a day's use of transit may not seem like a significant hardship by itself, but when combined with regional incomes failing to keep pace with housing, commodities, and child care costs, the cumulative effect squeezes out many individuals and families who once called Portland home.

Bus Riders Unite demands that TriMet and other community stakeholders implement a reduced fare program for low-income riders, as part of a larger strategy to support sustainable growth and livability in the Portland metropolitan region. By ensuring equitable access to public transit for all local residents, this program will help Portland live up to its image as a national leader in sustainability and progressive policy. Adoption of the reduced fare program outlined here will be a powerful demonstration of TriMet's commitment to transit equity and environmental justice.³

² http://www.fhwa.dot.gov/livability/fact_sheets/transandhousing.cfm

³ <http://trimet.org/about/transitequity.htm>

In this report, we evaluate several strategies for TriMet to implement a reduced-cost fare for low-income riders, estimate the level of demand for a reduced-cost fare, and calculate projected changes to fare revenue. We then explore possible sources of revenue to cover the costs associated with this proposed program. To motivate this proposal, we begin by representing the disproportionate hardships experienced by low-income individuals and families in Portland.

We are seeking a reduced fare for low-income riders on the principle that mobility is a human right and public policy should attempt to lower barriers to mobility for all. A low-income pass is a step toward the ideal of an efficient, fareless transportation system accessible to all, regardless of ability to pay.

"We are seeking a reduced fare for low-income riders on the principle that mobility is a human right and public policy should attempt to lower barriers to mobility for all. "

Part 2

The Reality Of Transit Costs

Like all of BRU's proposals, the reduced fare for low-income riders originates with the transit users we speak with daily - when we hold member meetings, when we organize on buses, and when we talk to our friends and coworkers. Several of the people we spoke with agreed to share their stories with a wider audience. Their experiences show how high transit costs affect people living on low incomes.

"Edith" takes transit daily and is an Honored Citizen pass holder. She doesn't have access to a car, so transit is her only means to move around. Edith works as a part-time freelance editor while her husband finishes his studies, and with their limited income transit is an expense that they sometimes cannot afford. Before she knew about the Honored Citizen pass she would buy the \$100 pass and it was a real burden, especially since she was living off of her loans. While she was attending school Edith was able to get a discounted pass. However, even with the discount the passes are still a burden on students to obtain when most students have little to no income. Edith understands that lowering the fares for low-income folks can make a difference: "It's money that you can save, put more food on the table, or simply a smaller expense to worry about."

"Jake" makes \$20,000 a year, about 170% of the federal poverty line. He owns a car, and although the related expenses consume almost a third of his biweekly paycheck, the convenience of the car makes him reluctant to give it up in favor of a \$100 monthly bus pass. He says that if the price were reduced to \$50, the low cost would win over convenience and he would stop driving to work.

"Diana" uses a number of lines including the 4, 9, 71, 72, Blue, Red, Yellow, Green lines among others. She doesn't have access to a vehicle so transit is a lifeline, which she uses to go to doctor's appointments, schools, shopping, and everything in between. She usually buys monthly passes but also carries single tickets as a backup. There have been times in which she has struggled to pay for her pass, and recently had to collect cans to pay for a monthly pass.

Diana would walk to her destination or change the dates of her appointments when she didn't have enough for her fare. She buys an Honored Citizen pass for her daughter, son, and herself for a total of \$84. Diana believes \$84 is very expensive for people who don't have a lot of money to begin with.

"El" is 29 and lives in southeast Portland. A few years ago, when she was transit-dependent and working only several hours a week, El struggled to pay for bus fare. "It was hard being like, 'Oh, yeah, I can only make this many trips, because I only have this many dollars to spend on transportation,'" she says. El's current job at a warehouse in Beaverton, combined with a couple of side gigs, yields about \$25,000 a year, putting her just over 200% of the federal poverty line. There are months when she has no disposable income left after expenses. Now that she has a working car, she finds it more cost-effective to drive to work than to bus at TriMet's current prices. "I would totally go for the \$50 a month ticket," says El. "That would make getting to work and back comparable to what I'm paying for now in gas, or even less. With a lower fare, I would be much more likely to take transit. TriMet would be making \$50 more from me than they do right now, because right now I spend literally zero dollars."

Being transit dependent to **"Cherylle"** means relying upon buses and trains to get around every single day. She takes her kids to school, and since they live outside of the district, it takes an hour to get there. She uses the 19, 20, 72, 77, 80, 81, Blue, Red, and several other lines. Cherylle doesn't feel comfortable getting behind the wheel since being involved in a car crash and would rather take the bus. Cherylle currently has to buy monthly passes for her eldest daughter and herself; her second-oldest is already getting to the age in which she will need a bus pass as well. Their school puts bus passes on their school supplies list needs, a burden that hits low-income families like hers the hardest.

Part 3

Examples From Other Cities

In a reduced-fare program designed to benefit low-income communities, a rider whose income is at or below a certain level is deemed eligible to receive free or discounted fare on public transit. Two of Portland's metropolitan neighbors, San Francisco and Seattle, have each introduced low-income fare programs.

San Francisco Municipal Transportation Agency (SFMTA)

In 2005, transit officials decided to create the Lifeline pass **for residents with an income of less than 200% of the federal poverty line**. The monthly pass costs \$35, half the price of a standard adult pass. There are three steps to getting the discounted pass:

1. The passenger brings personal identification and proof of eligibility, together with a completed application form, to a specific Human Services Agency office. A tax return or an award letter for food stamps or Medicaid can serve as proof of eligibility.
2. The passenger brings their now-certified application form to the SFMTA Customer Service Center to obtain a Lifeline ID card, which must be renewed annually.
3. The passenger can now buy monthly stickers for the card at eight different locations, including three stores and five government and transit agencies.

