

REGIONAL TRANSIT ISSUE PAPER

Agenda Item No.	Board Meeting Date	Open/Closed Session	Information/Action Item	Issue Date
11	01/25/16	Open	Information	01/13/16

Subject: 2015 Fare Survey

ISSUE

For informational purposes only.

RECOMMENDED ACTION

None.

FISCAL IMPACT

None.

DISCUSSION

Attached are the results of RT's Fiscal Year 2015 passenger fare survey. The purpose of the annual fare survey is to quantify ridership by fare type on the RT system. Only about 5 percent of passenger boardings on RT's system are made by persons using a single-use fare. For the remaining 95 percent of passenger boardings, the annual fare survey is the only complete source of information explaining how many rides are provided per ticket or pass sold. Fare survey data is used to support fare structure and policy discussions as well as special pass agreements such as with the Los Rios Community College District (LRCCD) and Sacramento State University (CSUS).

The fare survey is conducted every spring on the RT system by RT route checkers who inspect the fare of bus passengers as they board and who work with transit officers to inspect passenger fares on the light rail system. Approximately 16,000 passenger fares were inspected as part of the FY 2015 survey. Data from bus fareboxes, light rail fare vending machines, and sales outlets are used to cross-check the fare survey estimates.

The table on Page 2 provides a summary of the FY 2015 fare survey results and is discussed in more detail below. FY 2015 fare revenue and ridership both decreased between 2 and 3 percent in FY 2015 compared to FY 2014. RT's overall average fare remained essentially flat at \$1.10 per passenger boarding, which is consistent with prior years as well, going back to RT's last fare increase in 2009. Among specific fare types, the average fare ranges from a little over \$2.50 to less than \$0.25 as a result of both discounts as well as the ability to make multiple rides on a single pass. For details, please see Attachment 1, which provides additional statistics and trend data.

Approved:

Presented:

Final 01/20/16

General Manager/CEO

Service Planner

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Fare Survey Results Fiscal Year 2015

Media Type	Face Value	Fare Revenue		Boardings		Average Fare	
		FY 2015	FY 2014	FY 2015	FY 2014	FY 2015	FY 2014
a Single Cash - Bus	\$2.50	\$2,098,786	\$2,189,051	839,515	875,620	\$2.50	\$2.50
b Single Ticket - Bus	\$2.50	\$226,824	\$584,401	90,730	233,760	\$2.50	\$2.50
c Single Cash - Rail	\$2.50	\$1,263,623	\$1,319,305	897,475	995,957	\$1.41	\$1.32
d Single Ticket - Rail	\$2.50	\$1,150,858	\$1,211,225	769,800	706,354	\$1.50	\$1.71
e Disc Single Cash - Bus	\$1.25	\$686,705	\$633,673	549,364	506,939	\$1.25	\$1.25
f Disc Single Tkt - Bus	\$1.25	\$43,140	\$106,566	34,512	85,253	\$1.25	\$1.25
g Disc Single Cash - Rail	\$1.25	\$362,985	\$412,578	227,181	359,489	\$1.60	\$1.15
h Disc Single Tkt - Rail	\$1.25	\$43,043	\$45,959	202,268	211,781	\$0.21	\$0.22
i Daily Pass	\$6.00	\$4,401,275	\$4,175,576	3,595,011	3,840,988	\$1.22	\$1.09
j Disc Daily Pass	\$3.00	\$2,192,910	\$2,073,429	2,301,509	2,108,262	\$0.95	\$0.98
k Monthly Pass	\$100.00	\$9,878,950	\$10,495,500	3,914,263	4,279,972	\$2.52	\$2.45
l Semi-Monthly Pass	\$50.00	\$371,800	\$378,850	274,734	578,195	\$1.35	\$0.66
m Student Semi-Monthly	\$25.00	\$773,513	\$860,888	747,010	874,506	\$1.04	\$0.98
n Senr/Disb Monthly/Semi	\$50.00	\$2,037,130	\$2,083,750	2,874,208	2,193,895	\$0.71	\$0.95
o Los Rios		\$1,011,106	\$1,028,073	3,623,145	4,343,659	\$0.28	\$0.24
p CSUS		\$750,602	\$688,327	892,614	599,808	\$0.84	\$1.15
q DHA		\$1,936,200	\$1,938,225	1,374,907	883,977	\$1.41	\$2.19
r Fare Evader		\$0	\$0	1,287,913	1,522,877	\$0.00	\$0.00
s Child		\$0	\$0	665,671	551,267	\$0.00	\$0.00
t Lifetime		\$0	\$0	254,807	226,069	\$0.00	\$0.00
u Other Boardings		\$0	\$0	342,365	389,517		
v Transfer Agmts (Net)		-\$1,188,828	-\$1,233,039				
w Difference, Actual vs. Model		\$355,481	\$164,585				
		\$28,396,102	\$29,156,920	25,759,001	26,368,144	\$1.10	\$1.11

