



Title VI Service Equity Analysis for COVID-19 Service Planning Impacts

March 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.

On March 9th 2020, Governor Kim Reynolds issued a Proclamation of Disaster Emergency for the State of Iowa as a result of the emergence of COVID-19 in the state and the larger global pandemic. Certain businesses were closed and public health experts advised everyone to avoid unnecessary travel and practice social distancing. DART then implemented a number of temporary fixed-route service reductions to account for changes in customer demand and driver availability. By fall of 2020 many of the emergency service reductions were reinstated. However, several routes continue to be impacted. The purpose of this Title VI analysis is to report on the remaining service reductions and document any impacts to minority and low-income communities.

This Title VI analysis will perform the following functions:

- Describe the COVID-19 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’s low-income population is more than 5 percentage points greater than the system average.

Emergency Service Changes

Following the declaration of a global pandemic and the restrictions placed on commerce and Two service reductions were swiftly implemented, first on March 26, 2020, scaling back of Express trips and on April 12, 2020, a broad Saturday service schedule on weekdays for most routes and a suspension of service on select routes. During the summer months of May through August 2020, most routes were fully restored to the normal service schedule through a series of additional service changes.

Since August 23, 2020, six routes continue operating at a modified schedule when compared to pre-pandemic service schedules. The six impacted routes are summarized in Table 1 below:

Table 1: Emergency Service Changes that remain in effect as of March 2021

Route	Pandemic Service Reductions Still in Effect
6 – Indianola Ave	<ul style="list-style-type: none"> Peak hour service was running every 15 minutes prior to the pandemic (30 minute frequency for each leg of the southern segments). Peak hour service is currently running every 30 minutes (60 minute frequency for each leg of the southern segments).
17 – Hubbell Ave/ Altoona	<ul style="list-style-type: none"> Peak hour service was running every 15 minutes prior to the pandemic, but is running every 30 minutes currently. Several of the deviations to E 29th and Euclid have not been added back as a result.
72 – West Des Moines / Clive Flex	<ul style="list-style-type: none"> Peak hour service was running every 30 minutes prior to the pandemic, but is running every 60 minutes currently.
D-Line Shuttle	<ul style="list-style-type: none"> Frequency was every 10 minutes prior to the pandemic but is currently every 15 minutes.
93 – NW 86 th Express	<ul style="list-style-type: none"> Prior to the pandemic, six morning inbound trips and six evening outbound trips were offered. Today, four morning inbound trips and three evening outbound trips are offered.
98 – Ankeny Express	<ul style="list-style-type: none"> Prior to the pandemic, nine morning inbound trips and ten afternoon and evening outbound trips were offered. Today, five morning inbound trips and seven afternoon and evening outbound trips are offered.

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 annual 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 of the on-going COVID-19 service reductions found that the following changes meet the

criteria of a major service change: Routes 6, 93, 98, D-Line (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.

Proposed Changes that will disproportionately impact minority and/or low income populations

Route 6 Indianola Ave

Route 6 is currently operating at 30 minute frequencies during peak periods, as compared to 15 minute frequencies during peak periods prior to the pandemic. Since the route's southern segment is split into two legs along SE 5th and SE 14th Streets, each leg effectively experiences 60 minute frequencies during peak periods.

Census data indicates that the concentration of minority residents living in the vicinity of Route 6 is significantly higher than DART's service area as a whole. Minority residents may be disproportionately impacted by the continued reduction of service on Route 6. However, service levels on Route 6 will be restored as part of the June 2021 service change.

D-Line

The D-line is a fare-free downtown circulator that typically operates with 10 minute frequency six days a week. The route is designed to connect the East Village and Capitol complex to the rest of downtown and the Western Gateway. The route serves downtown residents and workers, and helps provide access to many local businesses such as restaurants and shops. The route also helps Express Route customers reach the Capitol complex. Many of the main uses served by the D-Line are either closed or are operating in a limited capacity, so one but was removed from D-Line service, resulting in 15 minute frequencies on the route. With ridership down roughly 70%, DART staff continue to believe that despite the Title VI findings it is prudent to continue to operate the D-Line with reduced frequency, but to consider increasing back to normal frequency later in 2021.

Other major service changes where minority and low income populations were not disproportionately impacted.

Route 93 NW Johnston/Grimes Express

At the height of the pandemic, only two trips were offered in the morning and evening peaks on this route. Additional trips were added back in late summer 2020, but since ridership is down roughly 90% DART staff do not recommend restoring all trips at this time. Ridership may increase as workers return to downtown, but due to increased remote working and other commute trends DART should utilize the upcoming long-range planning efforts to determine the right level of service for this route.

Route 98 Ankeny Express

At the height of the pandemic, four trips were offered in the morning and evening peaks on this route. Additional trips were added back in late summer 2020, but since ridership is down roughly 84% DART staff do not recommend restoring all trips at this time. Ridership may increase as workers return to downtown, but due to increased remote working and other commute trends DART should utilize the upcoming long-range planning efforts to determine the right level of service for this route.

Public Participation Plan and Outreach

Due to the emergency nature of the initial service planning response to COVID-19, DART staff shared information about the service changes with customers and the general public, but did not gather meaningful feedback. DART has conducted two online surveys to understand customer sentiment about DART's response to COVID-19, but DART has not conducted route-specific public outreach for the routes that continue to experience reduced service levels. That outreach will occur in the spring and summer of 2021 as part of a broader long-range service planning effort.