20,000 customers per month currently use the Lifeline pass, which represents roughly 15% of the eligible ridership.⁴

⁴ Email from Diana Hammons, Senior Manager, Revenue Collection and Sales, San Francisco Municipal Transportation Agency on July 19, 2016

Seattle King County Metro

In 2012, after rapidly rising fares provoked protests among transit users, the King County Council put together an advisory committee to study the feasibility of a low-income fare. On March 1, 2015, the new LIFT program came into effect. The LIFT program is tied to the ORCA electronic fare card. King County Metro provides the discount on seven different services in four counties, in cooperation with Sound Transit and Kitsap Transit.⁵ In 2016, a discounted single fare is \$1.50, compared to a regular adult fare of \$2.50 to \$3.25. A monthly pass is \$54, close to half of the regular \$99.

As in San Francisco, **the LIFT program uses 200% of the federal poverty line as its standard.** Applicants to the program enroll at one of nine contracted social service agencies, which accept whatever documentation applicants can produce – pay stubs, TANF benefits, etc. – to verify that the applicant makes no more than the limit.

King County Metro estimated before implementing the program that it would result in a \$4.75 million fare revenue loss in the first full year it was in effect (2016). Another \$3 million to \$4 million in administrative expenses was estimated on top of that.⁶ It is too early to confirm the financial impact of the program, but early results suggest that it is succeeding in its primary mission: to get low-income residents where they need to go. As of August 2016, more than 33,000 riders had signed up for the program. King County Metro estimates that 496,000 residents in King county are eligible for this program.⁷ Riders have taken more than 3.7 million trips with ORCA LIFT cards.

In early 2016, King County Metro surveyed a total of 435 ORCA LIFT customers by phone and mail. They found that 79% were “very satisfied.” 44% of users were riding more than before. 47% of respondents had not previously used the electronic ORCA card, which suggests that building in a reduced fare program speeds uptake of electronic fares.⁸

⁵ LIFT can be used on King County Metro Transit buses, Sound Transit buses, the Link light rail, the Sounder Train, the Seattle Street car, the King County Water Taxi, and Kitsap Transit buses.

⁶ <http://metro.kingcounty.gov/am/reports/2014/transit-fares-report.pdf>

⁷ Per phone conversation with King County staff in July 2016

⁸ <http://metro.kingcounty.gov/am/reports/2016/orca/orca-lift-customer-survey-05-25-2016.pdf>

Part 4

Our Proposal For TriMet

BRU has crafted our own proposal for a reduced fare program for low-income riders in the TriMet service district. To be effective at mitigating barriers to transit access, the reduced fare program for low-income communities must meet the following criteria:

1. The program should be integrated with the rollout of an electronic fare system, which would maximize TriMet's ease of administration and riders' convenience of use.
2. The upper income limit for participation in the program should reflect Portland's livability and affordability crisis. TriMet's peer agencies in San Francisco and Seattle use 200% of the federal poverty line as their standard. (This corresponds with households earning below 66% of the area median income.) We strongly recommend that TriMet follow their example in this implementation of a reduced fare program.
3. The reduced-cost fare should match the Honored Citizen fare of \$28 per month. It would be simple to administer, simple to remember, and fundamentally affordable. In this report, we also analyze a \$50 pass, half the cost of the current adult pass.
4. Eligibility should be verified through W-2s, tax returns, pay stubs, or possession of an Oregon Trail card. As in Seattle, social service agencies and community-based organizations could enroll their clients in the program using the same documentation provided for participation in other programs.
5. The card should be valid for at least two years from the date of issuance, as in Seattle.

6. The reduced fare program should supplement, not replace, the existing subsidized tickets provided by Portland-area social service agencies.⁹

Why did we choose this income level?

BRU has long criticized TriMet's current operating definition of "low income," at 150% of the federal poverty line. The federal poverty guidelines are widely considered to be an inadequate measure of poverty. Devised in the early 1960s, they have never been altered to account for the rapid rise in the price of housing, health care and child care, nor do they take into account geographic difference in the cost of living. Portland ranks smack dab in the middle – 25th – in a Brookings Institution ranking of income inequality among the nation's 50 largest cities. Nevertheless, in the state of Oregon, 71 percent of families labeled poor by the Oregon Center for Public Policy (two adults, one child with income less than \$19,055 per year) had at least one parent working.¹⁰

We used federal poverty guidelines as our threshold in acknowledgement that this is the most widely-used and most familiar metric. However, we set our proposed threshold at 200% FPL because we know that folks living well above lower thresholds still find the cost of transit prohibitive. Earlier in this report, we discussed "Jake," who makes more than 150% FPL and spends an inordinate chunk of his income on transportation; we also discussed "El," who makes more than 200% FPL and is so cost-conscious she cannot afford TriMet.

⁹ This may seem counterintuitive, since the electronic fare program will have broader impact and be more efficient. But as the Seattle Transit Riders Union pointed out, and the King County implementation taskforce agreed, different programs reach different populations. Social service clients with no income may need those free tickets. Others may find it easier to make it to their usual sources than to one of the locations where e-fare cards can be acquired or reloaded. Maintaining some redundancy is especially important during the rollout period, when it will take time for riders to understand and obtain their new benefits.

