

Title VI Evaluation of Fare Proposals November 2013

Submitted by

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I. INTRODUCTION

In May 2011, the District Board of Directors adopted Resolution No. 11-017 approving a proposed fare structure, changes in fares, pass prices, fare media and the establishment of a ten-year schedule, with a review after five years, of planned increases in fare and pass prices. In April 2013, the Board adopted Resolution 13-022 deferring the implementation of a fare increase which had been scheduled for July 1, 2013 under the 2011 resolution in order to allow staff to conduct further analyses and propose revisions to the fare structure. In September 2013, the Board approved Staff reports 13-240 and 240A, setting a public hearing to consider a proposed revision of the fare structure to introduce a day pass and eliminate transfers, to create Clipper discounts on local cash fares, to reduce the price of 31 day adult local pass, and to increase the price of the youth/senior disabled pass. If approved, the proposals would take effect as early as July 1, 2014.

The Board referred the fare policy and various elements of it for public input, with a public hearing to receive comments on the proposed fare structure, a schedule of fare increases, and other fare changes on October 23, 2013. Part of the decision making process includes a Title VI analysis to assess how each proposal will affect different rider populations, and to determine if any of the fare proposals results in disproportionately high and adverse effects on minority populations and low-income populations within the District.

II. TITLE VI BACKGROUND

Title VI of the Civil Rights Act of 1964, Section 601 states:

“No persons in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.”

It is AC Transit’s responsibility to ensure that all transit service, and access to its facilities, is equitably distributed and provided without regard to race, color, national origin, or other bases as defined by applicable law. It is also the goal of AC Transit to ensure equal opportunities to all persons without regard to race, color, or national origin to participate in all local and regional transit planning and decision-making processes under the District’s control.

Title VI along with Executive Order 12898 requires agencies to develop and implement an integrated approach to achieving Environmental Justice. This approach includes the collection, analysis and dissemination of understandable and useable information on the adverse environmental and health impacts on protected populations. This information should enrich the decision-making process for projects and proposals affecting the social and physical environment to the benefit of both decision-makers and the public.

The Federal Transit Administration (FTA) recommends that recipients of federal aid evaluate fare changes according to the following steps:

1. assess the effects of the proposed fare changes on minority and low-income populations;
2. assess the alternatives available for people affected by the fare changes;

3. describe the actions the agency proposes to minimize, mitigate, or offset any adverse effects of proposed fare changes on minority and low-income populations; and
4. determine which, if any, of the proposals would have a disproportionately high and adverse effect on minority and low-income populations. (Adapted from FTA Circular C4702.1A, May 13 2007.)

III. METHODOLOGY AND DATA SOURCES

In order to conduct the Title VI equity analysis for the fare proposals, District staff used data derived from the 2012 Onboard Rider Profile Survey (weighted to reflect District ridership).

The 2012 Onboard Survey represents the most current data that the District has regarding our passengers. The data are less than two years old so ridership will not have changed much since the study was conducted. Accordingly, we have assumed that passengers' trip characteristics, demographics, income, and travel behavior have remained essentially the same. The analysis is based on the assumption that AC Transit riders will continue riding they way they have been, that they will continue paying the way they have (cash, Clipper, etc), and that they will use a fare that will save them money, if it's easy and available on the bus.

The cornerstone used to identify the equity impacts of the fare proposals is the ***One-Way Average Fare Analysis*** for local service, which presents the average costs of linked one-way trips for the fare category and type of payment used. The One-Way Average Fare is calculated for each of the fare proposals, and investigated by ethnicity, race, and income to determine the impacts on classes of riders protected under Title VI. The 2012 Onboard Survey data set, which includes approximately 10,000 in-depth phone interview surveys, was used to develop the "One-Way Average Fare". This rich data set allowed staff to obtain very detailed information though cross-tabulation.

Staff first sorted each survey record between local and Transbay. After the data were sorted into Local and Transbay, the data were further sorted by the four fare categories: youth, senior, disabled and adult, as well as by four primary means of paying: cash (bills and coins); e-cash; monthly pass; and transfer. Because the fare proposals do not affect the Transbay monthly pass, the EZPass program, and the University of California Student Class Pass, data reflecting these programs were excluded from the analysis.

The data were then sorted by the question which asks the number of buses that respondents took in order to complete their one-way trip. Because this is also sorted by cash and pass, the impacts by fare category can be quantified for each fare proposal. For purposes of estimating average cash fares for the proposals, it was assumed that the existing fare policies were used to represent the existing average fare; and the proposed fare policies were applied to determine the average fare by proposal. For instance, in the existing fare structure, those using one bus would be charged a full cash fare; those transferring once would be charged a full cash fare and a transfer charge; and those transferring twice would be charged a full cash fare, a transfer charge and an additional full cash fare. For the proposed fare structures, changes to the appropriate rules would apply, such as those involving elimination of transfers, purchase of a day pass, or discounted rides for Clipper users.

To quantify the average cost per trip for pass riders, staff made assumptions that were fairly conservative in estimating impacts. The analysis in this report assumes that local pass riders use the 31-day pass 60 times per month. The assumption is based upon using the pass for 40 round trips using one bus, and an additional 10 round trips that require 2 buses. Given the fact that about half of local riders are Transit Dependent (defined by the 51% of riders without a Driver's License) staff believe that this is an appropriate estimate that lies between using the pass only to commute to work and using the pass for other trip purposes.