Single Fares – On the bus system, the single fare is truly a single-ride fare, that is, one fare paid allows the rider to board only once. On light rail, this is not actually the case, because the “single” light rail ticket is actually implemented as a two hour light rail pass, which allows the rider to board an unlimited number of trains during that period.¹ This is why the average fare on a single light rail ticket is closer to \$1.50 than the stated price of \$2.50 (see Lines c and d). The most common ways for a rider to make multiple boardings on a single ticket are by transferring between lines, making an entire round trip in the two hour window, or by giving the ticket to another rider. Only about 20 percent of light rail single fare users actually board only once.

Discount Single Ticket (Rail) - The discount single light rail ticket (Line h) is notable for its low average fare of less than \$0.25 per boarding. This equates to over 200,000 rides being made on only 35,000 tickets. Staff has not been able to conclusively explain this unusual statistic; however, one possible explanation is that unstamped tickets, which are technically a form of fare evasion, may occasionally be miscounted as valid stamped tickets. Because total sales of the discount single light rail ticket are only 35,000 per year, it would be fairly easy for a small number of miscounts during the survey to skew the ridership figure significantly.

¹ It is possible to enforce a true single ride on light rail, but it is more difficult for riders and ticket inspectors to understand and adhere to such a system. Gated subway systems do not necessarily get around this issue; a single fare paid to enter a turnstile on the New York subway allows a rider to ride as many trains as he or she wants until exiting from another turnstile.

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Daily Passes – As shown in the table (see Line i), the average fare per boarding on a daily pass has recently ranged between \$1.09 and \$1.22. Although this may seem low, and although this does drive down RT’s average fare on a *per boarding* basis, it is important to keep in mind that tracking the average fare on a *per boarding* basis is ultimately a simplification. For a typical rider using a \$6.00 daily pass, the relevant figure is not that it costs \$1.22 *per boarding* but that it costs \$3.00 each way.

Because RT’s network is largely based around light rail trunk service, the RT system is extremely transfer-dependent, with only *half* of all light rail riders making a single-seat ride and only a *third* of bus-riders making a single-seat ride. This tends to encourage the use of passes over single fares (e.g., over 85 percent of RT riders use a multi-ride pass of one type or another). Contrary to being the “typical” rider, only about 5 percent of RT riders actually pay the \$2.50 single fare and make a single-seat ride with it. Likewise, it cannot fairly be said that the system is “designed” to capture \$2.50 per rider or that the fare collection program is deficient if it fails to do so.

Monthly Passes – As shown in the table (see Line k), the \$100 full price monthly pass brings in \$2.52 per boarding, making it one of the highest per-passenger fare types. At \$100, it takes 40 boardings per month for a rider to “pay off” a monthly pass. Because the average fare is approximately \$2.50 per boarding, the average rider is in fact barely breaking even. The full price monthly pass is the only monthly pass type where this is the case (i.e., student, senior, and disabled pass holders average more than 40 rides per month). This means that RT may experience different sensitivity to price changes on the full-price monthly pass than on the student, senior, and disabled passes.

Semi-Monthly Pass – The \$50.00 full-price semi-monthly pass (Line l) has a much lower average fare (\$1.35) than the regular \$100.00 monthly pass (\$2.52) despite no differences in eligibility. The lower average fare implies that semi-monthly pass users make much greater use of their passes than full monthly pass holders. This may be because full monthly passes are preferred by anyone who can afford them, meaning that semi-monthly pass holders are more likely to be lower-income, and therefore more likely to be transit-dependent and more likely to use transit frequently (e.g., as their primary means of transportation).