¹⁰ <http://portlandtribune.com/pt/9-news/288942-165161-portlands-growing-divide-the-wealthy-and-the-rest-of-us>

Table 1 lists what our recommended limit of 200% FPL would look like at different household sizes, with 100% FPL included as a comparison.

Table 1. 2016 U.S. Health and Human Services poverty guidelines (annual income)¹¹

Household Size	100% FPL	200% FPL
1	\$11,880	\$23,760
2	\$16,020	\$32,040
3	\$20,160	\$40,320
4	\$24,300	\$48,600
5	\$28,440	\$56,880
6	\$32,580	\$65,160
7	\$36,730	\$73,460

Cost estimate

Our cost estimate for TriMet to provide a reduced-cost monthly pass option comprises two major categories: program administrative expenses and changes in revenue from offering the reduced fare.

Administrative expenses

TriMet’s budget breakdown of staff and project expenses in its Fare Revenue Division is not specific enough to determine which staff position(s) would be responsible for managing a reduced fare program. We estimate that the additional administrative work to implement this program could add up to one full-time position to the Fare Revenue Division (estimated \$61k/year¹²), and would add duties incrementally to other divisions within TriMet. Administrative costs will also vary based upon mechanisms ultimately chosen for robust public outreach and income verification. We recognize that King County Transit estimates its administrative costs for their reduced-fare program at \$3-4 million. However, we don’t know how such a program would be managed in Portland, so we provided estimates for costs that we had the ability to project.

¹¹ <https://aspe.hhs.gov/poverty-guidelines>

¹²Base pay for the Specialist, Fare Revenue staff position is \$61,404/year, per the 2017 TriMet Budget. <http://trimet.org/budget/pdf/2017-adopted-budget.pdf> (pg. FA-18)

Changes in fare revenue

Three fundamental changes make up the total change in fare revenues. These three changes are:

- Qualifying riders switching from adult fare monthly passes to reduced fares,
- Qualifying riders switching from single-fare and day passes to reduced fares, and
- New riders purchasing reduced fares.

Table A6 (Appendix B) shows the number of boardings made by different types of riders who would qualify for the reduced fare at different levels of income eligibility. We present here the basic results of our estimates of ridership and revenue impacts of the LIFE pass. More details about the estimates can be found in the appendix.

We have created two scenarios: low adoption rate and high adoption rate. We know from already-implemented programs in Seattle and San Francisco that only a small percentage of eligible riders seek and obtain the reduced fare, presumably because not everyone is aware of it and not everyone who is aware of it will choose to apply for the program.

Within each of the two scenarios, we further assume that higher-use riders would be more eager to switch to a reduced fare than those who ride less often. In a low adoption scenario, we assume only 2.5% of people who ride 10-19 times a month switch to the reduced fare. We assume the adoption rate rises to 5% of those who ride 20-29 times a month, and 10% of those who ride more than 30 times a month. In the high adoption scenario, we assume 5, 10, and 20% of riders in the 10-19, 20-29, and > 30 ride categories switch to the reduced fare, respectively. For qualifying monthly pass users we assume that 10% adopt the LIFE pass in the low adoption scenario, and 20% adopt the pass in the high adoption scenario.

Multiplying these adoption rates by the total who qualify creates the number we estimate will use the new LIFE-pass, shown in Table 2. For example, if the adoption rate were low, and the program only provided fare reductions to riders making 150% of FPL, then qualifying participants who use a monthly pass (“Pass Users”) would use their new, reduced-cost pass to make 740,000 annual boardings (highlighted in yellow). In a high-adoption scenario, individuals who do not use a monthly pass, and who ride 20-29 times per month, would make 650,000 boardings at 185% FPL eligibility (blue).

Table 2. Adoption rates as percentages and as million boardings per year

	Low Adoption	Boardings (millions per year, low adoption)			High Adoption	Boardings (millions per year, high adoption)		
		<150% FPL	<185% FPL	<200% FPL		<150% FPL	<185% FPL	<200% FPL
Pass Users	10%	0.74	0.90	0.93	20%	1.47	1.80	1.87
Non-Pass 10-19 rides/month	2.5%	0.12	0.14	0.14	5%	0.24	0.27	0.28
Non-Pass 20-29 rides/month	5%	0.29	0.33	0.33	10%	0.57	0.65	0.67
Non-Pass 30 rides/month	10%	1.56	1.86	1.91	20%	3.11	3.73	3.82

Tables 3 and 4 present resulting revenue losses in two scenarios: a low-income fare that costs \$50 per month (half the price of a current monthly pass), or \$28 per month (the cost of a current Honored Citizen monthly pass). We assume that current adult-fare riders pay about \$2 per boarding, and therefore for the \$50 reduced pass cost, \$1 of revenue is lost per boarding, and for the \$28 reduced pass cost, \$1.44 is lost per boarding.

