

Title VI Service Equity Analysis Fleet Forward 2022 Long Range System Plan Service Improvements



CORPUS CHRISTI REGIONAL TRANSPORTATION AUTHORITY

August 2023 updated May 2024

Prepared in accordance with Federal Transit Administration Circular 4702.1B

Introduction

With respect to the COVID-19 pandemic in which the World Health Organization declared a global pandemic on March 12, 2020, the Fleet Forward 2022 Long Range System Plan (LRSP) was completed in December 2022 to provide the Corpus Christi Regional Transportation Authority (CCRTA) with a plan to increase ridership levels through the identification of innovative service improvements to meet customer needs. In addition, the LRSP contains defined service implementation timelines, prioritized capital investments including bus stop amenities outlined within annual operating, capital improvements, and financial plans through year 2027 and beyond. The LRSP included multiple opportunities for community input, including on-board surveys, surveys from social media outlets, public meetings, and stakeholder discussions.

Per the Federal Transit Administration's (FTA) Title VI Circular 4702.1B, transit providers that operate 50 or more fixed route vehicles in peak service and are located in an urbanized area (UZA) with a population of 200,000 or more, must perform a service equity analysis when implementing a major service change. The CCRTA, as a recipient of federal financial assistance, will ensure full compliance with the Title VI, as amended and related statutes and regulations in all programs and activities. In compliance with this requirement and following its own internal policies, the CCRTA actively monitors its programs and services to ensure discrimination does not occur either intentionally or unintentionally. Additionally, as the CCRTA is a recipient of U.S. Department of Transportation (DOT) funds, the CCRTA is required to follow FTA guidance regarding decisions having adverse impacts on minorities or low-income populations in compliance with Presidential Executive Order 12898 (Feb. 11, 1994).

The CCRTA is conducting a Title VI Service Equity Analysis for the proposed impacts on CCRTA's service levels per the LRSP recommended service improvements. This Title VI service equity analysis will:

- Determine whether the proposed changes constitute a major service or not,
- Evaluate how the proposed changes may impact low-income and minority populations, and
- Identify strategies to avoid, minimize, or mitigate any disproportionate burdens, disparate impacts, or any potentially negative outcomes.

Relevant Policies

This CCRTA service equity analysis was completed in accordance with FTA regulations outlined in FTA Circular 4702.1B, "Title VI Requirements and Guidelines for Federal Transit Administration Recipients." The circular requires this analysis to ensure or minimize any disparate impact on minority populations or disproportionate burden on low-income populations.

Disparate Impact Definition

Refers to a facially neutral policy or practice that disproportionately affects members of a group identified by race, color, or national origin, where the recipient's policy or practice lacks a substantial legitimate justification and where there exists one or more alternatives that would

serve the same legitimate objectives but with less disproportionate effect on the basis of race, color, or national origin. (FTA Circular 4702.1B, Chap. I-2)

Disproportionate Burden Definition

Refers to a neutral policy or practice that disproportionately affects low-income populations more than non-low-income populations. A finding of disproportionate burden requires the recipient to evaluate alternatives and mitigate burdens where practicable. (FTA Circular 4702.1B, Chap. I-2)

Each transit agency is responsible for establishing a threshold for what constitutes a “major” service change as well as what differential is considered a disparate impact or disproportionate burden.

Disparate Impact Policy

A disparate impact exists if a major service change, fare change, or fare media change requires a minority population to bear adverse effects by 20 percent or more than the adverse effects borne by the general population in the affected area.

Disproportionate Burden Policy

A disproportionate burden exists if a major service change, fare change, or fare media change requires a low-income population to bear adverse effects by 20 percent or more than the adverse effects borne by the general population in the affected area.

Major Service Change

In 2023, the CCRTA completed its FTA Triennial Title VI Program. Per CCRTA’s Service Standards, a major service change is any service change that:

- Permanently adds or deletes 25% of route miles to a route, or
- Permanently adds or deletes 25% of the average daily revenue hours to a route

Summary of Proposed Changes

Within the LRSP, the CCRTA has proposed major service changes to 24 route services including Routes 5, 6, 15, 17, 19, 23, 24, 25, 29, 30, 32, 34, 35, 37, 50, 53, 54, 55, 56, 60, 76, 78, 93 and 95, which is to be implemented in two phases.

Major Service Change Matrix

Table 1: Fleet Forward Long Range System Plan Proposed Major Service Change Improvements

