

CORPUS CHRISTI REGIONAL TRANSPORTATION AUTHORITY Fare Equity Analysis

August 2019



FARE EQUITY ANALYSISCorpus Christi Regional Transportation Authority

Table of Contents

		Page
Introductio	on	1
	ysis Goals	
	re Revenue and Peer Comparison	
Fare Equity	y Analysis	4
Fare Chang	ge Mitigation	10
Table of	Figures	
Figure 1	2016 CCRTA Fare Analysis: Peer Review Findings	2
Figure 2	Fare Revenue Trends	3
Figure 3	2019 Federal Poverty Level Guidelines for the 48 Contiguous States and District of Columbia	4
Figure 4	Existing Fare Structure, Initial Recommendations, and Revised Recommendation	
Figure 5	Change in Cost by Demographic Group	8
Figure 6	Existing and Recommended Fare Structure	9
Figure 7	Percent Increase in Cost for Riders	10

Corpus Christi Regional Transportation Authority

INTRODUCTION

Title VI of the Civil Rights Act of 1964 ensures that "no person in the United States shall, on the basis 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." Corpus Christi Regional Transportation Authority (CCRTA), as a recipient of Federal Transit Administration (FTA) funds, is committed to FTA objectives set forth in Circular 4702.1B, Title VI Requirements and Guidelines for Federal Transit Administration Recipients. These objectives are designed to ensure that FTA-assisted benefits and related services are available and equitably distributed without regard to race, color, or national origin.

FARE ANALYSIS GOALS

A comprehensive evaluation of CCRTA's existing fare structures and policies was completed in 2016 as part of the Transit Plan 20/20 process. A series of goals and objectives developed for the fare analysis were defined as:

- Encourage ridership growth and minimize loss. Fares haven't been adjusted since 2006, and a fresh look at fare structures and policies is worthwhile.
- Maintain affordability for low-income populations. Maintaining affordability for seniors, Medicaid card holders, and vulnerable populations is important in this fare analysis.
- **Encourage farebox recovery in keeping with peer agencies.** Farebox revenues were pledged for bond against capital costs to build a new operations facility. Achieving healthy farebox revenues—with a goal of approximately \$1.8 million in fares annually will maintain the ability to pay off this debt service.
- Encourage simplicity and ease of understanding for operators and customers. Simplifying fare categories and classifications can make it easier for both operators and customers to understand fares, as well as ensuring the fare collection system is consistent with industry best practices.

Corpus Christi Regional Transportation Authority

CCRTA FARE REVENUE AND PEER COMPARISON

CCRTA's most recent fare increase was implemented in 2006 and increased the base fare from \$0.50 to \$0.75. As CCRTA has continued to expand services and improve amenities, the percent of expenses covered by fares has declined. Currently, the farebox recovery ratio, or the percent of operating costs that are covered by passenger fare revenue, is 5.5%. When CCRTA conducted a comprehensive fare analysis in 2016, the agency's farebox recovery ratio was less than half of any of its peer agencies, according to results from a peer analysis conducted as part of that effort (Figure 1). CCRTA's local base fare was also significantly lower than any of the other peer agencies. Average fare per passenger was \$0.28.

Figure 1 2016 CCRTA Fare Analysis: Peer Review Findings

	CCRTA	HART (Tampa, FL)	ECAT (Pensacola, FL)	El Metro (Laredo, TX)	Sun Metro (El Paso, TX)	Rock Region Metro (Little Rock, AR)
Local Base Fare	\$0.75	\$2.00	\$1.75	\$1.50	\$1.50	\$1.35
Annual Boardings	5,734,712	15,334,839	1,516,649	3,184,119	12,226,961	2,840,494
Annual Operating Cost	\$21,950,903	\$63,270,537	\$8,984,762	\$11,996,967	\$49,336,369	\$14,985,310
Annual Passenger Fares	\$1,790,931	\$16,420,800	\$1,974,636	\$3,380,086	\$9,766,316	\$2,288,345
Farebox Recovery Ratio	7%	24%	18%	24%	17%	14%
Average Fare per Passenger	\$0.28	\$1.03	\$1.21	\$1.05	\$0.75	\$0.74

Source: National Transit Database, 2014, http://www.ntdprogram.gov/ntdprogram/data.htm, adapted from 2016 CCRTA Fare Analysis

Corpus Christi Regional Transportation Authority

However, to meet bond requirements for construction of a new operations facility, CCRTA is obligated to generate \$1.8 million in operating revenue annually. Fares comprise the majority of this revenue. However, fare revenue has been decreasing overall for the agency (Figure 2), indicating that a method to increase farebox revenue is desirable, while keeping in mind other goals related to affordability and equity.