Table 3. Annual revenue lost with \$50 pass (all units in millions of dollars)

Income Group	Low Adoption			High Adoption		
	<150% FPL	<185% FPL	<200% FPL	<150% FPL	<185% FPL	<200% FPL
Pass Users	0.74	0.90	0.93	1.47	1.80	1.87
Non-Pass 10-19 rides/month	0.12	0.14	0.14	0.24	0.27	0.28
Non-Pass 20-29 rides/month	0.29	0.33	0.33	0.57	0.65	0.67
Non-Pass >30rides/month	1.56	1.86	1.91	3.11	3.73	3.82
Total Revenue Lost	2.70	3.23	3.32	5.40	6.46	6.63

Table 4. Annual revenue lost with \$28 pass (all units in millions of dollars)

Income Group	Low Adoption			High Adoption		
	<150% FPL	<185% FPL	<200% FPL	<150% FPL	<185% FPL	<200% FPL
Pass Users	1.06	1.30	1.34	2.12	2.60	2.69
Non-Pass 10-19 rides/month	0.17	0.19	0.20	0.34	0.39	0.40
Non-Pass 20-29 rides/month	0.41	0.47	0.48	0.82	0.94	0.96
Non-Pass >30rides/month	2.24	2.69	2.75	4.49	5.37	5.50
Total Revenue Lost	3.89	4.65	4.78	7.77	9.30	9.55

We will address each of the three predicted changes separately and sum them to estimate a total change in fare revenue. For a complete explanation of methods and calculations, please see Appendix B.

1. Lost revenue from adult fare monthly passes to reduced fare – Less than \$2.69M

According to our calculations, between 740,000 and 1,870,000 boardings per year are made by riders who currently use monthly passes and would qualify for and participate in a reduced fare program, depending upon eligibility and adoption rates. These riders switching from adult monthly passes would reduce TriMet fare revenues by no more than \$2.69M (at maximum eligibility, participation, and subsidy).

2. Lost revenue from riders switching from adult single and day passes to reduce fare - Less than \$6.86

According to our calculations, between 1,970,000 and 4,770,000 boardings per year are made by riders who do not use monthly passes and would qualify for and participate in a reduced fare program, depending upon eligibility and adoption rates. These riders switching from adult fares would reduce TriMet fare revenues by no more than \$6.86M (at maximum eligibility, participation, and subsidy).

3. New revenue from new riders due to decreased fare costs – Up to \$660,000

After reviewing key data on ridership elasticity,¹³ a conservative estimate assumes that ridership would increase by about 10% (those who qualify for the reduced fare and for whom it makes sense). For a 50% decrease in fares (for the \$50 pass), this is at the low end of the elasticity estimates in the literature. See further discussion on this in Appendix B.

Considering this information, new riders may amount to about 10% of current qualifying riders (for the \$50 pass) and 15% (for the \$28 pass). Multiplying the number of boardings by the revenue per boarding for the different pass costs, we get the results shown in Table 5. Although the revenue acquired from new riders entering the TriMet system is comparably low, the additional 990,000 boardings per year represent a significant increase in the number of people able and choosing to take the bus or the train - the ultimate aim of public transit. **These riders may generate up to \$660,000 per year in new fare revenue, among the many public benefits of increased ridership.**

Table 5. Annual new ridership and revenues following reduced-fare pass offering (all units in millions)

	Low Adoption			High Adoption		
	<150% FPL	<185% FPL	<200% FPL	<150% FPL	<185% FPL	<200% FPL
Total Current demand (annual boarding)	2.70	3.23	3.23	5.40	6.46	6.63
New Boardings (10% of current)	0.27	0.32	0.33	0.54	0.65	0.66
New Revenue \$50 pass	\$0.27	\$0.32	\$0.33	\$0.54	\$0.65	\$0.66
New Boardings (15% of current)	0.40	0.48	0.50	0.81	0.97	0.99
New Revenue - \$28 pass	\$0.23	\$0.27	\$0.28	\$0.45	\$0.54	\$0.56

¹³“Elasticity” in economics refers to the responsiveness of supply and demand to changes in price; in this case, it refers to the degree that transit ridership changes in response to a change in price. See the Transit Cooperative Research Program’s (TCRP) research on the elasticity of fare changes at http://onlinepubs.trb.org/onlinepubs/tcrp/tcrp_rpt_95c12.pdf

Summarizing these various revenue losses and gains in Table 6, the cost to TriMet of introducing the reduced pass ranges from \$2.43 million to \$5.97 million per year for the \$50 pass and from \$3.66 million to \$9 million per year for a \$28 pass, at varied levels of eligibility and participation. Given TriMet's budget is more than one billion dollars annually, with annual fare revenues in excess of \$120M, this represents a shift in less than 1% of the total TriMet budget, and less than 8% of current fare revenues.

Table 6. Overall annual cost estimates (millions of dollars)

	Low Adoption Scenarion			High Adoption Scenarion		
Threshold	<150% FPL	<185% FPL	<200% FPL	<150% FPL	<185% FPL	<200% FPL
\$50 Pass	\$2.43	\$2.191	\$2.98	\$4.86	\$5.81	\$5.97
\$28 Pass	\$3.66	\$4.38	\$4.50	\$7.32	\$8.76	\$8.99

Part 5

How To Meet The Need

Conversations about funding new rider services or benefits tend to be framed around sacrifice: namely, what are riders willing to give up in order to get what they want? Do you want service coverage or frequency? Bus shelters or lighting?

We would like to frame this conversation differently, with the question: **What untapped resources could support this essential program?**

Impose an additional tax within the service district

Here is one answer. Transit is a public good and best paid for by members of the public, proportionate to their ability. TriMet is authorized by state law to levy its own **income tax** and its own **property tax**.¹⁴ A new corporate and/or personal income tax – each allowable up to 1% – could raise substantial revenue for the agency. TriMet currently imposes only a payroll tax, leaving investment income and corporate profit off the table. In a city that prides itself on equity – and in which low-income transit riders are counting their farebox pennies – this is a missed opportunity to utilize potential revenues to make transit more affordable to low-income communities.

Increase advertising revenue

TriMet collects approximately \$4 million from companies paying to advertise on transit vehicles, bus shelters, and train stations. Muni in San Francisco collected in total \$17 million in advertising last year.