In order to evaluate the effect of implementing a day pass, data for linked one-way trips were doubled for respondents who indicated their surveyed trip was part of a round-trip, approximately 98% of survey respondents. While this underestimates daily bus ridership, since a person may take a round-trip plus another trip[s] at another point in the day, it is a way of getting a snapshot of the possible benefits to users.

IV. AC TRANSIT RIDERSHIP PROFILE

Using data derived from the 2012 Onboard Survey, the District has been able to discover much about the general demographics of its ridership in addition to their trip making characteristics and fare payment methods. This information was used early in the planning stage of the fare policy development to ensure that impacts to minority and low-income populations were considered early in the process. Using the data to perform a number of cross tabulations, the following provides a picture of who is using the system and in what manner.

a. Income and Ethnicity

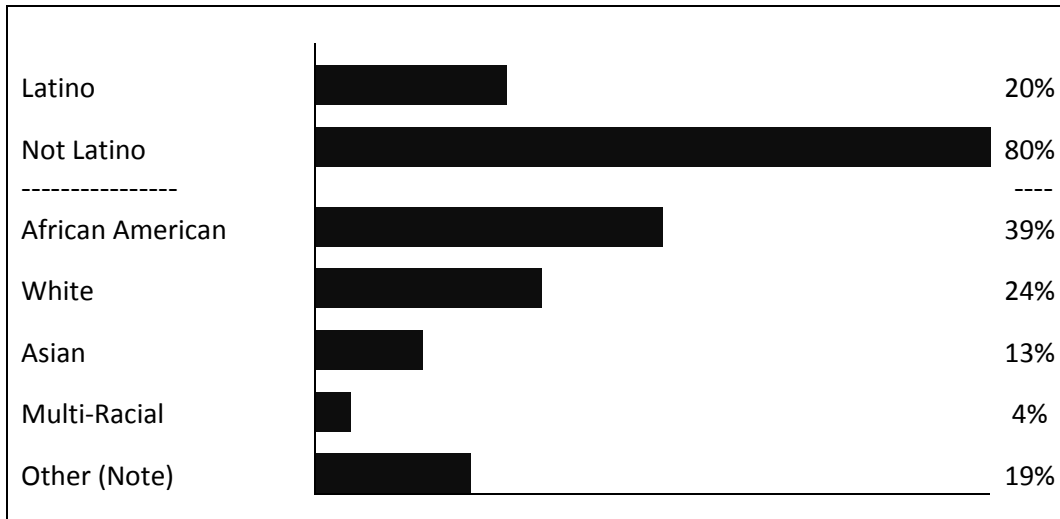
Table 1: Household Income

< \$10,000		23%
\$10-24,999		26%
\$25-34,999		15%
\$35-49,999		10%
\$50-74,999		11%
≥ \$75,000		16%

Approximately half of adult AC Transit riders reported a household income (in 2011) of less than \$25,000 per year (49%), while close to three-quarters of the ridership reported a household income of less than \$50,000 per year (74%).

Table 2 presents the system-wide ethnicity and race of the District's riders. One in five AC Transit riders identified as being Latino. The largest proportion of riders indicated their race as African American (39%), followed by riders who identify as White (24%) or Asian (13%). Nineteen percent of riders identify themselves as "other" and four percent identified as multi-racial. (Note: Most who chose "other" indicated they were "Hispanic", "Latino", or "Mexican".)

Table 2: Ethnicity & Race



It is important to understand how ethnicity, race, and income categories are determined for the purpose of Title VI analyses, and how that influences language used in this report. The Federal Transit Administration requires recipients of federal funds to evaluate fare changes to determine whether those changes have a discriminatory impact on “minority and low-income” populations. However, people that traditionally have been called “minority” make up the majority of the population in the AC Transit service area and are the majority of AC Transit riders, so the term is used with some hesitation. Additionally, the US Census Bureau shifted from classifying Latin American heritage as a racial category; instead they ask separately about peoples’ ethnicity and their race, and AC Transit has followed this trend in order to more easily align data from different sources. For the purpose of simplicity, in this report we have used the terms “Latino” and “African American” to refer to these populations.

In order to calculate household income, the US Census Bureau uses a complicated algorithm which factors in the income, age, and number of persons in each household. Using those data, 29% of persons living in the AC Transit service area are low-income, defined as less than 200% of the Federal poverty rate. The same breadth of data is not available from the onboard survey, so in this report we have opted instead to refer to how much a person’s household income is rather than qualify it as low-income or not. It is worth noting, however, that a person living in the Bay Area with a household income of less than \$35,000 is most likely low-income by any standard, and that applies to 63% of AC Transit weekday riders.

Tables 3 and 4 present a cross-tabulation of income and ethnicity which shows that in general, White riders comprise both a greater share of higher income riders and also comprise the lowest percentage of low-income riders. At income levels above \$150,000, over 57% are White. African Americans and Asians accounted for over 16% and 11% respectively of those riders. Latino riders comprised 13% of those with incomes above \$100,000, compared to 86% of non-Latinos. When compared by ethnicity (Table 5), 14% of White riders have incomes above \$100,000, 9% of Asians, fewer than 2% of Black riders, and 3% of Latino riders.

At lower income levels, almost 80% of African American and over 77% of Latino riders live in households with incomes under \$35,000. This compares to 58% of Asian riders and 46% of White riders.