Route	Day of Week	Proposed Service Improvement or Change
Route 5 Alameda	Weekdays/ Saturdays/ Sundays	<ul style="list-style-type: none"> • Extend routing to Staples Street Station. • Interline with Route 76.
Route 6 Santa Fe/Malls	Weekdays/ Saturdays/ Sundays	<ul style="list-style-type: none"> • Restructure routing in downtown area to service Water Street • Add service on Sunday
Route 15 Kostoryz/Carroll High School	Weekdays/ Saturdays/ Sundays	<ul style="list-style-type: none"> • Restructure routing to operate between Port Ayers and Southside Stations.
Route 17 Carroll/Southside	Weekdays/ Saturdays/ Sundays	<ul style="list-style-type: none"> • Restructure routing to operate between Port Ayers and Southside Stations.
Route 19 Ayers	Weekdays/ Saturdays/ Sundays	<ul style="list-style-type: none"> • Simplify routing, remove branches, and extend all trips to Flour Bluff.
Route 23 Molina	Weekdays/ Saturdays/ Sundays	<ul style="list-style-type: none"> • Extend routing to the Greenwood Walmart.
Route 24 Airline/Yorktown	Weekday/ Saturdays	<ul style="list-style-type: none"> • Extend routing to Southside Stations • Remove pilot status and turn to regular route
Route 25 Gollihar/Greenwood	Weekdays/ Saturdays/ Sundays	<ul style="list-style-type: none"> • Discontinue service and replace with extension of Route 23.
Route 29 Staples	Weekdays/ Saturdays/ Sundays	<ul style="list-style-type: none"> • Extend routing to TAMU-CC and operate more frequently.
Route 30 Westside/Health Clinic	Weekdays/ Saturdays	<ul style="list-style-type: none"> • Discontinue service due to low ridership.
Route 32 Southside	Weekdays/ Saturdays/ Sundays	<ul style="list-style-type: none"> • Restructure routing to serve key destinations along Saratoga Boulevard.
Route 34/35 Robstown	Weekdays/ Saturdays/ Sundays	<ul style="list-style-type: none"> • Expand service • Add Sunday service
Route 37 Crosstown	Weekdays/ Saturdays/ Sundays	<ul style="list-style-type: none"> • Discontinued service. Replace with extended Routes 19 and 29.
Route 50 Calallen/NAS-CC Express	Weekdays	<ul style="list-style-type: none"> • Consolidate routing with Route 53.
Route 53 Robstown/ NAS-CC Express	Weekdays	<ul style="list-style-type: none"> • Discontinue service. Consolidate with Route 50.

Route 54 Gregory/ Downtown Express	Weekdays	<ul style="list-style-type: none"> Discontinue service due to low ridership.
Route 76 Harbor Bridge Shuttle	Weekdays/ Saturdays/ Sundays	<ul style="list-style-type: none"> Restructure routing in downtown area Interline with Route 5 Expand evening Service Fri-Sat
Route 78 North Beach	Weekdays/ Saturdays/ Sundays	<ul style="list-style-type: none"> Restructure routing in North Beach and Staple Street Station Expand service to Sunday.
Route 95 Port Aransas Express	Weekdays/ Saturdays/ Sundays	<ul style="list-style-type: none"> Expand service hours until approximately 1AM

Summary of Public Outreach Activities

To collect community feedback on the proposed service changes, the CCRTA held outreach events during the Spring and Fall timeframes in 2022. CCRTA staff held multiple pop-up events at transfer stations, a public meeting to present the proposed service changes, and stakeholder meetings to collect feedback. Comments from the outreach activities were incorporated into the final proposed changes analyzed in this document.

Rider Surveys

In addition to the pop-up events, stakeholders and public workshops, the CCRTA issued multiple rider surveys. The survey asked riders for general opinions about the proposed service changes and collected information on respondent demographics so the results could be considered in a Title VI context. The survey distribution was not extensive enough to ensure statistical validity, but a target number of complete responses was set for each route (proportional to ridership) and in total to make every effort for an accurate representation.

Summary of Findings

This analysis finds that the proposed changes, when examined in context, do not suggest that the service changes as a whole cause a disparate impact or disproportionate burden. Thus, no additional mitigation measures are necessary.

Service Equity Analysis

The service equity analysis has three key parts:

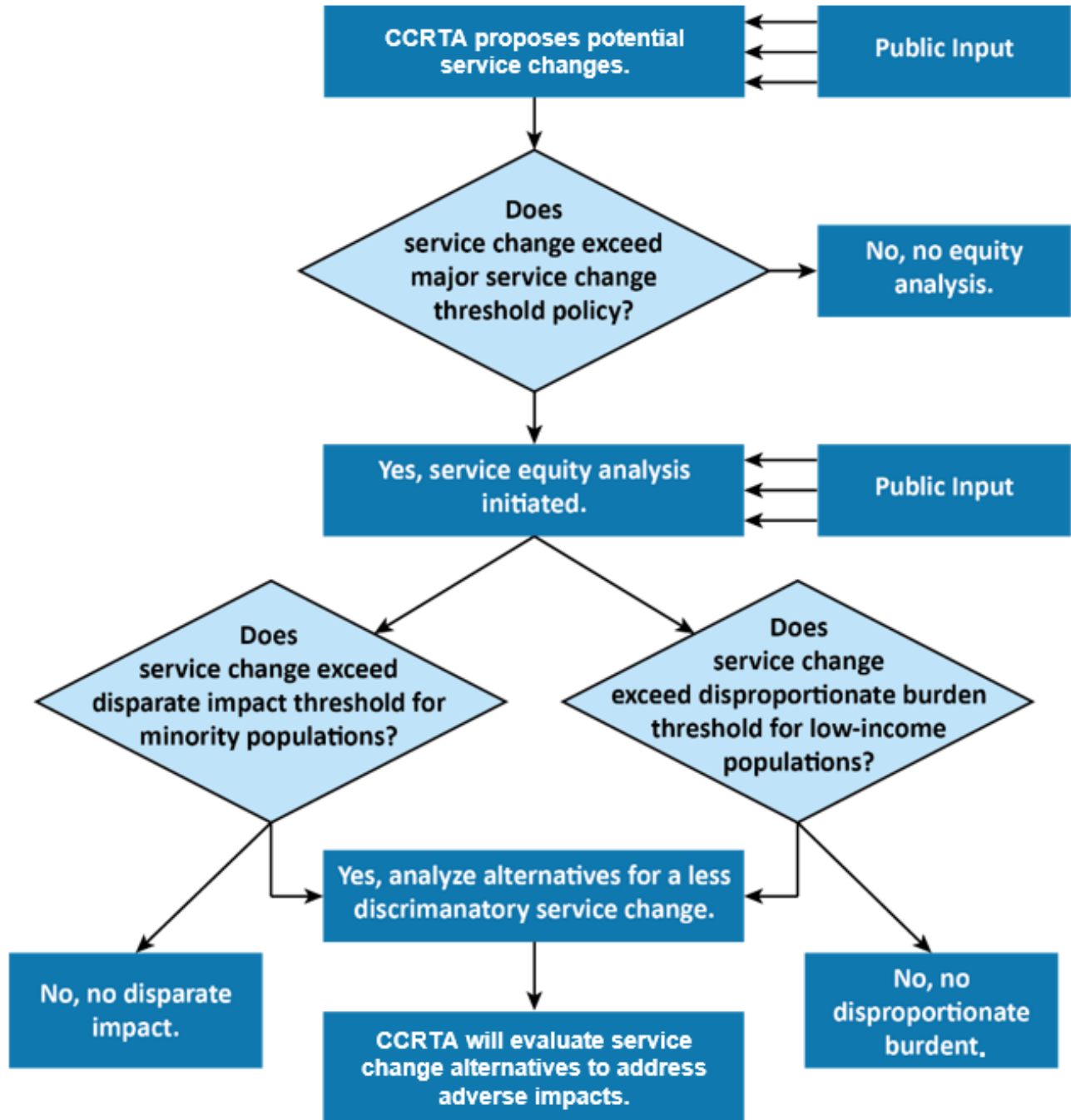
- First, proposed service changes are analyzed to determine if those changes meet the major service change threshold as defined by CCRTA's Service Standards.
- If any of the proposed service changes meet the major service change threshold,