Senior/Disabled Passes – As shown in the table, (see Line n), the use of the senior/disabled sticker increased over 40 percent, while sales were almost unchanged. This change remains unexplained; however, counterfeiting is one possible explanation. Because photo identification is necessary for discounted fare types such as this, the only economical means of enforcing the fare is to issue permanent ID cards and sell new stickers each month; however, stickers are among the least secure forms of media from counterfeiting. This is a vulnerability that Connect Card should greatly mitigate, if not eliminate.

Los Rios – The Los Rios pass has for many years been one of RT’s lowest average fare categories (see Line o). Under RT’s new contract with LRCCD, annual revenues will approximately double, while ridership is expected to stay approximately the same. While this will still equate to a relatively low average fare, the revenue is guaranteed, and might not be less than what RT would have captured had the program had been eliminated entirely. Continuation of the

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program, even at a higher fee structure, was also deemed a valid goal for RT and LRCCD for equity and social service reasons.

CSUS – In FY 2015, ridership increased by almost 50 percent on the CSUS pass (see Line p), but based on the contract structure, which bills CSUS for the prior year’s ridership, revenue will not increase until next year. For this reason, the average fare appeared to be much lower for CSUS this year, but average fare and fare revenue should both increase in FY 2016.

DHA – The Department of Human Assistance (DHA) pass (see Line q) had a much lower average fare this year; however, fare revenue was almost unchanged. This is because DHA purchases a steady amount of passes from RT, but distribution to clients can vary from year to year. The data suggests that in FY 2015, DHA distributed more passes, resulting in much greater ridership on the same fare revenue.

Fare Evasion – Estimated fare evasion decreased from 1.5 million to 1.3 million boardings (see Line r). In percentage terms, light rail fare evasion decreased from 11.8 to 9.5 percent. For historical trends, see Attachment 1, Slide 6. Fare evasion, as reported by the fare survey, is typically much higher than the citation rate reported on monthly Key Performance Reports (KPR). The KPR statistic represents only the fraction of riders who are actually issued citations, which can vary depending on transit officer instructions. The fare survey, in contrast, uses a uniform sample of locations and times to attempt to capture the most accurate estimate of fare evasion possible.

Fare Survey Report

For Year Ended 6/30/15

Abridged Version

Sacramento Regional Transit District
Planning Department



Fare Survey Summary – FY 2015

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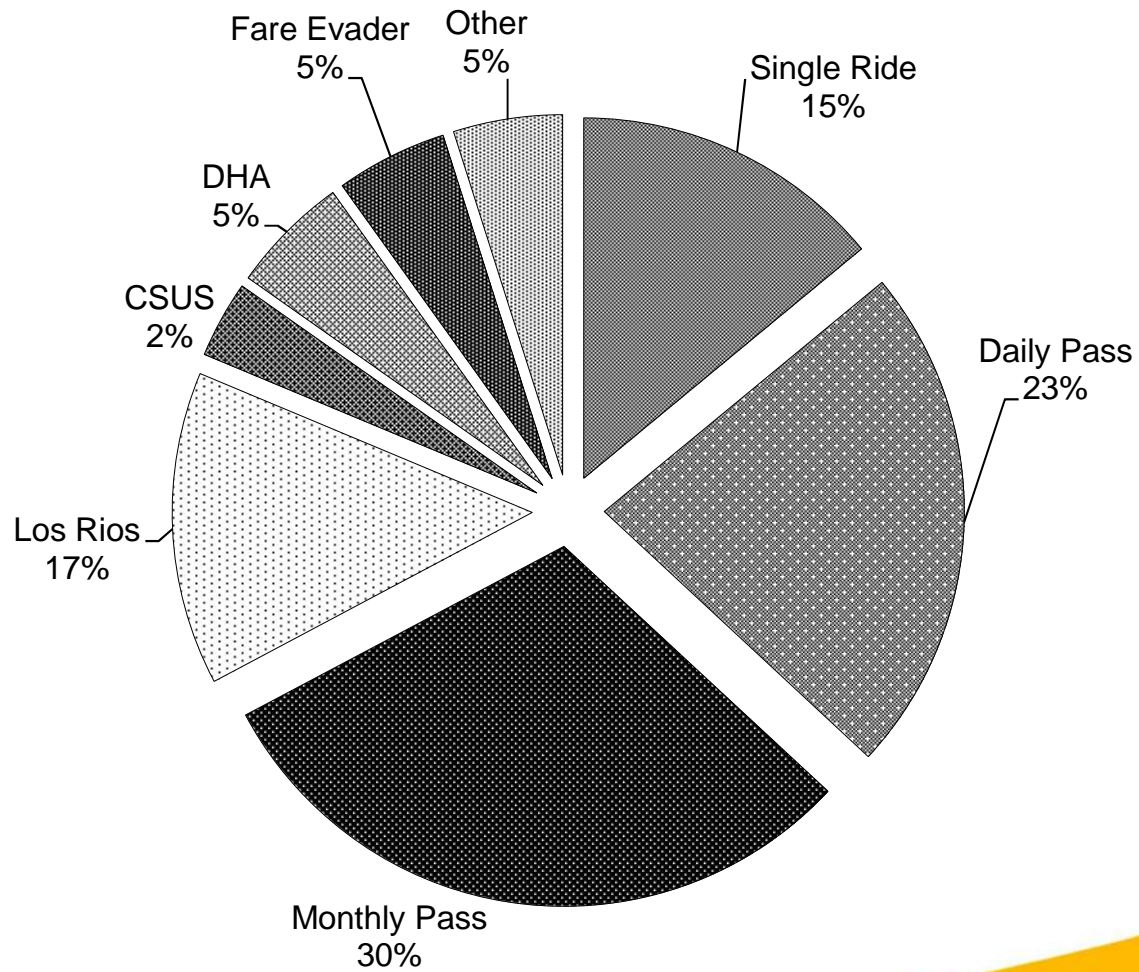
Fare Survey Details – FY 2015