The combination of relatively low fares, rising costs, and time since the last fare change provides an opportunity for CCRTA to update and simplify the fare structure.

Figure 2 Fare Revenue Trends

	2016 (Actual)	2017 (Actual)	2018 (Projected)
Passenger Fares - RTA Route	\$833,944	\$806,825	\$771,532
RTA Presold Passes/Ticket	\$188,534	\$235,494	\$203,229
Service Contracts	\$262,577	\$272,830	\$252,444
Student Tickets	\$999	\$1,199	\$1,199
Port Aransas Services	\$1,810	\$82	\$892
Port A Shuttle	\$0	\$532	\$251
Express Fares - Park & Ride	\$182,936	\$173,460	\$168,041
Express Fares - Commuter Cards	\$4,185	\$3,295	\$3,527
Demand Response	\$172,677	\$154,758	\$192,523
Vanpool Revenue	\$88,908	\$47,980	\$0
Overs & Shorts	(\$1,569)	\$287	(\$605)
Total	\$1,735,001	\$1,696,741	\$1,593,034

Source: CCRTA

Survey Methodology and Rider Data

This Fare Equity Analysis measures the impacts of recommended fare changes on low-income and minority riders traveling on CCRTA routes. The Fare Equity Analysis was carried out using a sample of CCRTA riders, examining how the proposed fares would affect this group, and comparing/contrasting the impacts of the existing and proposed fare structures for all riders, minority riders, and low-income riders.

The study team used rider data from a survey conducted by CCRTA between January and April 2019. The survey was designed to include a broad cross-section of riders, represents the most current rider data, and reflects a sample of about 500 riders. Bilingual surveys with 25 questions were geographically distributed throughout the service area, and the survey was also available online. Community outreach by agency staff and a public relations firm was conducted on buses, at transfer stations, in multiple city jurisdictions, and at colleges and universities to collect responses. Electronic tablets were primarily used to collect survey responses in the field, and the agency web site and social media were utilized to increase the volume of responses collected.

Questions specific to the Fare Equity Analysis included gender, age, race, geographic location, zip code, household income, and fare payment type. All riders who identified as non-white were classified as minorities. All riders whose household income and household size rendered them below the Federal poverty threshold were classified as low-income (Figure 3). The analysis looked at each group (all survey respondents, minority respondents, and low-income respondents) and compared total transit costs under both CCRTA's current and proposed fare structures.

Figure 3 2019 Federal Poverty Level Guidelines for the 48 Contiguous States and District of Columbia

Persons in Family/Household	Household Income Poverty Guideline	
1	\$12,490	
2	\$16,910	
3	\$21,330	
4	\$25,750	
5	\$30,170	
6	\$33,740	
7	\$38,060	
8	\$42,380	
For families/households with more than 8 persons, add \$4,420 for each additional person.		

Source: U.S. Department of Health & Human Services (2019)

Corpus Christi Regional Transportation Authority

Initial and Revised Recommendations

Initial fare recommendations were developed based on analysis conducted as part of the 2016 fare analysis and discussions among CCRTA staff. An initial equity analysis was conducted for this set of recommendations. After initial results were determined, CCRTA developed a revised set of recommendations designed to reduce impacts to minority and low-income riders. Existing, initial, and revised recommended fare schedules are provided in Figure 4.

The primary differences between the initial and revised recommendations were **reducing pass product multipliers**, **providing uniform pass products**, **and adding reduced fare options across fare categories to provide more options to help mitigate negative impacts for riders**. The proposed fare structure would also eliminate several products, including the \$0.10 reduced fare during off-peak hours, 11-Trip Commuter Pass, and free transfers. Approximately 24% of CCRTA riders are currently making transfers to complete their trips.

The proposed fare change results in a mix of increases to the base fare and decreases in the multipliers for pass products. The proposed fare change will provide consistency in fare products across fare categories, including Reduced fare categories—i.e., 1-Day, 7-Day, and 31-Day passes will be available for Regular, Reduced, Premium, and Premium Reduced fares as opposed to the existing structure, which does not allow pass products for premium service and only allows 31-Day passes for Reduced fares. Other fare structure changes to help offset negative impacts include **offering free service for seniors** (age 65 and older) and **formalizing existing policies related to CCRTA's token program** for use on B-Line service.

