

APPENDIX A

Title VI Policy Analysis

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1. Title VI Program Summary

Title VI of the Civil Rights Act of 1964 states, “No person in the United States shall, on the ground of race, color, or national origin, be excluded in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.” In accordance with Title VI, the Federal Transit Administration (FTA) requires transit agencies that receive federal funds and that operate more than 50 vehicles to submit a report detailing their Title VI program every three years to demonstrate that the service they provide complies with Title VI. The FTA provides detailed guidance to transit agencies on how to comply with Title VI through FTA Circular 4702.1B (“the Circular”).¹

As the designated recipient of funds allocated to the Berks and Lancaster urbanized areas, the South Central Transit Authority (SCTA) is required to submit a Title VI program. SCTA submitted its most recent Title VI program in 2021. The SCTA Title VI Program discusses the services operated in Berks and Lancaster counties by the Berks Area Regional Transportation Authority (BARTA) and the Red Rose Transit Authority (RRTA) as managed and administered by SCTA. The following presents a review of SCTA’s Title VI Program and provides recommendations for changes that would benefit the customers served by BARTA and RRTA.

Agency Policies Related to Nondiscrimination

Title VI requires agencies to analyze how changes in service impact minority and low-income populations compared with non-minority and non-low-income populations. Agencies define under what circumstances they will conduct a formal Service Equity Analysis (SEA) to assess the impact of a proposed change in service. If the results of the SEA show the changes to be discriminatory, agencies must take steps to address those impacts. SCTA developed new non-discrimination policies as part of their 2021 Title VI Program. The key components of this framework are the major service change policy and the disparate impact and Disparate Burden policies.

MAJOR SERVICE CHANGE POLICY

The FTA requires agencies to define when a change in service is consequential enough to warrant an SEA. SCTA defines a major service change as any change in service that meets one of the following conditions:

1. There is a change in any fare.
2. There is a change in service, which affects:
 - a. 25 percent or more of the route miles of a route.
 - b. 25 percent or more of the revenue vehicle miles for a given day.
 - c. 25 percent or more of the ridership of a route for a given day.
3. A new route is established.
4. A route is discontinued in its entirety.

¹ Federal Transit Administration. (2012). *Title VI Requirements And Guidelines For Federal Transit Administration Recipients*. Retrieved from: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Title_VI_FINAL.pdf.

SCTA must conduct an analysis for a change to the service operated in Berks or Lancaster Counties by BARTA or RRTA that meets any of the above criteria. In the 2021 Title VI Program Update, SCTA reported no changes were made in BARTA and RRTA operations that meet the major service change criteria, and, as a result, SCTA did not conduct an SEA.

DISPARATE IMPACT AND DISPROPORTIONATE BURDEN POLICIES

In addition to the major service change policy, Title VI also requires agencies to develop disparate impact and disproportionate burden policies. These policies quantify if a major service change has an adverse effect that will negatively impact transit passengers, and specifically if the change impacts all passengers proportionately. The Circular advises agencies to ensure that service is provided equitably with respect to the following two populations:

- **Minority persons**, which the Circular defines as any person identifying as American Indian and Alaskan Native, Asian, Black or African American, Hispanic or Latino, and Native Hawaiian or Other Pacific Islander.
- **Low-income persons**, which the Circular defines as a person whose median household income is below the federal poverty line.

In short, agencies must ensure that changes to transit service impact minority and/or low-income groups similarly to how those changes impact non-minority and/or non-low-income groups. A service change is acceptable when the impacts are similar across all groups. The test as it relates to minority and non-minority households is called the disparate impact policy; the test as it relates to low-income and non-low-income households is the disproportionate burden policy.

The FTA gives agencies latitude for developing their own disparate impact and disproportionate burden policies. Agencies may set their own numerical threshold for determining when a Disparate Impact or Disproportionate Burden takes place, with the caveat that agencies may not set the thresholds so high that it is impossible to arrive at a finding of a Disparate Impact or Disproportionate Burden. Agencies may also choose the method by which demographic comparisons are made. They may choose to compare the population affected by a service change, defined as the population living in census tracts within a certain distance of an affected transit stop, with the population living in the agency's service area. Alternatively, an agency may compare the ridership of a given route to the systemwide ridership.

SCTA's disparate impact policy is:

A Disparate Impact occurs if “the absolute difference between 1) the percentage of the minority population affected by the change and 2) the percentage of minority using a particular mode of transportation within the service area is 15 percent or greater.”

SCTA's disproportionate burden policy is:

A Disproportionate Burden occurs if “the absolute difference between 1) the low-income population affected by the change and 2) the percentage of the low-income population using a particular mode of transportation within the service area is 15 percent or greater.”

