



Title VI Fare Equity Analysis
Student Pass Program

Draft

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CONTENTS

1. Purpose of Analysis.....	1
2. Project Description	1
3. Title VI Requirements.....	1
4. Data and Methodology	2-3
5. Baseline Data.....	3-5
6. Demographics of Fare Change	6
7. Change in Sales and Ridership Forecast.....	6
8. Results and Impacts.....	7
9. Systemwide Average Fare Impacts.....	7-8
10. Comparison of Impacts	8
11. Findings.....	9

FIGURES

1. Baseline Minority Ridership Statistics – FY 2018	3
2. Baseline Low-Income Ridership Statistics – FY 2018	4
3. Ridership and Fare Revenue by Fare Type – FY 2018	5
4. Minority and Low-Income Use.....	6
5. Student Pass Program Ridership Forecast	7
6. Systemwide Average Fare by Minority Status.....	7
7. Systemwide Average Fare by Low-Income Status.....	8
8. Change in Average Fare – Minority and Low-Income Splits.....	8
9. Determination of Potential Disparate Impacts and/or Disproportionate Burdens.....	9

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1. Purpose of Analysis

Pursuant to SacRT's fare change policy and in accordance with Federal Title VI civil rights requirements, the purpose of this analysis is to identify and document any potential disparate impacts on minority populations or disproportionate burdens on low-income populations resulting from changes to SacRT's fare structure.

SacRT will accept comments on this draft analysis through July 6, 2019.

2. Project Description

On May 13, 2019, SacRT staff presented a discussion to the Board of Directors regarding a new initiative to build Student ridership. The initiative is intended to be revenue neutral for SacRT and funded primarily by the City of Sacramento, allowing all grade TK-12 students who either go to school within the City limits of Sacramento, or reside within the City limits but attend a school outside the City's boundaries to ride SacRT's services for free with a School ID and special sticker.

3. Title VI Requirements

SacRT is required to conduct a Title VI fare equity analysis prior to implementing any fare change, with some exceptions, including promotional free-ride days and promotional fare reductions lasting up to six months.¹ Once the funding is secured, Staff intends to seek approval from the SacRT Board for a funding agreement with the City under which SacRT would agree to create a new group pass type for students meeting the eligibility criteria, subject to Board approval of the Title VI analysis. The proposed change to the Student fares for TK-12 students residing or attending school in the City of Sacramento would be implemented in Fall 2019.

Prior to any fare changes being approved permanently, the Board of Directors must approve the findings of a final Title VI fare equity analysis. Prior to approving a final Title VI fare equity analysis, SacRT policy requires that a draft analysis of the proposed changes be made available for a 30-day public review period, that members of the public be invited to comment, and that staff and the Board of Directors take public comments into consideration. In accordance with these requirements, this draft report is being made available on SacRT's web site on June 6, 2019, and comments will be received for a 30-day period (through July 6, 2019). Staff intends to present a final version of the report, including the comments received, to the Board of Directors in July 2019.

¹ See FTA Circular 4702.1B, Chapter IV, Section 7 and RT Fare Change Policies (Resolution No. 15-11-0129).

4. Data and Methodology

On-Board Survey – In April 2013, an on-board passenger survey was conducted on SacRT buses and light rail trains. Passengers on randomly selected trips on all SacRT routes completed a self-administered questionnaire. In accordance with FTA guidance, when possible, equity analyses are based on demographic estimates of actual riders. These on-board survey responses therefore form the basis of the analysis below.

Fare Survey – On an annual basis, SacRT conducts a passenger fare survey. This survey provides ridership figures for each fare type, including multi-ride passes, and is used to compute an average fare per boarding for each fare type.

Special Surveys – In the case of new fare types, SacRT may use special surveys or research to estimate minority and/or low-income utilization rates.

Analysis - Using the demographic data from the 2013 on-board survey, SacRT can estimate the percentage that minority and low-income populations utilize each fare type. This data is combined with the average fare per boarding for each fare type from the annual fare survey. SacRT can then estimate overall average fare splits for minority versus non-minority and low-income versus non-low-income riders.