Historically, CCRTA has provided tokens to partner agencies, which function as a free pass or "buy one get one free" pass on CCRTA fixed-route service, depending on the token type. When passengers expressed interest in using tokens for B-Line service, CCRTA informally allowed use of tokens for free lunch trips to senior centers or trips to other destinations within the B-Line service area for a \$0.50 upcharge. While this informal policy has been in place for several years, proposed fare recommendations would formalize the policy to provide additional clarity for passengers, including posting the policy on the agency's website and publishing in written materials. Formalizing the policy will allow eligible passengers who may not be aware of it to make use of this option.

Corpus Christi Regional Transportation Authority

Figure 4 Existing Fare Structure, Initial Recommendations, and Revised Recommendations for CCRTA Fares

Fare Category	Existing Fare	Existing Multiplier/ Discount	Initial Recommendation	Initial Recommendation Multiplier/ Discount	Revised Recommendation	Revised Recommendation Multiplier/ Discount
Regular Fixed-Route						
Base Fare	\$0.75	-	\$1.00	-	\$1.00	-
Day Pass	\$1.75	2.33	\$2.25	2.25	\$2.00	2.0
7-Day Pass	\$7.50	10.0	\$8.00	8.0	\$8.00	8.0
31-Day Pass	\$30.00	40.0	\$35.00	35.0	\$35.00	35.0
Transfers	Free	-100%	Eliminated	-	Eliminated	-
Reduced Regular Fixed-Route – Students, Seniors, People with Disabilities		60+ currently receive 64 would pay full reg		Revised Recommenda	tions, seniors age 65+	would ride for free,
Reduced Fare (Peak Hours)	\$0.25	-	\$0.50	-	\$0.50	-
Reduced Fare (Off-Peak Hours)	\$0.10	-	-	-	-	-
Reduced Day Pass	-	-	-	-	\$1.00	2.0
7-Day Reduced Pass	-	-	-	-	\$4.00	8.0
31-Day Reduced Pass	\$11.00	44.0	\$15.00	30.0	\$15.00	30.0
Seniors Age 65+	\$11.00	44.0	\$15.00	30.0	Free	-100%
Premium						
Premium Fare	\$1.25	-	\$2.00	-	\$2.00	-
Premium Day Pass (valid on all services)	-	-	-	-	\$4.00	2.0
Premium 7-Day Pass (valid on all services)	-	-	-	-	\$16.00	8.0
Premium 31-Day Pass (valid on all services)	-	-	-	-	\$70.00	35.0
11-Trip Commuter Pass	\$12.50	-9.1%	\$20.00 (10-Trip)	-0.0%		

FARE EQUITY ANALYSISCorpus Christi Regional Transportation Authority

Fare Category	Existing Fare	Existing Multiplier/ Discount	Initial Recommendation	Initial Recommendation Multiplier/ Discount	Revised Recommendation	Revised Recommendation Multiplier/ Discount
Premium Reduced – Students and People with Disabilities	Note: Seniors age 60+ currently receive a premium reduced fare. In the Revised Recommendations, seniors age 65+ for free, while riders age 60-64 would pay full premium fare.			s age 65+ would ride		
Premium Reduced Fare	\$0.25	-	\$1.00	-	\$1.00	-
Premium Reduced Day Pass (valid on all services)	-	-	-	-	\$2.00	2.0
Premium Reduced 7-Day Pass (valid on all services)	-	-	-	-	\$8.00	8.0
Premium Reduced 31-Day Pass (valid on all services)	-	-	-	-	\$30.00	30.0
Seniors Age 65+	\$0.25	-	\$1.00	-	Free	-100%
B-Line	Note: Recommendations for B-Line include formalizing the \$0.50 upcharge policy for tokens.					
B-Line Regular Fare (trips within ADA service area)	\$1.25	-	\$2.00	-	\$2.00	-
B-Line Regular Fare + \$2.00 Surcharge (trips outside ADA service area)	\$3.25	-	\$4.00	-	\$4.00	-
B-Line Regular Fare 10-Trip Pass (trips within ADA service area)	-	-	\$20.00	0.0%	\$20.00	0.0%
B-Line Regular Fare + Surcharge 10-Trip Pass (trips outside ADA service area)	-	-	\$40.00	0.0%	\$40.00	0.0%
B-Line Pass	\$50.00	40.0	-	-	-	-

Corpus Christi Regional Transportation Authority

Fare Change Analysis

Under the recommended fare change proposal, CCRTA riders would see an overall increase in average fare and pass prices. The current Title VI policies of CCRTA were used to determine whether the proposed fare changes would distribute positive and negative impacts equitably. The current policy for disparate impacts1 states:

A disparate impact exists when fares which have been identified as more utilized by minorities or persons with incomes below the poverty level will be raised faster than the base rate. Similarly, if a fare is less utilized and will see changes more favorable than the base rate, a disparate impact exists.