¹⁴ OR. REV. STAT. § 267.300 (2013).

\$5.3 million in buses, \$1.1 million in stations, and \$12.7 million in shelter advertising. Muni’s total ridership is just over double that of TriMet’s, but it collects more than four times the advertising revenue that TriMet does. This discrepancy suggests that there may be avenues TriMet has not yet fully explored. (See Table 7.)

Table 7. TriMet vs. Muni

	Muni (San Francisco) ¹⁵	TriMet (Portland)
Ad Revenue	\$17 Million	\$3.2 Million ¹⁶
Employees	4,800	2,800 ¹⁷
Average Weekday Ridership	702,000	314,572 ¹⁸
# of Revenue Vehicles	1,057	810 ¹⁹

For example, there is a MAX station named Providence Park. Perhaps Providence could be convinced to pay for this advertising with a portion of the \$5.8 billion in profits it is reportedly not using to provide medical care.²⁰

¹⁵ <https://www.sfmta.com/sites/default/files/SFMTA%20Adopted%20Operating%20Budget%20Book%20FY2015%20AND%20FY2016.Full%20details.pdf> Accessed August 27, 2016.

¹⁶ <http://trimet.org/budget/pdf/2017-adopted-budget.pdf> pg. Financial Summary-1. Accessed August 20, 2016.

¹⁷ <http://trimet.org/careers/> Accessed August 20, 2016.

¹⁸ <https://trimet.org/about/pdf/2016-07.pdf> Accessed August 23, 2016.

¹⁹ <https://trimet.org/ataglance/TriMet-At-a-Glance-2016.pdf> Accessed August 20, 2016.

²⁰ Jaquiss, Nigel. “The Five Things Hospitals Don’t Want You to Know About Obamacare.” *Willamette Week*. April 13, 2016.

Premium fares for premium service

TriMet's Westside Express Service (WES) provides weekday rush-hour commuter rail service in a 14-mile corridor between Beaverton and Wilsonville, running roughly parallel to Highway 217. WES service effectively duplicates TriMet bus service on lines 76-Beaverton/Tualatin and 96-Tualatin/I-5, but with amenities like faster service, more bicycle racks, and free Wi-Fi. Coupled with the fact that WES only operates during weekday rush hours, **commuters and other choice riders²¹ are the primary beneficiaries of WES service**, with few advantages shared with elderly, disabled, and otherwise transit-dependent residents living along the WES corridor.

Most commuter rail systems in the United States calculate fares based upon distance traveled, add a premium surcharge above the standard intra-city fare, or both. Contrary to this common practice, **a ride on WES costs exactly the same as a ride on a bus or light rail.**

According to TriMet's own performance and efficiency data, **WES costs \$16.11 per boarding passenger to operate**, compared with \$3.18 for bus service and \$2.51 for MAX Light Rail.²² Additionally, TriMet reports for May 2016 indicate an average of 8,775 weekly boardings on WES, a figure dwarfed by 1,176,200 weekly bus boardings and 755,600 weekly boardings on MAX. As a result, fares paid by bus and MAX riders are tantamount to a huge subsidy for a tiny niche of WES riders. This is evidence that lower-income bus riders carry a disproportionate amount of the financial burden of riding transit in the TriMet service area.

²¹ Choice riders are defined as individuals who have the ability and means to drive but choose public transit in stead.

²² <https://trimet.org/about/dashboard/index.htm#efficiency> Accessed August 20, 2016.

Charge for parking at TriMet Park & Ride facilities

Numerous public transit systems across the country have adopted a service model that encourages commuters from outlying suburbs to drive personal vehicles from their homes to a regional transit center, leaving their vehicles in a parking lot, then boarding public transit to their jobs in the city center. The Massachusetts Bay Transit Authority (MBTA) collects \$17.3 million per year in parking revenue, using a parking rate that varies based upon duration of stay, number of stalls available, and proximity to the city center. **Many public transit agencies serving large cities charge for the use of commuter parking lots under their control**, including SEPTA (Philadelphia),²³ LACMTA (Los Angeles),²⁴ and RTD (Denver).²⁵

We know that Park & Ride users are likely able to afford a modest daily fee. According to a document put together by the TriMet budget task force in 2012, a Fall 2011 survey of Green Line lot users found 48% had household incomes of \$70,000 or more. Only a third had household incomes under \$50,000. At WES lots, the numbers were even more heavily weighted toward people with higher incomes: 58% of Park & Ride users made \$70,000 or more, and only 23% made less than \$50,000.

One sticking point to introducing paid parking is the cost of enforcement. We think the introduction of electronic fare cards could be a game-changer in that regard. If the Park & Ride facility were set up with a boom barrier lifted by tapping an e-fare card against a reader, neither enforcement patrols nor vending machines would be needed.

It seems unlikely that charging a reasonable fee would cause the Park & Ride lots to lose occupancy. According to that 2012 budget task force document, the primary destinations for Park & Ride users are downtown Portland and the Lloyd District. At \$5 for a day of riding, plus \$1-2 for parking, it would still be cheaper to use TriMet than to drive and park downtown. Worsening traffic congestion in the metro region also provides incentive to use the Park & Ride.

²³ <http://www.septa.org/parking/tips.html>

²⁴ https://www.metro.net/riding/paid_parking/locations/

²⁵ <http://www.rtd-denver.com/HowToPark.shtml>

Appendix A

Bus Riders Unite's History Of Success

Testimony Before, Not After, Board Votes

TriMet Board meetings offer the community a chance to testify on the actions of the Board. However, after years of testifying, BRU members noticed something strange: the public was only allowed to testify at the end of meetings, after Board votes had taken place. Thanks to BRU advocacy, TriMet modified this nonsensical arrangement in 2011 and allowed public comment before the Board votes on motions in a given meeting.