Table 3: Ethnicity & Race by Income

Household Income								
Ethnicity	Under \$10,000	\$10,000 - \$24,999	\$25,000 - \$34,999	\$35,000 - \$49,999	\$50,000 - \$74,999	\$75,000 - \$99,999	\$100,000 - \$149,999	\$150,000 or greater
Latino	21.6%	25.1%	23.1%	18.7%	16.4%	11.9%	11.3%	13.5%
Not Latino	78.4%	74.9%	76.9%	81.3%	83.6%	88.1%	88.7%	86.5%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Race								
African American	55.5%	50.2%	46.9%	40.8%	30.7%	24.2%	12.7%	16.4%
White	11.8%	14.8%	16.7%	27.6%	37.5%	40.8%	53.9%	57.4%
Asian	8.1%	6.2%	9.5%	10.1%	12.3%	17.5%	19.0%	11.3%
Other	20.8%	24.3%	21.8%	16.8%	15.5%	10.1%	9.5%	11.1%
Multi-Racial	3.7%	4.5%	5.1%	4.7%	4.1%	7.5%	4.9%	3.8%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 4: Income by Ethnicity & Race

HOUSEHOLD INCOME	Latino Ethnicity		Racial Identification				
	Yes	No	African American	White	Asian	Other	Multi-Racial
Under \$10,000	25.4%	24.6%	30.7%	13.7%	21.7%	25.9%	20.4%
\$10,000 - \$24,999	34.2%	27.2%	32.1%	19.9%	19.2%	34.9%	28.6%
\$25,000 - \$34,999	17.8%	15.8%	17.0%	12.8%	16.7%	17.8%	18.3%
\$35,000 - \$49,999	9.1%	10.5%	9.2%	13.1%	11.0%	8.6%	10.5%
\$50,000 - \$74,999	7.6%	10.3%	6.6%	16.9%	12.8%	7.5%	8.7%
\$75,000 - \$99,999	2.9%	5.7%	2.7%	9.6%	9.5%	2.5%	8.3%
\$100,000 - \$149,999	1.7%	3.6%	0.9%	7.9%	6.4%	1.5%	3.4%
\$150,000 or greater	1.4%	2.4%	0.8%	6.0%	2.7%	1.2%	1.9%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

b. Number of Buses per Trip

Almost one-third of riders take only one AC Transit bus to complete their one-way trip (66%); 31% need one transfer, and another 3% require 2 or more transfers.

Table 5: Number of Buses per Trip

NUMBER OF AC BUSES TAKEN TO COMPLETE ONE-WAY TRIP	
1 bus	65.8%
2 buses	31.0%
3 buses	2.9%
4 buses	0.2%
AVERAGE NUMBER OF AC BUSES TO COMPLETE ONE-WAY TRIP	1.38

As indicated on Table 5 above, on average, a local rider needs 1.38 buses to complete their one-way trip. This provides an understanding of the impact that costs of transferring might have on their fares.

Further cross-tabulations for ethnicity and income for both *Frequency of Use* and *Number of Buses to Complete a One-way Trip* are shown in Table 6 and Table 7. These also reveal that riders that use the bus most frequently with the greatest number of buses per trip are much more likely to be African American. Additionally, cross-tabulations for *Household Income* and *Number of Buses to Complete a One-way Trip* also show that as income increases the number of buses needed for a one-way trip *decreases*. This highlights the greater use of multiple buses of lower income riders.

Table 6: Number of Buses by Ethnicity & Race

	NUMBER OF AC BUSES TAKEN TO COMPLETE ONE-WAY TRIP				Total	Average
	1 bus	2 buses	3 buses	4 buses		
Ethnicity						
Latino	67.6%	30.2%	2.1%	0.1%	100.0%	1.35
Not Latino	65.4%	31.2%	3.2%	0.3%	100.0%	1.38
Race						
African American	58.8%	36.5%	4.4%	0.3%	100.0%	1.46
White	74.1%	24.2%	1.6%	0.0%	100.0%	1.28
Asian	73.1%	25.6%	1.0%	0.3%	100.0%	1.29
Other	67.4%	30.1%	2.4%	0.1%	100.0%	1.35
Multi-Racial	69.4%	28.1%	1.8%	0.7%	100.0%	1.34

Table 7: Number of Buses by Income

	NUMBER OF AC BUSES TAKEN TO COMPLETE ONE-WAY TRIP				Total	Average
	1 bus	2 buses	3 buses	4 buses		
HOUSEHOLD INCOME						
Under \$10,000	61.5%	34.8%	3.6%	0.1%	100.0%	1.42
\$10,000 - \$24,999	62.2%	33.3%	4.1%	0.4%	100.0%	1.43
\$25,000 - \$34,999	64.3%	32.6%	3.0%	0.1%	100.0%	1.39
\$35,000 - \$49,999	69.3%	28.2%	2.5%	0.0%	100.0%	1.33
\$50,000 - \$74,999	69.1%	29.0%	1.7%	0.1%	100.0%	1.33
\$75,000 - \$99,999	79.2%	20.2%	0.6%	0.0%	100.0%	1.21
\$100,000 - \$149,999	82.0%	18.0%	0.0%	0.0%	100.0%	1.18
\$150,000 or greater	85.8%	13.5%	0.7%	0.0%	100.0%	1.15

c. Fare Media Use

A large number (42%) of system-wide riders indicated that they use a pass (31-day pass or Senior/Disabled Monthly), which is close to the percentage that indicated they use cash (50%). Riders who use cash include those who pay with bills and coins (31% of system-wide

riders) and those who use a declining-cash balance on a Clipper card (18% of all riders.) Among local riders, almost 40% pay a cash fare with bills and coins.

A cross-tabulation of *Fare Payment Media* by *Race/Ethnicity*, below in Tables 8a, highlight that ethnicity among pass users is generally similar to the ethnic pattern of system riders. African American riders are the greatest users of passes at 43% of pass users, compared to 22% White, and 13% Asian.