According to this policy, any difference in percentage change of transit cost experienced by low-income and minority groups compared to the total service area results in a disparate impact.

The existing and recommended fare structures are provided in Figure 6. Results from this analysis show that all riders, including minority riders and low-income riders, will experience an increase in total transit costs under the proposed fare structure.

To calculate the average percent change in cost (Figure 5), the type of service, pass product, and fare currently paid was determined for all survey respondents, survey respondents identifying as non-white, and survey respondents below the poverty level. Each survey respondent was then assigned a new fare type according to the recommended fare structure. The percent change in trip cost for each survey respondent was then averaged to determine the percent change in average cost per trip for all riders, minority riders, and low-income riders.

On average, all riders would experience a 9.0% increase in transit costs. Minorities would pay 2.8% higher fares than under the existing fare structure—less than the 9.0% increase anticipated for riders as a whole. The percent change in average cost per trip is greatest for low-income riders, who would, on average, see a 33.2% increase in costs.

Impacts to low-income passengers appear high in part due to the removal of the \$0.10 reduced fare during off-peak hours. While the change from \$0.10 to \$0.50 represents a 500% increase, it also addresses a key goal of the fare change by simplifying the fare structure, making fare payments easier to understand, and helping CCRTA meet goals and obligations related to farebox recovery. Proposed mitigation elements for low-income populations include reduced pass product multipliers, reduced fare options across all fare categories, and free fixed-route service for seniors age 65 and above.

Figure 5	Change in Cost by	y Demographic Group

Respondent Group	Total Respondents	Average % Change in Cost	Difference from All Riders	Allowed Difference
All Riders	502	9.0%	-	-
Minority Riders	292	2.8%	-6.2%	0%
Low-income Riders	222	33.2%	24.2%	0%

¹ CCRTA's existing "disparate impacts" policy applies to both minority and low-income populations. The agency intends to develop separate "disparate impact" and "disproportionate burden" policies to apply to minority and low-income populations as part of the next scheduled Title VI Program update.

FARE EQUITY ANALYSISCorpus Christi Regional Transportation Authority

Figure 6 **Existing and Recommended Fare Structure**

Fare Category	Existing Fare	Recommendation		
Regular Fixed-Route				
Base Fare	\$0.75	\$1.00		
Day Pass	\$1.75	\$2.00		
7-Day Pass	\$7.50	\$8.00		
31-Day Pass	\$30.00	\$35.00		
Transfers	Free	-		
Reduced Regular Fixed-Route – Students, Seniors, People with Disal	bilities			
Reduced Fare (Peak Hours)	\$0.25	\$0.50		
Reduced Fare (Off-Peak Hours)	\$0.10	-		
Reduced Day Pass	-	\$1.00		
7-Day Reduced Pass	-	\$4.00		
31-Day Reduced Pass	\$11.00	\$15.00		
Seniors Age 60-64	Dodugod	Regular		
Seniors Age 65+	Reduced	Free		
Premium				
Premium Fare	\$1.25	\$2.00		
Premium Day Pass (valid on all services)	-	\$4.00		
Premium 7-Day Pass (valid on all services)	-	\$16.00		
Premium 31-Day Pass (valid on all services)	-	\$70.00		
11-Trip Commuter Pass	\$12.50	-		
Premium Reduced – Students, Seniors, People with Disabilities				
Premium Reduced Fare	\$0.25	\$1.00		
Premium Reduced Day Pass (valid on all services)	-	\$2.00		
Premium Reduced 7-Day Pass (valid on all services)	-	\$8.00		
Premium Reduced 31-Day Pass (valid on all services)	-	\$30.00		
Seniors Age 60-64	Premium Reduced	Premium		
Seniors Age 65+	Fremium Reduced	Free		
B-Line				
B-Line Regular Fare (trips within ADA service area)	\$1.25	\$2.00		
B-Line Regular Fare + \$2.00 Surcharge (trips outside ADA service area)	\$3.25	\$4.00		
B-Line Regular Fare 10-Trip Pass (trips within ADA service area)	-	\$20.00		
B-Line Regular Fare + Surcharge 10-Trip Pass (trips outside ADA service area)	-	\$40.00		
B-Line Pass	\$50.00	-		