Bus Stop Improvements

Early in Bus Riders Unite's organizing history, members came together to identify improvements to the safety of the most dangerous bus stops across the city. Through our advocacy, five East Portland bus stops that BRU members prioritized received safety upgrades in 2013.

Transit Equity Advisory Committee (TEAC)

In 2013, after years of sustained advocacy around BRU priorities, TriMet recognized the need to establish the Transit Equity Advisory Committee. The committee, made up of members from the community, includes a seat elected by Bus Riders Unite members. TEAC is charged with evaluating the Environmental Justice and Civil Rights implications of TriMet policy.

Campaign for a Fair Transfer

BRU developed and pushed the Campaign for a Fair Transfer for four years, seeking more travel time per bus fare. During the first year of the campaign, more than thirty organizations signed on, and more than 6,000 people signed a petition in support. In 2013, under escalating pressure from BRU and our allies,

TriMet's Board of Directors asked staff to study the extended transfer time. BRU members and OPAL staff sat down with TriMet representatives, explaining our analysis and sharing our stories. In 2014, a compromise went into effect: the two-hour transfer would increase to 2.5 hours. BRU celebrated a momentous win after four years of campaigning.

Civil Rights Complaint to Federal Transit Administration (FTA)

In 2014, OPAL successfully challenged TriMet's proposed changes in transfer times and service availability through a complaint to the Federal Transit Administration, filed in conjunction with local partners at the Center for Intercultural Organizing (now Unite Oregon). The complaint led to a change in policy nationally: TriMet is a time-based transit system, where a rider pays for a set number of hours with their fare. Thanks to our complaint to the FTA, a time-based transit system cannot reduce transfer times or hours without first conducting a Title VI Civil Rights assessment of the disproportionate impact on low-income people and people of color.

YouthPass

In 2000, Portland Public Schools dropped yellow bus service for high school students in favor of the YouthPass program, which allowed students on free and reduced lunch programs to ride TriMet for free during the school year by showing their student ID. YouthPass is successful at getting students to school and back, but also at enabling youth to participate in extracurriculars, travel on weekends, and form transit habits early. School districts in East Portland don't have access to this opportunity—and serve more students of color and those with low income. For the past three years, youth involved in OPAL and the Multnomah Youth Commission have been successfully fighting to preserve YouthPass, and to expand YouthPass to East Portland. In November 2015, OPAL's Youth Environmental Justice Alliance launched its official campaign to win YouthPass for the Parkrose and David Douglas school districts, releasing a detailed report on the issue in April 2016.²⁶

²⁶ <http://www.opalpdx.org/wp-content/uploads/2016/04/YouthTransitReport-online.pdf>

Appendix B

Methodology Used For Program Cost Estimate

Our estimates of fare changes relied wholly on the 2012 onboard fare survey carried out by TriMet. The survey was carried out to create a system wide representative sample of fare payment type and rider type, among other important data. We took the survey data at face value and did not inquire further into its representativeness, accuracy or other issues related to the questions we are researching. For example, we assume at a systemwide level that the fare payment type breakdowns are accurate within reason. We also followed TriMet in using a weighting value (“Weight2” in the dataset) that re-weights responses based on representativeness and adjusting for single trip or round-trip use on the day of the survey.²⁷ The following sections explain how the calculations were performed.

Step One Data Cleaning

We could not use TriMet’s full dataset, because some respondents were irrelevant to our analysis (those riding non-TriMet services) and others had left key questions unanswered. Our process of cleaning the data to answer our core research questions goes as follows. Our first step was to remove Portland Streetcar and C-TRAN riders. Our second step was to remove responses without weights. Third, since our analysis relied on determining the poverty status of each rider, we had to cull responses which did not include household size or income (both missing and “wish not to say”).

Finally, we had to remove responses without use frequency, since we assumed that riders’ frequency of use would influence how they responded to a low-income fare. Table A1 below shows how many responses remain after each step.

²⁷ We also ran the same numbers without TriMet’s weighting and found very little change.

Table A1. Dataset changes and resulting sizes

Dataset	Size (N)
Full dataset	16,987
Removed streetcar and C-TRAN	15,491
Removed records with missing weights	15,111
Removed records with missing income, household size and use frequency	10,731

To ensure that the records we removed did not differ too greatly from the general ridership, we checked the distribution of certain attributes between the original full dataset and the smaller cleaned dataset. Tables A2, A3, and A4 show that the distributions of income, fare type and fare cost remained pretty similar between the two datasets. In most cases the shares of particular types rise in the clean dataset because the number of categories is reduced – but we can assume if those missing data were added, these cleaned proportions would hold.