then the proposed route changes are analyzed to determine if those changes create a disparate impact or disproportionate burden according to CCRTA's Service Standards.

- If a disparate impact or disproportionate burden is found, then mitigation measures will be recommended for the proposed service changes so that they no longer create a disparate impact or disproportionate burden.

Figure 1 below outlines CCRTA’s Title VI service equity analysis process. Because of the combination of proposed changes, CCRTA focused on analyzing the proposed major service changes to provide the necessary information for decision making purposes related to the proposed service changes.

Figure 1: CCRTA Title VI Service Equity Analysis



Data Sources

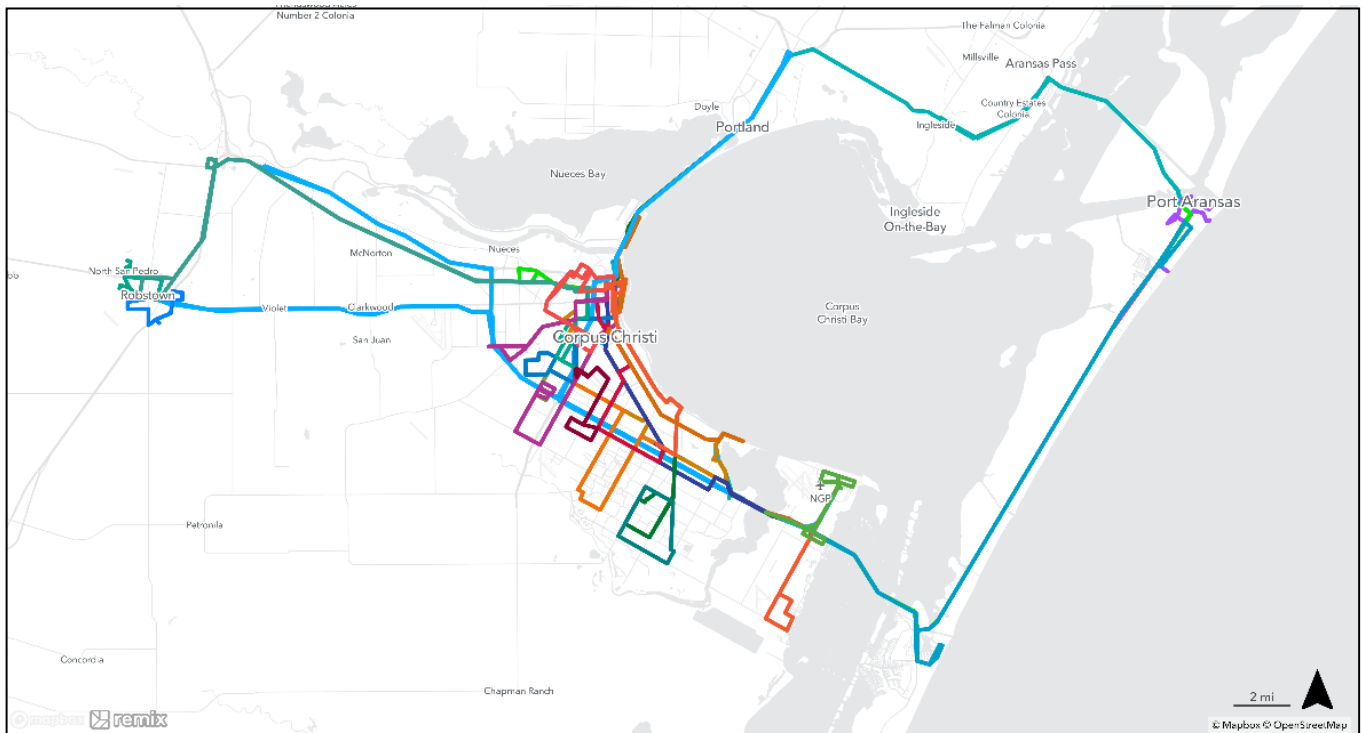
Data sources used to perform the Title VI Service Equity Analysis include the U.S. Census Bureau demographic data from the U.S. Census Bureau American Community Survey (ACS) 5-year, 2017-2021, CCRTA Bus Route and Stops General Transit Feed Specification (GTFS) data, and survey results collected as part of the LRSP community engagement efforts.