Findings - Potential disparate impacts to minority populations, and disproportionate burdens to low-income populations, from fare changes are determined by comparing the rate of change of the average fare for all minority riders to that for non-minority riders and the rate of change of the average fare for all low-income riders to that for non-low-income rides, respectively. SacRT's Title VI goal is for the percent increase in average fare for minority or low-income populations to be less than or equal to that for non-minority or non-low-income populations in the case of a net fare increase and equal or greater to that for non-minority or non-low-income populations in the case of a net fare decrease. A disparate impact or disproportionate burden may exist if there is a statistically significant deficiency from this goal. SacRT defines a deficiency as statistically significant if the rates of change differ by more than 20 percent.

Minority Definition - FTA defines a minority person as anyone who is American Indian or Alaska Native, Asian, Black or African American, Hispanic or Latino, or Native Hawaiian or other Pacific Islander.

Low-Income Definition - FTA defines a low-income person as a person whose household income is at or below the U.S. Department of Health and Human Services (HHS) poverty guidelines. The HHS definition varies by year and household size. For the purpose of this analysis, SacRT used HHS poverty guidelines from 2013.² Survey

² Although newer HHS statistics are available, the 2013 statistics were the newest statistics available at the time that the statistical analysis was performed on the 2013 on-board survey data. RT's baseline demographic statistical data is typically refreshed during the process of preparing the triennial Title VI update report, which was last updated in 2017.

participants were asked their household size and their household income from a list of ranges. For the purposes of this survey, the participant’s income is assumed to be the midpoint of the range selected.³

5. Baseline Data

Based on Fiscal Year 2018 budget, SacRT will average \$1.45 in fare revenue per passenger boarding. These figures include 184,194 boardings made by children under age five, and 272,391 boardings made by riders in other minor categories for which SacRT has no demographic data. Excluding these categories, and excluding the \$2.3 million deduction for transfer agreement reimbursements to other agencies, (and other adjustments), SacRT collected \$27,276,233 in fares, and 20,004,417 passenger boardings for an average fare of \$1.36 for riders with known demographic data. These figures are used as a baseline for the remainder of this analysis.

**Figure 1
Baseline Minority
Ridership Statistics – FY 2018**

	Fare Revenue		Boardings		Average Fare
	Amount	%	Amount	%	
Minority	\$20,049,580	67.7%	13,793,474	69.0%	\$1.45
Non-Minority	<u>\$9,554,720</u>	<u>32.3%</u>	<u>6,210,943</u>	<u>31.0%</u>	\$1.54
Subtotal	\$29,604,300	100.0%	20,004,417	100.0%	\$1.48
Non-Classified	<u>(\$2,328,067)</u>		<u>456,585</u>		
Total	\$27,276,233		20,004,417		\$1.36

Non-classified boardings are already excluded from the Minority splits

Minority riders make up an estimated 69 percent of SacRT ridership and pay an estimated 67.7 percent of fares. They pay an average of \$1.45 per boarding, compared to \$1.54 for non-minority riders.

³ For example, if a passenger selected a household income range of \$25,000 to \$35,000, that passenger’s income was assumed to be \$30,000 for the purposes of this analysis.

**Figure 2
 Baseline Low-Income
 Ridership Statistics – FY 2018**

	Fare Revenue		Boardings		Average Fare
	Amount	%	Amount	%	
Low-Income	\$14,026,852	47.4%	9,865,321	49.3%	\$1.42
Non-Low-Income	<u>\$15,577,448</u>	<u>52.6%</u>	<u>10,139,096</u>	<u>50.7%</u>	\$1.54
Subtotal	\$29,604,300	100.0%	20,004,417	100.0%	\$1.48
Non-Classified	<u>(\$2,328,067)</u>		<u>456,585</u>		
Total	\$27,276,233		20,004,417		\$1.36

Non-classified boardings are already excluded from the Low-income splits

Low-income riders make up an estimated 49.3 percent of SacRT fixed-route ridership and pay an estimated 47.4 percent of fares. They pay an average of \$1.42 per boarding compared to \$1.54 for non-low-income riders.

Baseline fare revenue, passenger boardings, and average fares for Fiscal Year 2018 are provided for each major fare type in Figure 3.