Table A2. Comparison of fare type between full and cleaned datasets

Fare	Full	Cleaned
Cash	26.7%	26.0%
Ticket (book)	3.5%	4.2%
Day Pass	15.6%	18.5%
7-Day	1.6%	1.9%
14-Day	1.6%	1.8%
Monthly / 30-Day	23.9%	26.7%
Annual Pass	3.4%	2.8%
Other	18.2%	18.1%
Streetcar College / Employer Program	1.0%	NA
Missing	4.4%	NA
Total	16,982	10,730

Table A3. Comparison of fare cost between full and cleaned datasets

Fare Cost	Full	Cleared
Adult	54.5%	64.6%
Youth	5.5%	2.7%
Honored	13.2%	14.5%
LIFT	0.1%	0.1%
Employer Sticker	7.0%	9.1%
College Sticker	5.3%	5.6%
PPS Student Sticker	1.8%	0.7%
HC Downtown Pass	2.2%	2.3%
Other	0.4%	0.5%
C-TRAN	1.0%	NA
Streetcar Fare	4.6%	NA
Missing	4.4%	NA
TOTAL	16,982	10,730

Table A4. Comparison of income between full and cleaned data sets

Income	Full	Cleaned
Under \$10,000	19.3%	22.8%
\$10K-19.9K	11.5%	14.8%
\$20K-29.9K	13.1%	17.2%
\$30K-39.9K	7.1%	9.3%
\$40K-49.9K	6.2%	8.1%
\$50k-59.9K	4.4%	5.7%
\$60K-69.9K	3.9%	5.1%
\$70,000 or more	13.8%	17.0%
Did not say	12.2%	NA
Missing	8.4%	NA
Total	16,982	10,730

Step Two **Determining Poverty Status**

To determine poverty status, we used the income and household size given by each rider and compared it with the federal Health and Human Services guidelines for poverty income based on

household size.²⁸ These guidelines are shown earlier in Table 1. For the potential poverty thresholds for the analysis, we used 150% of this federal poverty line, 185%, and 200%. For riders' income, we used the midpoint of the income classes used on the survey, \$7,500 for the "under \$10,000" category, and \$90,000 for the "\$70,000 or more" category.

Step Three Counting Riders In Each Category

Once the data was cleaned it was straightforward to sum the riderships in each category in order to estimate the number of riders potentially switching from adult fares to reduced fares. As mentioned earlier, weight category 2 was used as the summing value to create the shares of ridership in each category. Table A5 shows the total weights for these different categories and table A6 shows the respective total annual ridership in each category, converting the weights to ridership using the total weights of 6486.35 to represent the 103.3 million boardings in 2012.

Table A5. Total weights for each rider category

	All	HC	Non-HC	Non-HC			
				<150% FPL	<185% FPL	<200% FPL	>200% FPL
All	6486.35	892.1	5594.16	2398.71	2845.447	2924.42	2669.74
Pass Users	1779.28	537.83	1241.45	462.97	566.27	586.28	655.17
Non-Pass <10 rides/month	988.57	100.73	877.83	302.2	358.16	373.37	514.46
Non-Pass 10-19 rides/month	697.66	76.022	621.64	296.11	339.46	345.36	276.28
Non-Pass 20-29 rides/month	801.52	57.57	743.96	359.53	410.52	419.19	324.77
Non-Pass >30 rides/month	2219.29	120.02	2099.28	977.9	1171.03	1200.21	899.06

²⁸ <https://aspe.hhs.gov/poverty-guidelines>

Table A6. Estimates total annual riderships each rider category (all units in millions)

	All	HC	Non-HC	Non-HC			
				<150% FPL	<185% FPL	<200% FPL	>200% FPL
All	103.3	14.2	89.1	38.2	45.3	46.6	42.5
Pass Users	28.3	8.6	19.8	7.4	9.0	9.3	10.0
Non-Pass <10 rides/month	15.7	1.6	14.1	4.8	5.7	5.9	8.2
Non-Pass 10-19 rides/month	11.1	1.2	9.9	4.7	5.4	5.5	4.4
Non-Pass 20-29 rides/month	12.8	0.9	11.8	5.7	6.5	6.7	5.2
Non-Pass >30 rides/month	35.3	1.9	33.4	15.6	18.6	19.1	14.3

Step Four Estimating Revenue Generated Per Rider Type and Lost Per Adoption

It was challenging to estimate the revenues earned per boarding for the different payment and cost types. Obviously the costs per boarding are related to the ticket and pass prices, but the use data needed to get the per boarding average price was not easily available. According to the 2012 survey data, adult monthly pass users make 44.8 trips per month, so we have a good idea of the average trip cost of about 2.2 dollars per boarding. Single ride and day pass users however make about 25 trips per month, but it is unclear how many passes they purchase to make those trips (i.e. how many days are they riding?). We then observed that overall, 103.3 million boardings generated about \$102 million in fare revenues in 2012. This \$.98 per boarding was hard to reconcile with the roughly \$2.2 per-boarding revenues generated for the typical adult day pass or monthly pass user. So, in our cost estimating we used a per-boarding revenue of \$2 per boarding for adult single fare, day pass and monthly pass users - reduced somewhat from the 2.2 dollars per boarding to take into account the system overall average of 0.98 dollars per boarding. Adoption of the reduced-fare pass would reduce that to \$1 per boarding on average for the \$50 pass and even less for the \$28 pass.

