



Title VI Service Equity Analysis for August 2021 Service Changes

Prepared May 2021

Purpose

In compliance with Title VI of the Civil Rights Act of 1964, the Federal Transit Administration (FTA) requires all transit agencies receiving federal funding to monitor the performance of their systems, ensuring services are made available and/or distributed equitably. Each transit agency must develop a Title VI Program to document its policies and procedures for meeting FTA requirements. The DART Title VI Program (last updated in May 2019) stipulates that any major service change must be evaluated to determine its impact on minority (race, ethnicity or national origin) and low-income populations.

The Des Moines Area Regional Transit Authority (DART) is the primary fixed-route transit operator serving the Des Moines Metropolitan Area and the largest public transit agency in Iowa. The agency serves 11 cities and other parts of Polk County. Member communities include: Altoona, Ankeny, Bondurant, Clive, Des Moines, Grimes, Johnston, Pleasant Hill, Urbandale, West Des Moines, and Windsor Heights. DART operates Local, Express, Shuttle, and On-Call services.

This Title VI analysis will perform the following functions:

- Describe the August 2021 service changes that continue to be in effect
- Determine whether the changes constitute a “major service change” or not,
- Evaluate how the 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

DART’s Service and Fare Equity Policy (approved by the Commission in March 2019 and included in DART’s 2019 Title VI Program Update) outlines how Title VI analysis should be performed for any major service change. The following definitions apply to this service change Title VI analysis:

- *Major Service Change*: A major service change is when 25 percent or more of a route’s revenue hours or revenue miles is added or reduced, or when the total revenue hours for the system are expanded or reduced by 10 or more percent. (DART 2019 Title VI Program Update, Service and Fare Equity Policy)
- *Disparate Impact*: DART will consider a proposed major service change to have a disparate impact if the affected route’s minority population is more than 5 percentage points greater than the system average.
- *Disproportionate Burden*: DART will consider a proposed major service change to have a disproportionate burden if the affected route has a low-income population more than 5 percentage points greater than the system average.

Proposed Route Changes for August 2021

The scope of the August 2021 service changes are to restore service to routes still impacted by reductions due to COVID-19. Table 1 lists the changes in service levels proposed for August 2021.

Table 1 Service Changes for August 2021

Route	Proposed Service Changes
D-Line – Downtown Shuttle	<ul style="list-style-type: none">• Increase frequency from 15 minutes to 10 minutes. This action is restoring full service to the shuttle route, which was reduced in March 2020 due to the COVID-19 Pandemic.
98 – Ankeny Express	<ul style="list-style-type: none">• Restore a round trip in the morning. This action is restoring a trip which was suspended in March 2020 due to the COVID-19 Pandemic.

Impact of Service Changes

DART policy requires that all major service changes be evaluated for any potential disproportionate burden or disparate impact. The impacts of proposed changes must be calculated to determine whether or not the change is a “major service change.” Route-by-route changes in revenue hours and miles is summarized in Table 2 located in the appendix.

Result: DART defines a “major service change” as when 25 percent or more of a route’s revenue hours or revenue miles is added or reduced, or when the total revenue hours for the system are expanded or reduced by 10 percent”. Analysis found the following changes meet the criteria of a major service change: Routes 6 (See Appendix Table 2). Thus, changes to these routes will be the focus for the remainder of the report. Changes to remaining impacted routes are not considered a major service change by DART’s policy.

Table 2 Major Service Changes for August 2021

Route	Major Service Change
D-Line – Downtown Shuttle	<ul style="list-style-type: none">Service was running every 10 minutes prior to the pandemic. In March 2020, service was reduced to every 15 minutes. The service increase would restore service to a population that is 37% minority and 23% low-income. The minority population is above the Disparate Impact threshold for Major Service Changes and the low-income population is above the Disproportionate Burden threshold.

Summary of Findings

D-Line – Downtown Shuttle, is determined to be a major service change due to the increase in both revenue miles and revenue hours. The changes are primarily a result of adding service back to the D-Line, which was reduced in March 2020 in response to the COVID-19 pandemic. Due to the continuing nature of the pandemic, the emergency COVID-19 service response was evaluated with the DART Title Service Equity Analysis policies and found the service reductions to have created a disparate impact and disproportionate burden. **This restoration of service is intended to address the disparate impact and disproportionate burdens.**

The area served by the D-Line exceed the regional average of minority and low-income populations and exceeds the threshold for the disparate impact and disproportionate impact policies. The proposed restoration of service constitutes a service improvement, which both minority and low-income populations are expected to benefit from the service levels as much as non-minority and non-low-income populations.



APPENDIX

Methodology and Analysis

Assessment of Service Proposal for Major Service Change Determination

A major service change is when 25 percent or more of a route’s revenue hours or revenue miles is added or reduced, or when the total revenue hours for the system are expanded or reduced by 10 or more percent.”(DART 2019 Title VI Program Update, Service and Fare Equity Policy). Table 2 below shows the magnitude of the proposed change by each affected route. Highlighted routes are identified as major service changes.