FARE CHANGE MITIGATION

Because a potential disparate impact on low-income riders was identified as a possible outcome of CCRTA's proposed fare changes, the agency worked diligently to modify the proposal in order to avoid, minimize, and mitigate those impacts, as required by FTA Title VI guidance. The modified fare proposal achieves goals identified in the 2016 fare analysis with a streamlined menu of fare and pass products as compared to the existing fare structure. In addition, all proposed fares and passes still have similar or lower prices than peer agencies.

Initial and Revised Recommendations Percent Cost Increase Analysis

As described previously, this Fare Equity Analysis included an initial and revised set of recommendations; after initial results were determined, CCRTA developed a revised set of recommendations designed to reduce impacts to minority and low-income riders. Figure 7 highlights the average percent increase in cost for riders in the initial and revised recommendations. The primary differences between the initial and revised recommendations were reducing pass product multipliers, providing uniform pass products, and adding reduced fare options across fare categories to provide more options to help mitigate negative impacts for riders.

Figure 7 Percent Increase in Cost for Riders

Rider Category	Initial Recommendation	Revised Recommendation
Total Riders	9.4%	9.0%
Minority Riders	3.4%	2.8%
Low-Income Riders	33.6%	33.2%

Additional information about options considered and mitigation elements included in the revised recommendations is provided below.

Initial Recommendations Options Considered

Several options from the initial recommendations were considered for modification in the revised recommendations but deemed infeasible:

- Elimination of off-peak reduced fare. The impacts to low-income passengers appear high in part due to the removal of the \$0.10 reduced fare during off-peak hours. While the change from \$0.10 to \$0.50 represents a 500% increase, it also addresses a key goal of the fare change by simplifying the fare structure and making fare payments easier to understand—charging different fares for specific fare categories at different times of day creates confusion for both operators and passengers. Importantly, eliminating off-peak fares will also help CCRTA meet goals and obligations related to farebox recovery; as discussed previously, CCRTA must generate approximately \$1.8 million in operating revenue annually. As such, CCRTA plans to move forward with eliminating off-peak reduced fares.
- Elimination of transfers. Increasing farebox revenue in keeping with peer agencies and agency obligations is one of the goals of these fare recommendations. While eliminating transfers does affect existing riders in terms of cost—approximately 24% of CCRTA riders currently make transfers to complete their trip—this recommendation also has the largest impact on increasing fare revenue, according to CCRTA's fare analysis. Eliminating transfers will help CCRTA meet farebox recovery goals and obligations with respect to generating \$1.8 million in operating

Corpus Christi Regional Transportation Authority

revenue annually. As such, CCRTA has elected to move forward with the recommendation to eliminate transfers.

Revised Recommendations Proposed Mitigation

Revised modifications to the proposed fare changes include the following items, which will significantly reduce or eliminate any disparate impacts for minority and/or low-income riders:

- **Reduced pass product multipliers.** The existing Day Pass multiplier will be reduced from 2.33 to 2.0 to reduce the fare burden for passengers currently using transfers to complete their trip.
- Reduced fare options across all fare categories to provide more options to help mitigate negative impacts for low-income students and individuals with disabilities. Reduced price Day Pass, 7-Day Pass, and commuter fares across all fare types are not currently offered. While it was not possible to quantify how many existing riders will switch to this new product, it is expected to be widely used and is likely to help minority and low-income riders.
- Free fixed-route service for seniors age 65 and above to further help mitigate negative impacts for low-income and minority riders in this age group.
- Continued offering of discounted passes and tokens through human service agencies. The existing program to offer CCRTA reduced-price passes through social service agencies will be sustained to continue offering discounted and free transit passes. These agencies have successfully partnered with CCRTA, administer other means-tested benefits, and will continue to ensure that anyone who cannot afford a regular CCRTA pass can access discounted products.
- Formalized use of tokens for B-Line service with payment of an upcharge. Formalizing the policy allowing passengers to use tokens toward B-Line service for an upcharge of \$0.50 will provide additional clarity for passengers, including allowing additional eligible passengers to make use of this option.

Together, these measures to modify the original fare change proposal help ensure that any disparate impact or disproportionate burden is minimized and mitigated to the greatest extent possible.