System Overview

The CCRTA provides public transportation services within the Coastal Bend of South Texas encompassing 846 square miles with an estimated population of 400,000. Cities within the service area include Agua Dulce, Banquete, Bishop, Corpus Christi, Driscoll, Gregory, Port Aransas, Robstown, San Patricio and unincorporated areas of Nueces County.

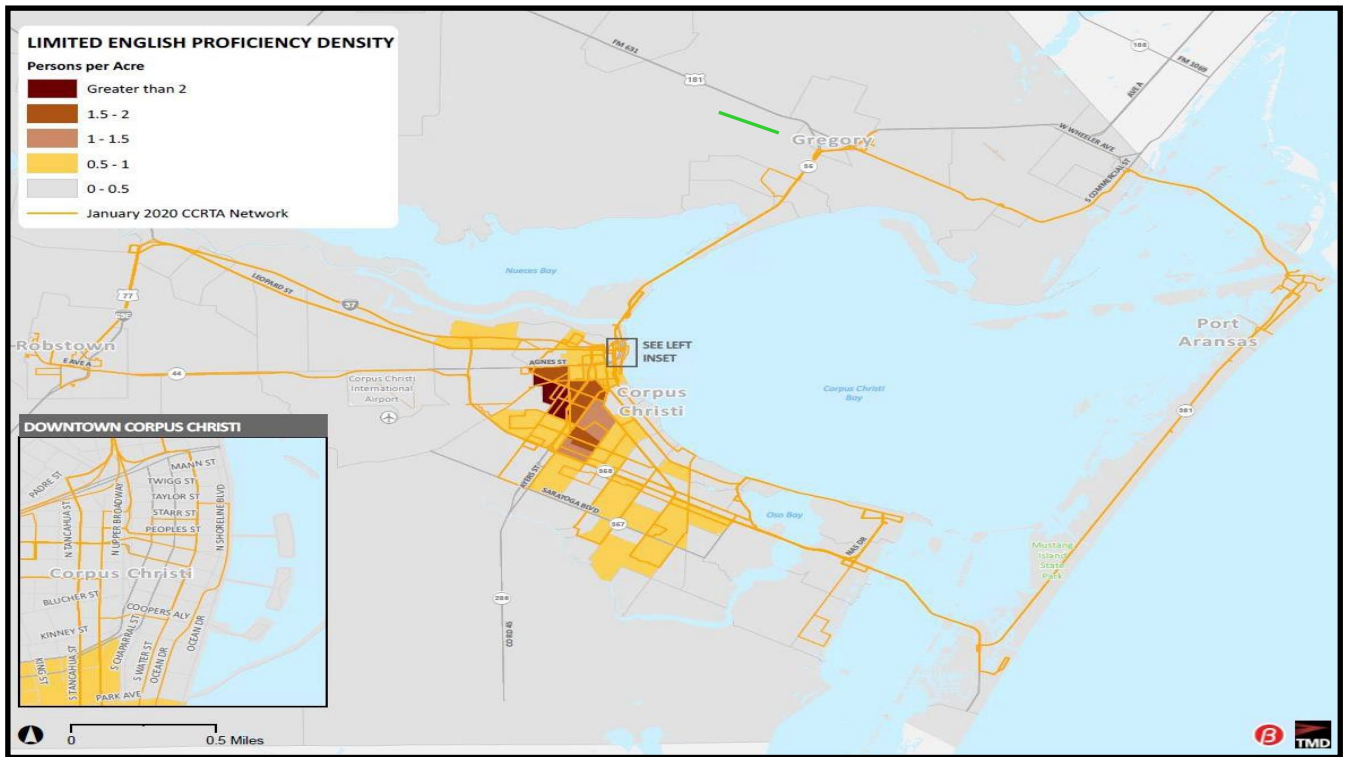
Currently, CCRTA is operating 31 services including 24 Fixed-route, 1 Flex, 1 Flexi-B on-demand, and 5 Commuter Express services. In addition, the CCRTA continues to provide contracted B-Line Paratransit service, contracted on-demand service in rural areas, and administers a contracted Vanpool program.

Figure 2: Current Bus Service Network (Year 2023)



Service Area Demographics Analysis

Figure 3: Limited English Proficiency Population Density



The CCRTA conducted a demographic analysis of minority and low-income populations within a half mile of CCRTA transit stops compared to minority and low-income populations in CCRTA’s service area, to determine if CCRTA is adequately serving minority and low-income populations. For the purpose of this analysis, minority is defined as all race/ethnicity groups except for non-Hispanic white. Low-income is defined as any individual below the federal poverty line.

As part of this analysis, CCRTA produced maps of minority density (Figure 4) and low-income density (Figure 5) in the Corpus Christi area. These maps show that the highest densities of minority populations and low-income populations are to the south and southeast of downtown Corpus Christi, with significant portions of both populations to the west of downtown and in Robstown.