Conclusion

DART's COVID-19 emergency service reductions have mostly been restored. Several routes continue to warrant reduced service levels, but since those reductions will have lasted for more than one year they are no longer temporary service changes. The changes are considered "major service changes" under DART's policy for routes 6, 93, 98, and the D-Line. Continued reduced service on Route 6 and the D-Line Downtown Shuttle are identified as "major service changes" that represent a disparate impact on minority populations.

A mitigation to the disparate impact of reduced service on Route 6 and the D-Line would be to restore the routes to full service levels. DART will restore service to Route 6 in June 2021. It is likely that demand for the D-Line will increase over the summer of 2021 and service could be restored in August 2021.



APPENDIX

Methodology and Analysis

Title VI Service Equity Analysis

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 1: 2019 Poverty Guideline 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.

Magnitude of Service Changes

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 2: Service Change Hours and Miles Comparison

COVID-19 Service Changes Revenue Hours and Miles Comparison							
Route	Route Description	Pre-pandemic		Current		% change in Revenue Hours	% change in Revenue Miles
		Revenue Hours	Revenue Miles	Revenue Hours	Revenue Miles		
6	INDIANOLA AVE	29.3	535.1	22.5	397.5	-23%	-26%
17	HUBBELL AVE/ALTOONA	43.5	784	36.5	668.5	-16%	-15%
72	WEST DES MOINES LOOP	29.3	598	25.1	482.6	-14%	-19%
93	GRIMES/NW JOHNSTON	14.5	344.7	8.25	216	-43%	-37%
98	ANKENY EXPRESS	20.8	581.6	13.5	373.1	-35%	-36%
D-Line	DOWNTOWN SHUTTLE	25.9	351.2	16	214.2	-36%	-39%

Geographic Concentrations of Minority and Low-Income Populations

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 2019 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 Figure 1 and Figure 2.

Table 3: 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 1 DART Service Area: Areas of Above Average Minority Populations

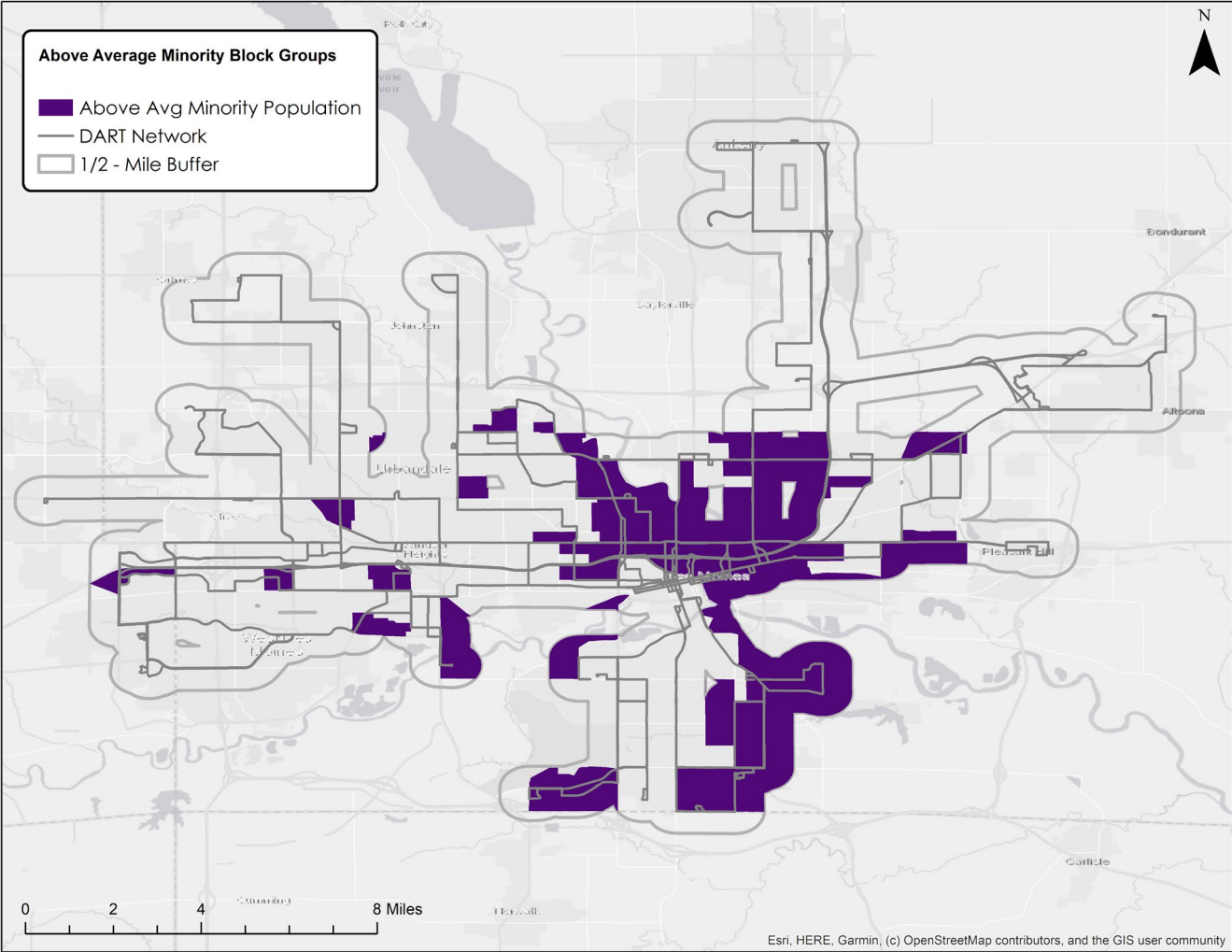


Figure 2 DART Service Area: Areas of Above Average Poverty