In a different presentation of the data, Table 8b shows that Latino riders, however, are more likely to pay with cash (55%) compared to non-Latinos (35%), and Latinos are also less likely to use Clipper. 16% of Latinos use cash on Clipper compared to 19% of all local riders, and 30% of Latinos use a pass on Clipper, compared to 42% of all local riders.

Table 8a: Ethnicity & Race by Fare Payment Media

	FARE MEDIA USED			
	Cash (bills and coins)	Cash (on a Clipper Card)	Pass (on a Clipper Card)	Total
Ethnicity				
Latino	30.2%	18.1%	18.0%	21.8%
Not Latino	69.8%	81.9%	82.0%	78.2%
TOTAL	100.0%	100.0%	100.0%	100.0%
Race				
African American	43.7%	33.6%	43.2%	44.0%
White	14.7%	31.4%	22.0%	20.8%
Asian	7.5%	14.1%	13.4%	9.9%
Other	29.2%	16.5%	16.4%	20.6%
Multi-Racial	4.9%	4.4%	4.9%	4.7%
TOTAL	100.0%	100.0%	100.0%	100.0%

Table 8b: Fare Payment Media by Ethnicity & Race

	FARE MEDIA USED			
	Cash (bills and coins)	Cash (on a Clipper Card)	Pass (on a Clipper Card)	Total
Ethnicity				
Latino	54.7%	15.7%	29.6%	100.0%
Not Latino	35.1%	19.8%	45.0%	100.0%
TOTAL	39.4%	19.0%	41.7%	100.0%
Race				
African American	39.3%	14.3%	43.7%	100.0%
White	28.0%	28.4%	46.3%	100.0%
Asian	30.2%	26.8%	43.0%	100.0%
Other	56.0%	15.0%	29.0%	100.0%
Multi-Racial	41.2%	17.7%	41.1%	100.0%
TOTAL	39.6%	18.8%	41.6%	100.0%

Cross-tabulations of Fare Payment Media by Income, in Tables 9a and 9b, show that in lower income categories cash use is substantially higher than pass use, despite the fact that lower income riders are more likely to be frequent riders (and so most likely to benefit from using a pass). In higher income categories pass use is higher than cash; the percentage of riders paying with cash decreases as income rises. Clipper use is three times or more the use of cash in the higher income categories when e-cash is included with passes.

Table 9a: Fare Payment Media by Income

	FARE MEDIA USED			
	Cash (bills and coins)	Cash (on a Clipper Card)	Pass (on a Clipper Card)	Total
HOUSEHOLD INCOME				
Under \$10,000	43.1%	10.2%	46.6%	100.0%
\$10,000 - \$24,999	40.9%	13.3%	45.8%	100.0%
\$25,000 - \$34,999	42.7%	20.5%	36.8%	100.0%
\$35,000 - \$49,999	35.1%	29.3%	35.6%	100.0%
\$50,000 - \$74,999	33.6%	28.3%	38.0%	100.0%
\$75,000 - \$99,999	24.2%	36.2%	39.6%	100.0%
\$100,000 - \$149,999	20.3%	42.2%	37.6%	100.0%
\$150,000 or greater	22.9%	39.5%	37.6%	100.0%
TOTAL	38.5%	19.5%	42.0%	100.0%

Table 9b: Fare Payment Media by Income

	FARE MEDIA USED	
	Cash (bills & coins)	Clipper (e-cash & pass)
HOUSEHOLD INCOME		
Under \$10,000	43.1%	35.1%
\$10,000 - \$24,999	40.9%	39.2%
\$25,000 - \$34,999	42.7%	47.4%
\$35,000 - \$49,999	35.1%	55.3%
\$50,000 - \$74,999	33.6%	62.4%
\$75,000 - \$99,999	24.2%	71.8%
\$100,000 - \$149,999	20.3%	76.1%
\$150,000 or greater	22.9%	74.1%
TOTAL	38.5%	47.1%

Table 10: Fare Payment Media by Fare Type

	FARE CATEGORY				Total
	Adult	Youth	Senior	Disabled	
Q397: FARE MEDIA USED					
Cash (bills and coins)	46.7%	40.4%	26.3%	8.5%	39.4%
Cash (on a Clipper Card)	23.5%	12.1%	10.8%	5.1%	18.9%
Pass (on a Clipper Card)	29.8%	47.6%	35.1%	0.0%	28.0%
Pass (sticker on an RTC card)	0.0%	0.0%	27.8%	86.4%	13.6%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%

Additionally, cross-tabulations of Fare Payment Media by Fare Type, above in Table 10, show that the prevalence of pass use is more significant in certain fare types than is cash use. Specifically, pass use among senior and disabled riders is much greater than cash use for those fare categories—probably the result of the highly discounted pass price. For disabled, pass use is six times higher than cash use (86% pass versus 14% cash); for seniors, pass use (63%) is over one and one-half times cash use (37%). Pass use among youth is not as high (48% vs 40% for cash uses).

V. DESCRIPTION OF FARE PROPOSALS

In April 2013, the Board of Directors voted not to raise fares in July, as originally scheduled. Instead, the Board and staff decided to explore a new fare structure and pricing with potential benefits for riders and service reliability. In September 2013, the Board considered a report and set a public hearing to receive testimony on the proposed fare policy. All proposals were the subject of a public input process that included information dissemination and community meetings. When considering new fare policies, staff followed the Fare Policy Goals, shown here:

Goal 1—Simplicity: Fares and the fare structure should be easy to use for passengers, and easy to operate for the District.