Figure 4: Minority Density within Service Area

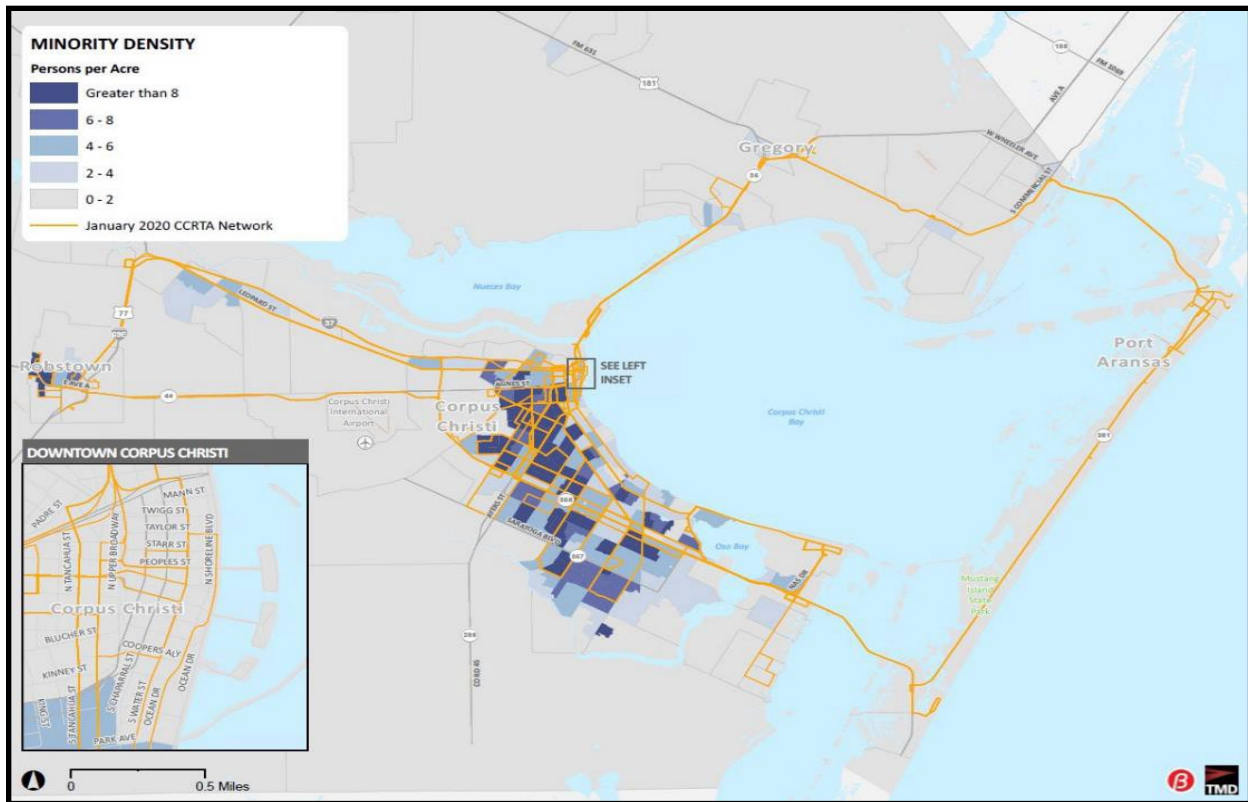


Figure 5: Low-Income Density within Service Area

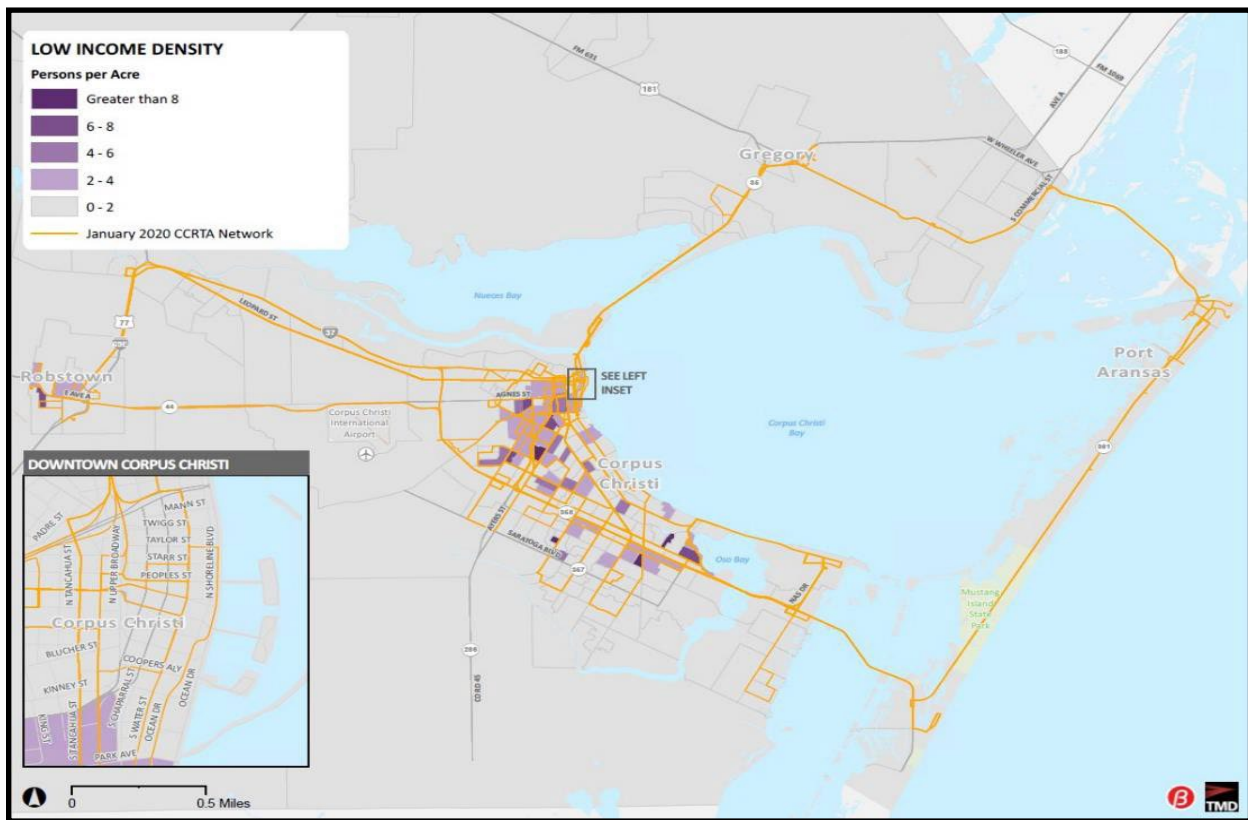


Table 2: 2023 Poverty Guidelines for the 48 Contiguous States and D.C.

Persons in Family/Household	Poverty Guideline	100 Percent of Poverty Guideline
1	\$14,580	\$14,580
2	\$19,720	\$19,720
3	\$24,860	\$24,860
4	\$30,000	\$30,000
5	\$35,140	\$35,140
6	\$40,280	\$40,280
7	\$45,420	\$45,420
8	\$50,560	\$50,560
For families/households with more than 8 persons, add \$5,140 for each additional person.		

Source: U.S. Department of Health and Human Services (HHS) Poverty Guidelines for 2023 <https://aspe.hhs.gov/topics/poverty-economic-mobility/poverty-guidelines>