**Figure 3
Ridership and Fare Revenue
By Fare Type – FY 2018**

Fare Type	Face Value	Fare Revenue	Boardings	Average Fare
Single Cash - Bus	\$2.75	\$1,518,222	552,081	\$2.75
Single Ticket - Bus	\$2.75	\$525,094	190,943	\$2.75
Single Cash - Rail	\$2.75	\$1,150,006	886,802	\$1.30
Single Ticket - Rail	\$2.75	\$970,822	579,740	\$1.67
Disc Single Cash - Bus	\$1.35	\$590,553	437,447	\$1.35
Disc Single Tkt - Bus	\$1.35	\$39,083	28,950	\$1.35
Disc Single Cash - Rail	\$1.35	\$500,965	362,097	\$1.38
Disc Single Tkt - Rail	\$1.35	\$49,900	50,519	\$0.99
Daily Pass	\$7.00	\$4,352,702	3,484,916	\$1.25
Disc Daily Pass	\$3.50	\$2,292,374	1,347,126	\$1.70
Monthly Pass	\$110.00	\$6,075,025	2,659,595	\$2.28
Semi-Monthly Pass	\$60.00	\$167,340	66,822	\$2.50
Student Semi-Monthly	\$27.50	\$421,523	752,027	\$0.56
Senr/Disb Monthly/Semi	\$55.00	\$1,161,260	1,189,291	\$0.98
Los Rios		\$2,306,659	1,433,005	\$1.61
CSUS		\$822,386	770,931	\$1.07
DHA		\$2,035,200	1,002,671	\$2.03
Fare Evader		\$0	433,827	\$0.00
Child		\$0	184,194	\$0.00
Lifetime		\$0	88,385	\$0.00
Mobile Single	\$2.75	\$533,588	402,032	\$1.33
Mobile Daily	\$7.00	\$145,810	206,767	\$0.71
Mobile Disc Single	\$1.35	\$61,704	81,130	\$0.76
Mobile Disc Daily	\$3.50	\$39,106	29,995	\$1.30
Connect Card		\$3,844,978	2,967,318	\$1.30
Other Boardings		\$0	272,391	\$0.00
Subtotal		\$29,604,300	20,461,002	\$1.45
Child/Other Boardings		\$0	456,585	\$0.00
Transfer Agreements		(\$869,977)	n/a	n/a
Difference Between Model/Actuals		(\$1,458,090)	n/a	n/a
Total		\$27,276,233	20,004,417	\$1.36

6. Demographics of New Fare Type

SacRT surveys show that student demographics are typically considered low-income and high-minority. Users of the Student Monthly and Semi-Monthly Pass (K-12 students), would represent users of the new free fares under the Student Pass Program, which are 87.0% percent minority and 63.8% percent low-income, both well above systemwide averages. Based on this analysis, the Student Pass Program for City of Sacramento students and residents that attend school in the City boundaries is expected to have greater minority and low-income utilization than the overall SacRT system, which has 69.0 percent minority and 49.3 percent low-income utilization.

**Figure 4
Minority and Low-Income Use**

Fare Type	% Minority	% Low-Income	Minority/ Low-Income Fare Type
Student Pass Program	87.0%	63.8%	Yes
RT System (Baseline)	69.0%	49.3%	

7. Change in Sales and Ridership Forecast

A recent analysis of SacRT fare revenues found that students either attending a K-12 school, or living within the City of Sacramento boundaries contribute approximately \$1,000,000 annually. The City of Sacramento is prepared to support this initiative by offsetting the fare revenue loss resulting from the implementation of the Student Pass Program. The new group pass type will be distributed through the eligible schools in the form of a sticker to be placed directly onto the school ID card belonging to the student. The new group pass type will not be sold for purchase; therefore, there is no anticipated sales increase.

Staff is estimating that approximately 100,000 students will be eligible to participate in the Student Pass Program; however, participation is assumed to be less likely for younger students (K – 5th grade), so the number of eligible students in this analysis include grades 6th through 12th only. To determine the ridership impact, existing offerings that are in place for CSUS and Los Rios Community College District were considered, since they are similar in nature. At approximately 39.52 boardings per student, ridership is projected to increase to 2,128,185, which is approximately 1,103,106 more boardings per year than current student ridership.

8. Results and Impacts

This analysis includes impacts from the new Student Pass Program, in aggregate with the recent fare structure changes that were included in a previous equity analysis conducted in March 2019.