Goal 2—Appropriateness: Fares and the fare structure should provide a good value for passengers.

Goal 3—Equity: Fares and the fare structure should be fair for all passengers.

Goal 4—Transparency: Fares and the fare structure should result in predictable costs and cost increases for passengers; and predictable revenue increases for the District.

Goal 5—Policy Supportiveness: Fares and the fare structure should be supportive of other District goals—service, land use, and social goals—and compliant with other regulatory mandates.

Goal 6—Affordability: Fares should be affordable to all passengers to ensure their full access to bus service and to prevent adverse impacts on socially vulnerable populations.

Under the proposal under consideration, basic cash fares would not change. A local day pass would be introduced and most transfers would be eliminated. Additionally, adult, youth, senior, and disabled 31-day and monthly pass prices would be adjusted.

Fare Proposals

- Retain basic cash fares for single rides at current prices
- Introduce a day pass, priced at \$5.00 for Adults, \$2.50 for Youth, Seniors, and Disabled passengers
- Retain one transfer between local and Transbay for Clipper card users. Eliminate all other transfers, except inter-agency transfers which require that no paper ticket is generated by the AC Transit farebox
- Introduce a small discount on single fares for Clipper card e-cash users: 10 cents off for adults and 5 cents off for youth, senior, and disabled
- Decrease the price of the adult 31-day pass from \$80 to \$75, and increase the price of the youth 31-day pass and the senior/disabled monthly pass from \$20 to \$23

Proposed Fares and Pass Prices

Single Ride	Current	Proposed cash	Proposed e-cash
Local Adult	\$2.10	\$2.10	\$2.00
Local Youth/Senior/Disabled	\$1.05	\$1.05	\$1.00
Transbay Adult	\$4.20	\$4.20	\$4.00
Transbay Youth/Senior/Disabled	\$2.10	\$2.10	\$2.00
Pass	Current	Proposed	
Local Adult 31-day	\$80.00	\$75.00	
Local Youth 31-day	\$20.00	\$23.00	
Local Senior/Disabled Monthly	\$20.00	\$23.00	
Transfers and Day Pass	Current	Proposed cash	Proposed Clipper
Transfer local to local (all)	.25	n/a	n/a
Transfer Adult local to Transbay	\$2.10	n/a	\$2.00
Transfer Senior/Disabled/Youth local to Transbay	\$1.05	n/a	\$1.00
Day pass Adult local	n/a	\$5.00	\$5.00
Day pass Senior/Disabled/Youth	n/a	\$2.50	\$2.50

VI. DETERMINING IMPACTS OF FARE PROPOSALS

Data from the Onboard Survey described in Section IV provided a background of AC Transit ridership that staff used to confirm the assumptions in the Average Fare Analyses. In fact, the One-Way and Round Trip Average Fare Analyses are derived from the same data that were presented in the Section IV cross-tabulations.

In order to array the data to arrive at an average fare for demographic and income groups, each survey “record” was sorted into a variety of categories that would be used to determine the average fare. The Onboard Survey data set includes approximately 10,000 detailed

surveys. These records can be sorted and cross-tabulated in any number of ways, as evidenced by the previous section. Table 11 presents a rudimentary depiction of the sorting process that was used to quantify the average Fare. Each row represents a completed On-Board survey, and each column represents how the rider answered the question.

Table 11: Sorting of Survey Cross-tabulation for Average Fare Analysis

Completed survey	Adult	Youth	Senior	Dis-abled	Cash	Pass	Transfer	Ticket	1 bus	2 bus	3+ bus	Other indicators —income, ethnicity, etc.
1		X				X			X			→
2			X		X				X			→
3	X					X				X		→
4	X					X				X		→
5		X					X		X			→
6-9095	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	→
10,000		X						X		X		→

In reality, the cross-tabulation was considerably more elaborate, using software designed for handling the volume and complexity of the On-Board Rider Profile. Using the Statistical Package for the Social Sciences software (SPSS), staff created a detailed sorting of each survey record so that averages could be derived for every major category, including:

- Fare Type – Adult, Youth, Senior or Disabled
- Fare Payment Method – Cash, E-cash, Pass or Transfer
- Number of buses for a one-way trip – 1 bus, 2 buses, 3+ buses
- One-way or Round-trip
- Household Income and Race/Ethnicity

Staff prepared One-Way and Round Trip Average Fare analyses for each fare scenario, reflected in Appendix tables, A-1 through A-4. These analyses compare the current fares by income and ethnicity to the different fare proposals. The analyses provide the basis for comparing the distribution of impacts among Title VI communities and the general population. These tables reflect:

- a. The average cost of a one-way linked trip
- b. Percentage change of the average cost of one-way linked trip
- c. The average cost of a round-trip
- d. Percentage change of the average cost of a round-trip

Basic Cash Fare and Pass Price scenarios

The proposal includes the following elements: retain price of basic cash fare for single rides and decrease price of single ride for Clipper users; retain transfer between local and Transbay for Clipper users only; and introduce a Daily Pass. It also includes proposals to reduce the local adult 31-day pass price to \$75, and raise the local Youth 31-day pass and

the local Senior/Disabled monthly pass to \$23. Table 13 presents a summary of impacts of affected local riders, including those in Title VI groups.