In addition, CCRTA has completed an analysis of minority and low-income populations within a half mile of CCRTA bus stops, and identified the areas that have above average minority (Figure 6) and low-income (Figure 7) populations. The findings are largely similar to the population density maps, with above average minority and low-income populations to the south of downtown Corpus Christi and in Robstown.

Figure 6: Census Tracts with Above Average Minority Population within 1/2 Mile Walkshed of Bus Stops

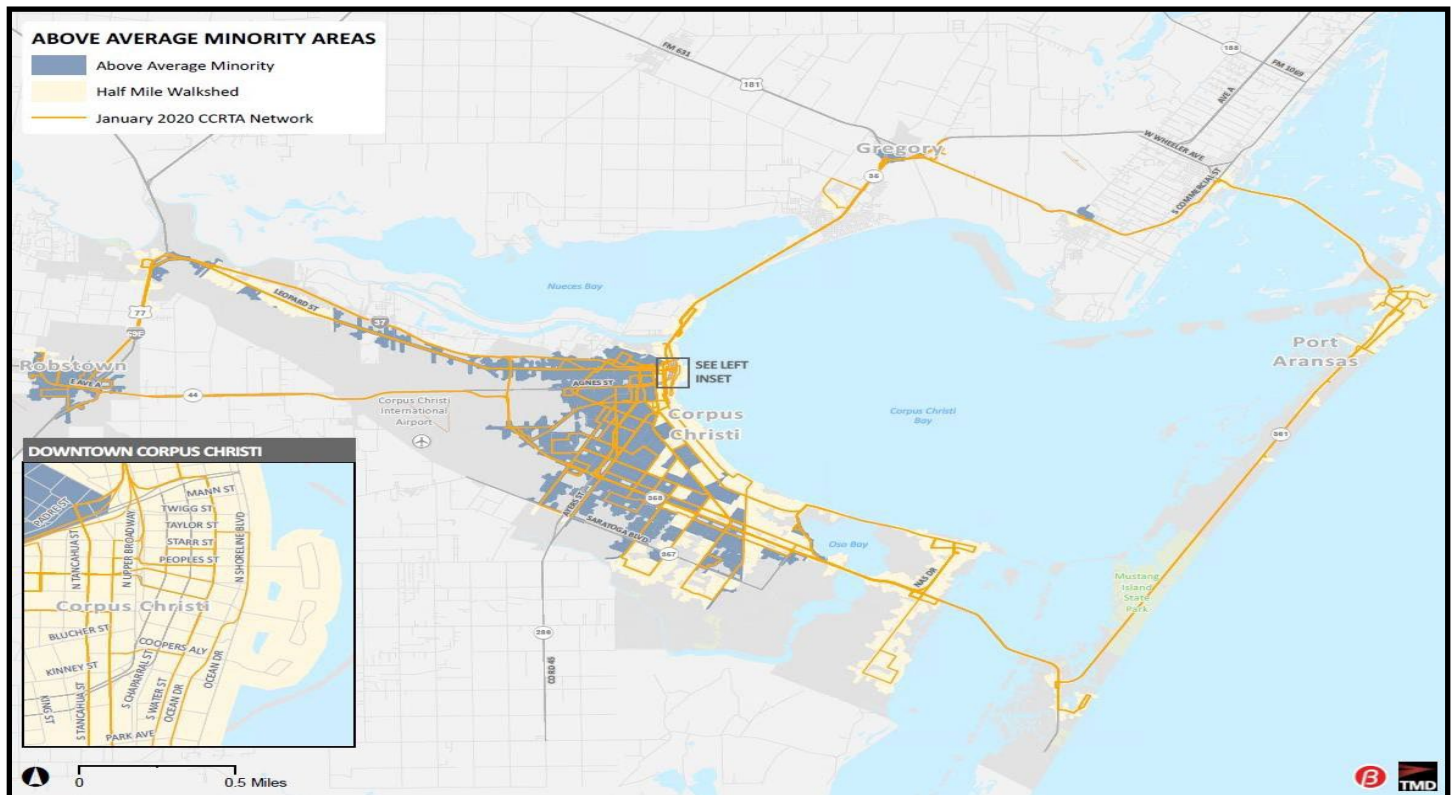


Figure 7: Census Tracts with Above Average Low-Income Population within 1/2 Mile Walkshed of Bus Stops