Table A7. Annual ridership numbers by fare type and cost (extrapolating from survey results)

	Cash	Ticket Book	Day Pass	7-Day	14-Day	Month/30-Day	Annual Pass	Other	Streetcar College/Employer	Missing	GRAND TOTAL
Adult	17,752,539	2,726,380	13,792,480	1,452,415	1,284,668	15,326,304	1,942,063	-	-	-	54,276,849
Youth	3,371,748	197,688	493,346	38,288	51,277	2,568,681	310,330	-	-	6	7,031,363
Honored	3,168,053	522,026	940,048	116,216	244,039	7,609,872	465,108	-	-	2	3,065,364
LIFT	22,900	11,761	-	-	-	57,414	39,075	-	-	-	131,151
Employer Sticker	-	-	-	-	-	-	-	7,933,755	-	-	7,933,755
College Sticker	-	-	-	-	-	-	-	5,707,477	-	-	5,707,477
PPS Student Sticker	-	-	-	-	-	-	-	2,934,304	-	-	2,934,304
HC Downtown Pass	-	-	-	-	-	-	-	2,360,685	-	-	2,360,685
Other	-	-	-	-	-	-	-	508,721	-	-	508,721
Ctran	-	-	-	-	-	-	-	768,379	-	-	768,379
Streetcar Fare	2,782,366	-	-	-	-	-	2,051,064	825,509	1,847,446	-	7,506,384
Missing	9,950	-	-	-	-	-	-	-	-	5,618	15,568
GRAND TOTAL	27,107,556	3,457,856	15,225,873	1,606,919	1,579,984	25,562,271	4,807,640	21,038,829	1,847,446	5,626	102,240,000

We make a necessary assumption that electronic fares will not dramatically change the cost per boarding or the share of ridership using each type of pass. We know that the electronic fare cards (which we recommend as the vehicle for the reduced fare) will not have prepaid monthly and day passes; instead, riders will pay as they go and then ride for free once they hit the total cost of a pass. We do not attempt to predict how the introduction of a \$28 or \$50 fare cap would play out differently from a prepaid \$28 or \$50 pass, and we have not attempted it here.

Step Five Estimating The Adoption Rates For Each Rider Type

There are two categories of riders assumed to benefit by switching to the reduced pass: riders currently using a normal adult monthly pass, and frequent riders not using monthly passes. The adoption rates for each of these is unknown: we are not sure how many would switch given the added logistics of becoming approved for the reduced-fare passes and the fact that we are unsure how the passes will be distributed. Thus we created a low and a high estimate for the adoption percentages.

Table A8 shows how we calculated different adoption rates depending on how often a rider uses TriMet. In the first row, we estimate that 10% to 20% of eligible riders who currently hold monthly passes will switch to the reduced fare. In the second row, we assume that none of the riders who use TriMet less than 10 times a month will find it worth their while to apply for the reduced fare. In the third row, we estimate that 2.5% to 5% of eligible riders who do not have monthly passes and ride 10 to 19 times a month would switch to the reduced fare. And so on.

Table A8. Adoption percentages by rider type and rider frequency

	Low adoption rate (%)	High adoption rate (%)
Pass users	10	20
Non-Pass <10 rides/month	0	0
Non-Pass 10-19 rides/month	2.5	5
Non-Pass 20-29 rides/month	5	10
Non-Pass >30 rides/month	10	20

Step Six **Estimating New Riders And Revenue Due To Lower pass costs**

The last step involves estimating the new ridership and resulting revenues due to lowering the pass costs. One of the key considerations in advancing a low-income pass proposal is the impact of such a discount on ridership growth, which can counter the revenue lost due from lowering pass costs. A fare reduction program is an excellent opportunity to bring new riders into the system, and as TriMet considers its options for creating a new reduced fare for low-income people, it will be critical to quantify that new ridership. The Oregon Department of Transportation’s Oregon Mosaic project, part of the agency’s planning division, has already studied this issue in depth,²⁹ drawing on the Transit Cooperative Research Program’s (TCRP) research on the elasticity of fare changes.³⁰

²⁸ <http://www.oregonmosaic.org/files/31.pdf>

²⁹ http://onlinepubs.trb.org/onlinepubs/tcrp/tcrp_rpt_95c12.pdf

After reviewing some key data found on ridership elasticity and being more conservative, we resolved to assume that ridership would increase by about 10% (among those who qualify for the low-income pass and for whom it makes sense). For a 50% decrease in fares (for the \$50 pass), this translates to an elasticity of -0.2 - at the low end of the elasticity estimates in the literature.

According to ODOT's analysis of TCRP's research, the impact of a 1% reduction in fare is a net 0.4% increase in bus ridership and 0.2% increase in rail ridership. Taking that figure as our baseline, we might estimate that BRU's proposal to offer a 50% fare discount to low-income people would lead to a roughly 20% increase in bus riders and 10% in rail passengers over current ridership in the eligible population. In the end, for simplicity, we assumed a conservative 10% increase in ridership (among riders who qualify for the low-income pass) after the 50% decrease in pass costs (for the \$50 pass) and a 15% increase in ridership for the \$28 pass.

A key caveat is that both ODOT and TCRP are assuming an across-the-board fare decrease, rather than one targeted toward a specific group of riders. And both organizations are careful to note that this impact is more modest in urban areas with already-established transit agencies; in short, it's likely that some folks who might find TriMet's fare pricing outside of their means are stretching their budgets or otherwise finding other ways to afford the cost of boarding, though these individuals will clearly benefit from a fare discount. So, it's perhaps fairer to say that a 20%/10% increase in bus/rail ridership represents the upper bound of what we could expect from a fare discount program.

We then multiplied this new ridership rate by the existing total of ridership who would start to use the pass - combining day pass users who switch to the reduced fare along with existing adult pass users who switch. We considered having different adoption rates for the different groups who experience different transit cost changes, but in the end, the number of riders is relatively small (compared to the total existing ridership) and so additional calculations wouldn't add very much accuracy. These new riders are then assumed to add revenue at either \$1 per ride for the \$50 pass, or 48 cents per ride for the \$28 pass.



[opalpdx@twitter](#) / [opalpdx.org](#)



R O D O

design by | rodolfogarciaflores@outlook.com