Table 13: Percentage Changes in Average Fares (Local Trips)

	One-Way Fare Change (Percent)	Round Trip Fare Change (Percent)
General:		
All affected patrons	16.1%	-1.5%
Income:		
Under \$10,000	19.4%	-0.7%
\$10,000 - \$24,999	18.4%	-1.0%
\$25,000 - \$34,999	17.3%	-1.9%
\$35,000 - \$49,999	14.5%	-1.5%
\$50,000 - \$74,999	14.3%	-1.5%
\$75,000 - \$99,999	7.8%	-1.9%
\$100,000 - \$149,999	8.4%	-2.5%
\$150,000 or greater	6.0%	-3.1%
Ethnicity:		
Latino	18.7%	-0.3%
Not Latino	15.5%	-1.7%
Race:		
African American	19.0%	-1.4%
White	10.1%	-1.7%
Asian	11.0%	-2.0%
Other	19.1%	-0.6%
Multi-Racial	14.1%	-2.1%
Fare Payment Method:		
Pass on Clipper card	-2.4%	-4.5%
Clipper e-cash	14.6%	-3.8%
Cash (bills and coins)	24.6%	-0.2%
Fare Category:		
Adult	15.8%	-1.8%
Youth	19.7%	0.0%
Senior	16.1%	3.1%
Disabled	18.2%	7.4%

Note: All figures presented reflect AC Transit analysis results per 31-day period

VII. IMPACTS OF FARE PROPOSALS

Summary of Findings

The fare changes, if approved, would result in an average one-way fare increase of approximately 16% (or 24 cents) for all passengers. Factoring in the proposed day pass (used most likely for round trip travel), the fare changes would result in an average round trip fare decrease of approximately 1.5% (or 4 cents) for all passengers. This includes the effects of eliminating transfers, introducing a small discount on Clipper, and changing pass prices for those passengers who use each of these fare products.

The average one-way fare would increase more for African American and Latino passengers: by 19%. The average one-way fare would also increase more for low-income passengers: by approximately 19% for those who earn less than \$10,000, and by 18% for those who earn between \$10-25,000. Title VI protected populations are doubly impacted: more than 77% of Latino and more than 79% of African American riders live in households with income of less than \$35,000, while only 46% of White riders do. Passengers who pay with cash (bills and coins) would face the largest one-way increase, of almost 25% (50 cents).

The District is required to assess the effects of fare change proposals to determine if they would have disproportionately high and adverse effects on Title VI-protected populations. While each of the elements of the fare proposals would result in a greater impact on these protected populations compared to riders as a whole, the differential effects are very small. In each case, the effect on a minority or low-income group is less than 5% different than the effect on overall ridership. AC Transit does not currently have thresholds to determine exactly at what point effects would be considered disproportionately high and adverse; such thresholds will be set in the coming year as we develop new Title VI policies. In the meantime staff believe that the current proposed fare changes would not result in disproportionately high and adverse effects.

The effect of individual elements of the fare proposals follows.

Elimination of transfers

Elimination of transfers would have no effect on the almost two-thirds of riders (66%) who currently only need one bus to complete their one-way trips, however, an individual rider who takes two buses (and does not use a pass) to complete a one-way trip would have to pay a separate fare for each bus, and so see that fare double. African American riders and riders from households with very low incomes (<\$10,000) are more likely to transfer than systemwide local riders.

One free transfer between local and transbay ride would be retained for riders using the Clipper card, but eliminated for those paying with cash (bills and coins). The number of riders currently paying for such a transfer with cash is extremely small, and there are not enough data to support an impact analysis for this proposed change. Transfers from other agencies will continue to be accepted, but inter-agency transfers from AC Transit which require a paper ticket will be eliminated. Again, insufficient data exist to support an impact analysis for this very small population.

New Fare Media – Day Pass

The District does not currently have data to indicate how popular a day pass might be; a survey that could reveal riders' preferences is too expensive and difficult to undertake at this moment. However, there may be positive impacts associated with introducing a lower cost discounted fare instrument for populations that transfer or travel frequently over the course of a day.

A significant number of AC Transit riders (34%) transfer to complete their linked one-way trips, and an overwhelming number (98%) of passengers use AC Transit to complete a round trip. In order to evaluate the possible effects of a day pass, data for linked one-way trips

were doubled for respondents. While this underestimates daily bus ridership for many passengers (since they might take an additional trip at another point in the day) it is a way of getting a snapshot of the benefits to such riders of the proposed day pass. Following this methodology, it was found that the average cost of a round trip would decrease 1.5% (4 cents) under the fare proposals.

Day pass implementation could affect the fares for different populations in a variety of ways. In particular, Latino would experience only a 0.3% (1 cent) decrease, compared to a 1.5% decrease for the system-wide local population.

The day pass proposal represents an alternative available for people affected by the fare change which could serve to minimize and offset any adverse effects of the proposed changes on minority and low-income populations. Notably, this savings was realized only when a day pass was purchased each time the round-trip fare would've passed the threshold fare (\$5.00 for Adults and \$2.50 for youth, seniors, and disabled persons). The staff report estimates that 15% of local adult fares would be paid with a day pass; those passengers who do not buy the day pass would still pay an average 16% increase in one-way fares. Therefore, an extensive public outreach campaign is crucial in realizing the benefits of a day pass to minority and low-income riders.

Clipper users would find it easier and more convenient to use the day pass, since an automatic "accumulator" would take out fares for each rider and when \$5.00 worth of fares (or \$2.50 for youth, senior, and disabled riders) are purchased, it would stop charging the card. That is, it will automatically buy a day pass when the passenger has spent \$5.00. Cash payers, however, would have to decide on their first trip of the day whether it made sense for them to purchase the day pass. Latino riders currently use Clipper at a much lower rate: only 45% of Latino riders use Clipper, compared to 60% of systemwide local riders. Implementation of the proposals should include public outreach methods to achieve greater adoption of Clipper Card use by these populations.