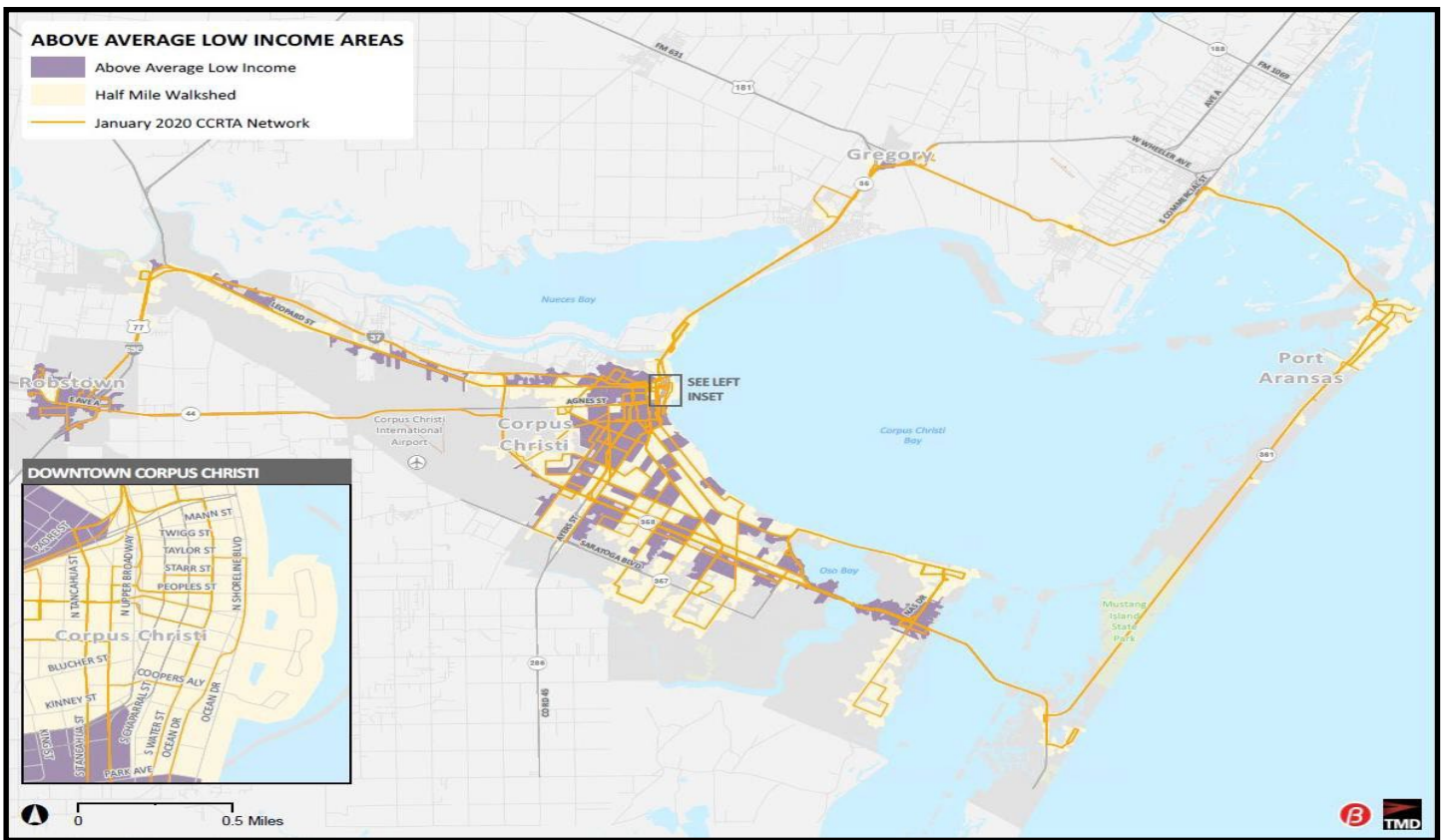


Table 3 below compares the percentage of minority and low-income populations within a half mile of bus stops to the percentage of minority and low-income populations within the service area overall. The percentage of minority and low-income populations within a half mile of a CCRTA service is greater than the percentage of minority and low-income populations overall, indicating that CCRTA provides appropriate service to minority and low-income populations.

Table 3: Title VI Populations within Service Area and within 1/2 Mile of CCRTA Bus Stops

	Total Service Area Population	Minority/Low-Income Population	Service Area Percentage	Population Within 1/2 Mile of CCRTA Stops	Minority/Low-Income Population	Within 1/2 Mile of CCRTA Stops Percentage
Minority	337,173	237,782	70.5%	225,113	170,022	75.5%
Low-Income	337,173	54,773	16.2%	225,113	43,067	19.1%

In addition to identifying areas with above average minority and low-income populations system-wide, CCRTA has identified which routes have an above average percentage of minority and low-income populations within 1/2 mile of the stops served by each route. Tables 4 and 5 below identify routes with above average minority and low-income populations within 1/2 mile of stops, respectively.