	Basic	Student	Senior	Disabled	Other	Total	Percent
Single Cash	1,736,989	397,652	117,693	261,201		2,513,534	9.8%
Prepaid Single	860,529	113,700	26,490	96,590		1,097,309	4.3%
Bus Daily	2,378,019	422,738	355,232	1,051,248		4,207,237	16.3%
FVM Daily	712,599	96,070	21,429	217,288		1,047,386	4.1%
Prepaid Daily	504,393	52,778	8,198	76,528		641,897	2.5%
Monthly Pass	3,914,263	0	523,032	2,319,984		6,757,278	26.2%
Semi Monthly Pass	274,734	747,010	3,786	27,407		1,052,937	4.1%
Other					8,441,422	8,441,422	32.8%
Subtotal	10,381,526	1,829,949	1,055,859	4,050,246	8,441,422	25,759,001	
Percent	40.3%	7.1%	4.1%	15.7%	32.8%	100.0%	67.2%

Breakdown of Other	Total	Percent of Total
Fare Evasion	1,287,913	5.0%
Amtrak	50,968	0.2%
Child <5	665,671	2.6%
Lifetime >75	254,807	1.0%
County Emp	0	0.0%
RT Emp	131,143	0.5%
CSUS Stu	887,875	3.4%
CSUS Emp	4,739	0.0%
Los Rios	3,623,145	14.1%
DHA	1,374,907	5.3%
Yolo/etran	63,419	0.2%
Class Pass	0	0.0%
Complimentary	61,316	0.2%
Other/Unknown	35,518	0.1%

Orange text indicates fare types that undergo statistical adjustment for lighter seasonal use

Systemwide Ridership by Fare Type – FY 2015

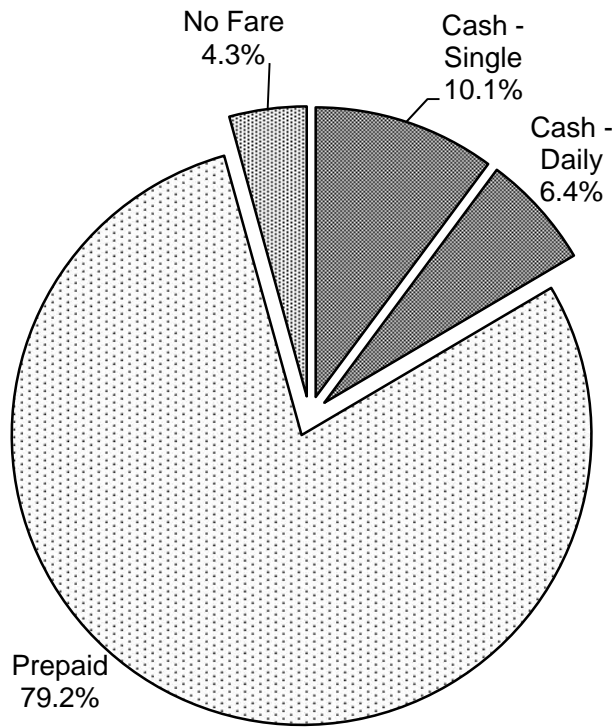


Notes:
 Fare evasion was 9.5 percent on light rail, equating to 5 percent of systemwide ridership