Discounts for cash fares on Clipper

Providing a small discount on Clipper is a good incentive to increase Clipper usage. It also may help move populations to fare instruments that provide an overall benefit. However, associating benefits to Clipper users that are not available to other cash riders may represent an unequal distribution of impacts if those cash riders are largely low-income and/or minority.

As noted in Table 8b, the Latino population is twice as likely to pay cash as to use a pass, versus the White population (55% Latino; 28% White), and, as Table 6 reveals, the Latino population is also more likely to need 2 or more buses to complete their one-way trip (32% Latino; 26% White). However, implementation of these small discounts would not result in a change to the overall average one-way fare.

Pass Price Adjustments

Adjusting the prices of passes results in an average one-way fare decrease to persons who use a pass (- 2.4%), but most of those savings would be passed on to the Adult pass user. Average one-way fares for disabled and youth riders would rise 18% and almost 20% respectively, while the senior average one-way fare increase would be comparable to

systemwide local riders' fare increase. (Savings resulting from pass price adjustments are magnified in the round-trip fare analyses.)

Changes to the structure of pass prices and costs of passes were developed under Resolution 11-017 and incorporated into Board Policy 328 in 2011, and followed a full Title VI equity analysis. The current proposals represent lower increases than were planned by those actions, and are not anticipated to have any additional disproportionately high or adverse effects.

Beneficial Effects of the Proposals

The proposals are intended to reduce dwell time (the time spent the bus spends sitting while people board) by eliminating the amount of time spent by passengers paying with cash and buying transfers at the fare box at each boarding. Introducing a day pass, which could be purchased once per day with a single \$5.00 bill, would likely accomplish this goal. Frequent riders and riders who must transfer to complete their trips – many of whom are Title VI populations – would benefit from reduced dwell time and improved reliability to bus service that accompanies it.

Many passengers would benefit from buying a day pass. A rider who takes three single trips in a day would save \$1.30 over current fares. A rider who takes a bus and a transfer twice a day would only have to pay \$.30 more than they currently do for an unlimited ride day pass. In addition, a day pass would offer unlimited trips, and increased mobility, for any passenger who buys it.

Reducing the cost of the Adult 31-day pass would also benefit many AC Transit riders. African Americans are 39% of total riders, but they are 43% of pass users. Almost one-quarter of riders paying an Adult fare currently pay with cash; by reducing the price, lower income passengers may be able to switch to the pass.

The convenience built in to using Clipper for purchase of the day pass and small discounts for single fare rides may make Clipper more attractive to populations who are not currently using them. This may make it easier for such populations to make the transition to buying monthly passes on Clipper. The District is committed to increasing the number of Clipper vendors and otherwise reducing obstacles to populations who have not yet accepted this form of payment. Major outreach to communities who would benefit from using Clipper and/or purchasing a 31-day or monthly pass could result in increased Clipper use. This would result in the average fares for Title VI populations to decrease.

Future onboard surveys should collect data that could identify whether cost savings and increased mobility will result from the implementation of these proposals.

VIII. ALTERNATIVES ANALYSIS

The Federal Transit Administration (FTA) recommends that recipients of federal aid assess alternatives available for people affected by fare change proposals, and describe the actions the agency proposes to minimize, mitigate, or offset any adverse effects of the proposals on minority and low-income populations. As stated earlier, staff found that implementation of the

proposed day pass would avoid or mitigate any effects found in the analysis. In addition, staff looked at the 7-day pass, established in 2011, which was intended to provide a discount for people who sometimes use the system heavily, but not for a full month. It could provide a discount fare instrument for people who may have difficulty paying for a full month's pass at a time. Staff believe the seven-day pass would still be a good, low-cost alternative for persons affected by the proposals.

Appendix Table A-1:

Average One-Way Local Fare Analysis (pass rate at 60 uses per 31 day period)

	Sample Size	Mean Cost of One-Way Linked Trip By Fare Change Policies (Dollars)	
		Current	Proposed
HOUSEHOLD INCOME			
Under \$10,000	1,503	1.44	1.72
\$10,000 - \$24,999	1,743	1.47	1.74
\$25,000 - \$34,999	996	1.62	1.90
\$35,000 - \$49,999	621	1.66	1.90
\$50,000 - \$74,999	597	1.68	1.92
\$75,000 - \$99,999	308	1.66	1.79
\$100,000 - \$149,999	195	1.66	1.80
\$150,000 or greater	138	1.67	1.77
All	6,101	1.55	1.80
ETHNICITY			
Latino	1,574	1.71	2.03
Not Latino	5,556	1.48	1.71
All	7,130	1.53	1.78
RACE			
African American	3,054	1.47	1.75
White	1,450	1.48	1.63
Asian	694	1.55	1.72
Other	1,234	1.76	2.06
Multi-Racial	328	1.49	1.70
All	6,988	1.54	1.78
FARE CATEGORY			
Adult	4,966	1.96	2.27
Youth	746	0.76	0.91
Senior	515	0.62	0.72
Disabled	958	0.44	0.52
All	7,185	1.54	1.78
FARE PAYMENT			
Cash (bills and coins)	2,857	2.03	2.53
Cash (on a Clipper Card)	1,359	2.05	2.35
Pass (on a Clipper Card)	2,002	1.07	0.81
All	7,185	1.54	1.79