Table 4: Above Average Minority Routes

Route	Percent Minority
12	94%
15	85%
16	92%
17	76%
19	84%
21	94%
23	90%
25	96%
27	79%
28	88%
30	96%
32	76%
34	94%
35	96%
37	82%
53	88%
54	80%
83	81%

Table 5: Above Average Low-Income Routes

Route	Percent Low-Income
12	29%
16	31%
19	23%
21	31%
23	28%
25	23%
28	23%
30	28%
34	33%
35	50%
37	24%
53	35%
54	30%
60	28%
76	25%
83	28%

Routes not listed include 3, 4, 5, 6, 26, 29, 50, 51, 55, 56, 65, 78, 94, and 95 which are neither above average minority nor low-income.

Major Service Change Policy

In compliance with CCRTA's Service Standards and FTA Circular 9030.1E, CCRTA evaluates service changes to determine whether or not a major service change is required. Service changes which permanently adds or deletes 25% of route miles to a route or adds or deletes 25% of the average daily revenue hours to a route is considered a Major Service Change. For proposed major service changes, a Title VI service or fare equity analysis will be presented to the Board of Directors prior to approval to implement service improvements or modifications.

Ridership and Performance Monitoring

In regard to the LRSP service improvements, the CCRTA has been monitoring trip level passenger loads on existing route services on a daily, weekly, monthly, and annual basis.

Major Service Change Threshold Analysis Results

Within the LRSP service improvements planned for implementation, fixed route services proposed to exceed the Major Service Change threshold are listed in Tables 6 and 7 below.

Current Weekday Service Level Changes:

- 24 routes trigger CCRTA's threshold for Major Service Change

Current Saturday Service Level Changes:

- 15 routes trigger CCRTA's threshold for Major Service Change

Current Sunday Service Level Changes:

- 21 routes trigger CCRTA's threshold for Major Service Change

Table 6: Population within ¼ Mile of CCRTA Stop by Minority Status, Existing and Proposed

Route	Existing		Proposed		Difference	
	Total Population Within 1/4 Mile	Percent Minority	Total Population Within 1/4 Mile	Percent Minority	Percent Point Change Minority	Disparate Impact
5	17,719	58.2%	16,541	57.7%	-0.5%	No
6	31,595	56.4%	30,322	55.8%	-0.5%	No
15	20,610	87.4%	31,569	80.1%	-7.3%	No
17	22,835	76.8%	12,201	85.1%	8.3%	No
19	28,591	83.2%	31,495	76.1%	-7.1%	No
23	22,986	89.6%	24,419	89.9%	0.3%	No
24	0	0	23,351	70.4%	70.4%	No
29	30,216	70.6%	25,778	68.5%	-2.1%	No
32	28,918	79.4%	18,781	81.4%	2.0%	No
34	5,087	95.6%	5,087	95.6%	0.0%	No
35	3,051	95.4%	3,051	95.4%	0.0%	No
50	451	59.0%	1,062	72.5%	13.5%	No
76	3,169	62.1%	1,891	59.5%	-2.6%	No
78	2,035	52.4%	3,828	53.7%	1.3%	No
93	4,289	47.5%	11,341	66.0%	18.5%	No
95	1,972	39.5%	1,991	39.3%	-0.2%	No

Table 7: Population within ¼ Mile of CCRTA Stop by Income Status, Existing and Proposed

Route	Existing		Proposed		Difference	
	Total Population Within 1/4 Mile	Percent Low-income	Total Population Within 1/4 Mile	Percent Low-income	Percent Point Change Minority	Disparate Impact
5	17,719	14.0%	16,541	13.7%	-0.3%	No
6	31,595	14.9%	30,332	14.3%	-0.6%	No
15	23,610	20.4%	31,569	19.1%	-1.3%	No
17	22,835	21.8%	12,201	24.0%	2.2%	No
19	28,591	21.8%	31,495	22.4%	0.6%	No
23	22,986	28.5%	24,419	27.6%	-0.9%	No
24	0	0.0%	23,351	15.8%	15.8%	No
29	30,216	25.0%	25,778	22.2%	-2.8%	No
32	28,918	17.9%	18,781	20.0%	2.1%	No
34	5,807	32.8%	5,807	32.8%	0.0%	No
35	3,051	55.4%	3,051	55.4%	0.0%	No
50	451	13.0%	1,062	18.4%	5.4%	No
76	3,169	23.5%	1,891	23.0%	-0.5%	No

78	2,035	27.00%	3,828	29.2%	2.2%	No
93	4,289	25.3%	11,341	27.8%	2.5%	No
95	1,972	20.3%	1,991	20.2%	-0.1%	No

Title VI Service Equity Analysis Summary

The service equity analysis determined that the proposed LRSP service improvements did not lead to any disparate impacts or disproportionate burdens. Despite certain fixed route services being suspended or experiencing reduced levels due to decreased ridership demand, the impacted areas continued to receive fixed route service.

In instances where service suspensions or reductions occurred, efforts were made to maintain duplicate or nearby existing routes in those areas. Additionally, bus stops were not closed or temporarily affected, as alternative services continued to serve those locations.

With system-wide span of service reductions in place, the impact was evenly distributed across the entire service area. This approach aimed to minimize service disruptions by avoiding direct service impacts on specific geographic areas within the service zone as much as possible.