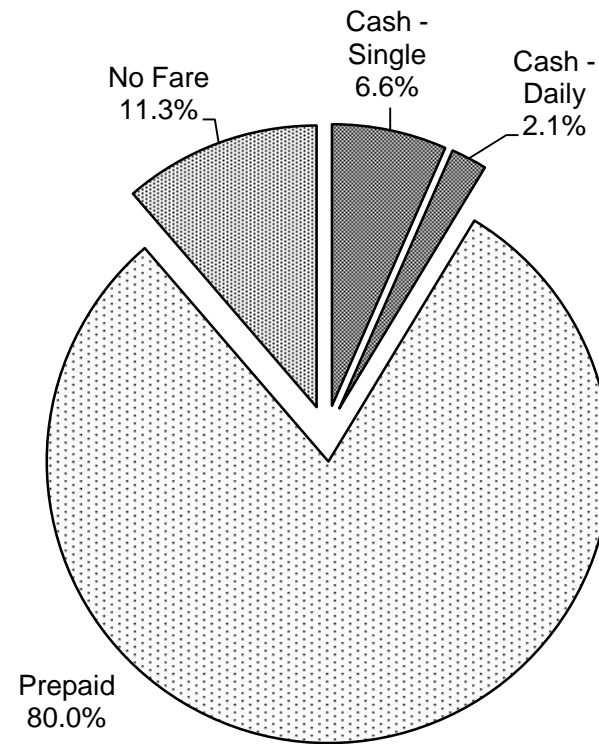
Use of Cash

Percent of Cash Boardings

Bus



LRT



Notes:

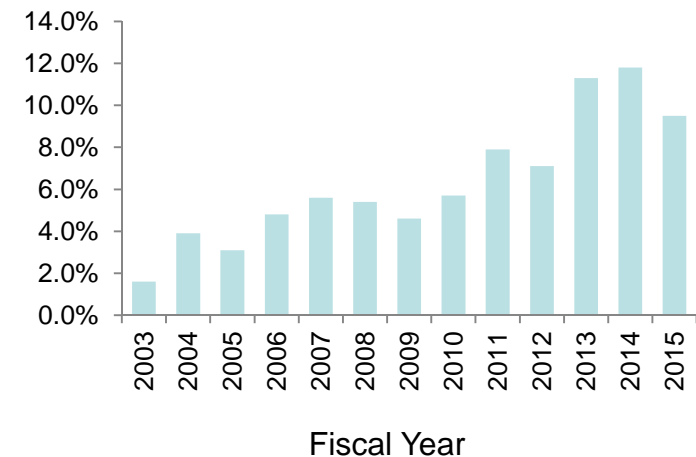
Bus cash boardings include boardings where cash is paid for a single ride or a daily pass.
 Light rail cash boardings reflect single ride and daily pass tickets purchased from FVMs.
 First boarding with a cash-paid daily pass is treated as a cash boarding. Subsequent boardings are treated as prepaid.
 All unlimited ride passes are treated as Prepaid (e.g., Lifetime Pass, RT Employee)
 No Fare includes fare evaders and children under age five

Light Rail Fare Evasion

- Fare evasion numbers are from fare survey and represent actual fare evasion rates
- Citation rate is the number of citations written per passengers inspected
- 14.33% of passengers were inspected FY 2015
- 17,399 passengers cited in FY 2015

Fiscal Year	Fare Evaders	Fare Evasion	Citation Rate
2003	137,618	1.6%	
2004	424,632	3.9%	
2005	377,548	3.1%	
2006	693,903	4.8%	
2007	821,594	5.6%	
2008	839,866	5.4%	
2009	792,619	4.6%	
2010	887,000	5.7%	0.89%
2011	994,775	7.9%	1.42%
2012	939,150	7.1%	1.91%
2013	1,531,052	11.3%	1.60%
2014	1,504,914	11.8%	1.67%
2015	1,148,923	9.5%	0.95%

Fare Evasion Rate



Fare Evasion from 2015 fare survey

Citation rates from Monthly Performance Reports on www.sacrt.com beginning in 2010