Appendix Table A-2:

Percentage Change to Cost of One-Way Linked Trip by Income and Ethnicity (pass rate at 60 uses per 31-day period) for Local Service

	Sample Size	Change to Mean Cost of One-Way Linked Trip By Fare Change Policies (Dollars)	
		Current Cost	Proposed
HOUSEHOLD INCOME			
Under \$10,000	1,503	1.44	19.4%
\$10,000 - \$24,999	1,743	1.47	18.4%
\$25,000 - \$34,999	996	1.62	17.3%
\$35,000 - \$49,999	621	1.66	14.5%
\$50,000 - \$74,999	597	1.68	14.3%
\$75,000 - \$99,999	308	1.66	7.8%
\$100,000 - \$149,999	195	1.66	8.4%
\$150,000 or greater	138	1.67	6.0%
All	6,101	1.55	16.4%
ETHNICITY			
Latino	1,574	1.71	18.7%
Not Latino	5,556	1.48	15.5%
All	7,130	1.53	16.3%
RACE			
African American	3,054	1.47	19.0%
White	1,450	1.48	10.1%
Asian	694	1.55	11.0%
Other	1,234	1.76	19.1%
Multi-Racial	328	1.49	14.1%
All	6,988	1.54	16.2%
FARE CATEGORY			
Adult	4,966	1.96	15.8%
Youth	746	0.76	19.7%
Senior	515	0.62	16.1%
Disabled	958	0.44	18.2%
All	7,185	1.54	16.1%
FARE PAYMENT			
Cash (bills and coins)	2,857	2.03	24.6%
Cash (on a Clipper Card)	1,359	2.05	14.6%
Pass (on a Clipper Card)	2,002	1.07	<u>-2.4%</u>
All	7,185	1.54	16.1%

Appendix Table A-3:

Average Local Round-Trip Fare Analysis (pass rate at 60 uses per 31 day period)

	Sample Size	Mean Cost of Round Trip By Fare Change Policies (Dollars)	
		Current	Proposed
HOUSEHOLD INCOME			
Under \$10,000	1,503	2.84	2.82
\$10,000 - \$24,999	1,743	2.90	2.87
\$25,000 - \$34,999	996	3.22	3.16
\$35,000 - \$49,999	621	3.28	3.23
\$50,000 - \$74,999	597	3.33	3.28
\$75,000 - \$99,999	308	3.27	3.21
\$100,000 - \$149,999	195	3.29	3.21
\$150,000 or greater	138	3.32	3.22
All	6,101	3.06	3.02
ETHNICITY			
Latino	1,574	3.38	3.37
Not Latino	5,556	2.93	2.88
All	7,130	3.03	2.99
RACE			
African American	3,054	2.89	2.85
White	1,450	2.93	2.88
Asian	694	3.06	3.00
American Indian/Alaska Native	99	3.12	3.02
Native Hawaiian/Pacific Islander	129	3.11	3.11
Other	1,234	3.47	3.45
Multi-Racial	328	2.96	2.90
All	6,988	3.03	2.99
FARE CATEGORY			
Adult	4,966	3.86	3.79
Youth	746	1.51	1.51
Senior	515	1.24	1.28
Disabled	958	0.87	0.94
All	7,185	3.03	2.99
FARE PAYMENT			
Cash (bills and coins)	2,857	4.02	4.01
Cash (on a Clipper Card)	1,359	4.07	3.92
Pass (on a Clipper Card)	2,002	2.10	2.01
Pass (sticker on an RTC card)	967	0.65	0.75
All	7,185	3.04	3.00

Appendix Table A-4:

Percentage Change to Cost of Round-Trip Linked Trip by Income and Ethnicity (pass rate at 60 uses per 31-day period) for Local Service

	Sample Size	Change to Mean Cost of Round Trip By Fare Change Policies (Dollars)	
		Current	Proposed
HOUSEHOLD INCOME			
Under \$10,000	1,503	2.84	-0.7%
\$10,000 - \$24,999	1,743	2.90	-1.0%
\$25,000 - \$34,999	996	3.22	-1.9%
\$35,000 - \$49,999	621	3.28	-1.5%
\$50,000 - \$74,999	597	3.33	-1.5%
\$75,000 - \$99,999	308	3.27	-1.9%
\$100,000 - \$149,999	195	3.29	-2.5%
\$150,000 or greater	138	3.32	-3.1%
All	6,101	3.06	-1.4%
ETHNICITY			
Latino	1,574	3.38	-0.3%
Not Latino	5,556	2.93	-1.7%
All	7,130	3.03	-1.4%
RACE			
African American	3,054	2.89	-1.4%
White	1,450	2.93	-1.7%
Asian	694	3.06	-2.0%
American Indian/Alaska Native	99	3.12	-3.3%
Native Hawaiian/Pacific Islander	129	3.11	0.0%
Other	1,234	3.47	-0.6%
Multi-Racial	328	2.96	-2.1%
All	6,988	3.03	-1.4%
FARE CATEGORY			
Adult	4,966	3.86	-1.8%
Youth	746	1.51	0.0%
Senior	515	1.24	3.1%
Disabled	958	0.87	7.4%
All	7,185	3.03	-1.2%
FARE PAYMENT			
Cash (bills and coins)	2,857	4.02	-0.2%
Cash (on a Clipper Card)	1,359	4.07	-3.8%
Pass (on a Clipper Card)	2,002	2.10	-4.5%
Pass (sticker on an RTC card)	967	0.65	13.3%
All	7,185	3.04	-1.5%