Table 3 Service Change Hours and Miles Comparison

Proposed Service Changes Revenue Hours and Miles Comparison							
Route	Route Description	Current		Proposed		% change in Revenue Hours	% change in Revenue Miles
		Revenue Hours	Revenue Miles	Revenue Hours	Revenue Miles		
D-Line	DOWNTOWN SHUTTLE	16	214.2	25.9	351.2	+38%	+ 39%
98	ANKENY EXPRESS	17.0	390.43	18.3	425.15	+ 3%	+ 5%
	FULL NETWORK	700.1	10,249	711.3	10,421	+ 2%	+2%

Geographic Concentrations of Minority and Low-Income Populations

Data Sources and Definitions

Data from the American Community Survey (ACS), DART ridership reporting, and customer surveys were used to perform the Title VI analysis.

2019 ACS five-year estimates provided block-group-level population data for the existing network demographic analysis. For purposes of this analysis, the following origin by race categories were defined as minority:

- Black or African American alone
- American Indian or Alaska Native alone
- Asian alone
- Native Hawaiian or Other Pacific Islander alone
- Hispanic or Latino alone
- "Other" race alone
- Two or more races

Individuals who reported in the ACS that their income over the previous 12 months fell below the federal poverty line were defined as low-income for the geographic analysis.

Results from the 2018 DART Customer Satisfaction on-board survey informed the Title VI evaluation of whether proposed service changes created a potential for a disparate impact or disproportionate burden. Survey respondents were asked to identify their race or ethnicity from the following categories and could select all that applied:

- Caucasian/White
- African American/Black
- Hispanic/Latino
- Native American
- Asian/Pacific Islander
- Middle Eastern/North African
- Other

Respondents who selected any combination of answers other than only Caucasian/White were considered minority riders.

The survey also asked respondents to provide their household income before taxes among the following income brackets:

- Less than \$10,000
- \$10,000 - \$14,999
- \$15,000 - \$24,999
- \$25,000 - \$34,999
- \$35,000 - \$49,999
- \$50,000 - \$74,999
- \$75,000 or More

DART utilizes the federal poverty guideline updated each year by the U.S. Department of Health and Human

Services to define low-income populations. See Table 6. The survey data did not include information on respondents' household sizes. Assuming an average household size of four people, incomes under \$25,750 fall below the poverty guideline. Thus, all DART survey respondents who selected "Less than \$10,000," "\$10,000 - \$14,999," and "\$15,000 - \$24,999" were considered low-income for purposes of this analysis.

Table 4 2019 Poverty Guidelines for Determining Low-Income Status

HHS Poverty Guideline for 2019	
Household Size	Income
1	\$12,490
2	\$16,910
3	\$21,330
4	\$25,750
5	\$30,170
6	\$34,590
7	\$39,010
8	\$43,430

Source: U.S. Department of Health and Human Services, 2019.

Population Analysis

Methodology: To evaluate which demographic groups would be impacted by the proposed service changes, geographic concentrations of minority and low-income populations were identified using Geographic Information Systems (GIS) analysis. All Census block groups were joined with 2017 ACS demographic data. All people living within a half-mile of the DART network were included in the analysis. The percentage of minority and low-income riders for each route were compared to the percentages for the total system, per DART policy. A route with a major service change that serves a population that is 5 percentage points or more above the system average minority population or low-income population would indicate a disparate impact or disproportionate burden, respectively.

Result: Table 3 includes the population and minority and low-income percentages for each route with above-average routes highlighted. Above-average block groups are also identified in Map 1 and Map 2.

Table 5 DART Network Demographics, ACS 2019 5-Year Average

Minority and Low Income Population by Route					
Route	Total Population	Low-Income Population	Low-Income Percentage	Minority Population	Minority Percentage
1	30,210	6,009	19.89%	10,740	35.55%
3	10,300	1,991	19.33%	3,854	37.42%
4	42,568	7,346	17.26%	17,947	42.16%
5	45,025	6,735	14.96%	10,449	23.21%
6	24,220	4,207	17.37%	8,931	36.88%
7	24,281	2,996	12.34%	5,613	23.12%
8	22,348	2,706	12.11%	4,713	21.09%
10	26,376	5,094	19.31%	11,460	43.45%
11	24,888	3,359	13.50%	5,414	21.75%
13	10,009	2,470	24.67%	4,897	48.92%
14	37,895	6,673	17.61%	13,636	35.98%
15	21,847	4,220	19.32%	9,214	42.18%
16	38,182	6,723	17.61%	15,784	41.34%
17	36,870	7,231	19.61%	14,517	39.37%
50	37,970	4,982	13.12%	11,163	29.40%
52	47,260	6,301	13.33%	13,766	29.13%
60	33,752	7,662	22.70%	12,136	35.96%
72	39,085	2,263	5.79%	8,396	21.48%
74	15,974	921	5.77%	3,352	20.98%
92	49,995	7,413	14.83%	12,706	25.41%
93	56,718	7,573	13.35%	14,711	25.94%
94	44,341	6,422	14.48%	13,292	29.98%
95	45,252	5,880	12.99%	12,455	27.52%
96	61,405	6,992	11.39%	15,752	25.65%
98	42,253	6,293	14.89%	12,936	30.61%
99	30,857	5,226	16.93%	11,159	36.16%
D-LINE	9,953	2,097	21.07%	4,431	44.52%
LINK	5,219	1,185	22.70%	1,950	37.38%
System Average	32,680	4,963	15.19%	10,192	31.19%
Finding Threshold			20.19%		36.19%

Figure 2 DART Service Area: Areas of Above Average Poverty