**Figure 5
Student Pass Program
Ridership Forecast**

Fare Type	Minority/ Low-Income Fare Type	Fare Revenue	Boardings	Average Fare
Student Pass Program	Yes	\$1,000,000	1,103,106	\$0.91
Baseline - SacRT System		\$27,276,233	20,004,417	\$1.36

The average fare for the Student Pass Program is expected to be \$0.91 per boarding, approximately 33 percent less than SacRT's baseline systemwide average of \$1.36.

9. Systemwide Average Fare Impacts

**Figure 6
Impact of Student Pass Program
On Systemwide Minority Average Fare**

	Fare Revenue		Boardings		Average Fare
	Amount	%	Amount	%	
Minority	\$19,593,175	68.5%	15,768,345	70.1%	\$1.24
Non-Minority	<u>\$8,995,491</u>	<u>31.5%</u>	<u>6,741,462</u>	<u>29.9%</u>	\$1.33
		100.0			
Subtotal	\$28,588,666	%	22,509,807	100.0%	\$1.27
Non-Classified	<u>(\$2,906,544)</u>		<u>456,585</u>		
Total	\$25,682,122		22,509,807		\$1.14

Non-classified boardings are already excluded from the Minority splits

The new minority average fare is \$1.24, and is lower than the baseline minority average fare, which was \$1.45. Non-minority average fare also decreased, from \$1.54 to \$1.33.

Under the Student Pass Program change, minority riders would continue to pay less per boarding (\$1.24) than non-minority riders (\$1.33).

Figure 7
Impact of Student Pass Program
On Systemwide Low-Income Average Fare

	Fare Revenue		Boardings		Average Fare
	Amount	%	Amount	%	
Low-Income	\$13,854,614	48.5%	11,295,467	50.2%	\$1.23
Non-Low-Income	<u>\$14,734,052</u>	<u>51.5%</u>	<u>11,214,340</u>	<u>49.8%</u>	\$1.31
		100.0			
Subtotal	\$28,588,666	%	22,509,807	100.0%	\$1.27
Non-Classified	<u>(\$2,906,544)</u>		<u>456,585</u>		
Total	\$25,682,122		22,509,807		\$1.14

Non-classified boardings are already excluded from the LI splits

The low-income average fare is \$1.23, and is lower than the baseline low-income average fare, which was \$1.42. Non-low-income average fare also decreased, from \$1.54 to \$1.31. Under the Student Pass Program change, low-income riders would continue to pay less per boarding (\$1.23) than non-low-income riders (\$1.31).

10. Comparison of Impacts

Compared to baseline expectations, minority, non-minority, low-income, and non-low-income riders would all see a reduction in average fare.

Figure 8
Change in Average Fare
Minority and Low-Income Splits

Rider Type	Existing	Proposed	Change	% Change
All	\$1.48	\$1.27	-\$0.21	-14.18%
Minority	\$1.45	\$1.24	-\$0.21	-14.52%
Non-Minority	\$1.54	\$1.33	-\$0.20	-13.26%
Low-Income	\$1.42	\$1.23	-\$0.20	-13.73%
Non-Low-Income	\$1.54	\$1.31	-\$0.22	-14.48%

11. Findings

Potential disparate impacts to minority populations are determined by comparing the *rate of change* of the average fare for all minority riders to that for non-minority riders.

An adverse difference exceeding 20 percent is considered significant. The same analysis is conducted for low-income populations to determine potential disproportionate burdens.

Figure 9 Determination of Potential Disparate Impacts and/or Disproportionate Burdens

Figure 12 - Disparate Impacts/Disproportionate Burdens

a. Percent decrease in non-minority avg fare	-13.26%
b. Threshold of statistical significance (80% * a)	-10.61%
c. Percent decrease in minority avg fare	-14.52%
d. Do fares decrease more for non-minority populations? (a < c)	No
e. Is there evidence of a potential disparate impact (c > b)	No
f. Percent decrease in non-low-income avg fare	-14.48%
g. Threshold of statistical significance (80% * f)	-11.59%
h. Percent decrease in low-income avg fare	-13.73%
i. Do fares decrease more for non-low-income populations? (f < h)	Yes
j. Is there evidence of a potential disproportionate burden? (h > g)	No

Based on these results, this analysis finds that the fare changes do not cause any disparate impacts on minority populations, nor do they cause any disproportionate burdens on low-income populations.