Service Standards and Monitoring

The Circular advises providers of fixed-route transit to publish and monitor service standards to ensure that minority and low-income populations do not receive discriminatory transit service. In addition, it advises agencies to develop standards by which to monitor the following for each mode of service they provide:

- Vehicle load
- Vehicle headways
- On-time performance
- Service availability
- Distribution of transit amenities
- Vehicle assignment.

The standards and results of the service monitoring from the 2021 Title IV Program update are provided below. BARTA and RRTA have nearly identical service standards. Differences between the agencies' standards are noted in the description.

Based on the 2021 Title VI Program update, the average minority population of Berks County is 26.77 percent, and the average low-income population is 13.61 percent. In Lancaster County, the average minority population is 19.39 percent, and the average low-income population is 10.88 percent. Block groups whose average minority and/or low-income population is above the county average are considered minority and/or low-income block groups.

LOAD

RRTA and BARTA's maximum allowable load—the ratio of passengers to seats—is 1.5. No routes in either system were reported to be at or above the seated capacity of vehicles.

VEHICLE HEADWAY

SCTA's standards for vehicle headways are presented in **Table 1**. SCTA's Title VI program update reports that, within Berks County, vehicle headway is best in the Reading urbanized area, as defined by the U.S. Census, where the minority and low-income percentage of population is concentrated. In Lancaster County, the highest frequency service is largely concentrated in the City of Lancaster, but some outlying routes with high concentrations of minority and low-income populations have higher frequencies as well.² Service is less frequent in outlying rural areas where the minority and low-income percentage of population is lower. In both Lancaster and Berks counties, on average, the frequency of weekday AM peak, weekday PM peak, and Saturday service is better for minority routes than non-minority routes. Sunday service is available on more minority than non-minority routes.

Table 1: Vehicle Headway Standards

	MONDAY-FRIDAY	SATURDAY	SUNDAY
Urbanized Areas	30-45 minutes	30-45 minutes	60 minutes

² SCTA 2021 Title VI Program Update, p. 15.

	MONDAY-FRIDAY	SATURDAY	SUNDAY
Outlying Areas	40-60 minutes	Limited service	No service

ON-TIME PERFORMANCE

BARTA and RRTA use the same standard for on-time performance: 95 percent on-time during the peak and 90 percent during the off-peak time periods for its fixed-route bus operation. A bus is considered on-time if it leaves its time point between zero and five minutes late. The Title VI program update report does not provide data on the systems' on-time performance. At present, neither BARTA nor RRTA formally track on-time performance.

SERVICE AVAILABILITY

Service is focused within the Reading and Lancaster urbanized areas. As the largest minority populations in BARTA and RRTA's service areas are concentrated in those cities, minority areas generally have greater bus service than non-minority areas. Within the cities of Lancaster and Reading, all bus stops are signed. Outside the cities, some stops are designated with a sign; if there is no sign, riders can wait on the side of the road to flag down a bus.³ Only two areas with above-average minority populations (Quarryville and the area northeast of Ephrata in Lancaster County) are not served by an SCTA bus route.

TRANSIT AMENITIES

SCTA evaluates any stop that generates over 25 passengers a day for potential placement of a bus shelter, as well as destinations that are trip generators for people with disabilities.

VEHICLE ASSIGNMENT

All SCTA vehicles have kneeler features, air conditioning, and wheelchair lifts or ramps. The average age of BARTA buses is 5.2 years; the average RRTA vehicle is 4.8 years. The average age of buses used on minority routes is lower than buses on non-minority routes.

³ BARTA and RRTA's policies for boarding a bus when no sign is present are described in the SCTA 2021 Title VI Program Update on pages 17 and 23, respectively.

2. Peer Comparison

Under the FTA Circular, transit agencies are allowed to set their own policies related to service standards and policies related to non-discrimination. Agencies operate different services and in different contexts; service policies and standards should fit the context in which transit service operates. Nonetheless, a comparison of SCTA's policies with those of its peers suggests there are standard practices related to Title VI policies that could serve as models for any updates SCTA may choose to make to its Title VI program.

Two types of peer agencies were selected for this report (**Table 2**):

- Agencies that are similar to SCTA in terms of their ridership, size of the urbanized area, and number of vehicles.
- Other agencies in Pennsylvania.

Table 2: Peer Agencies Used for Comparison

Agency	Peer Type
Salem Area Mass Transit District (Cherriots)	Similar size
Lexington Transit Authority (Lex Tran)	Similar size
City of Colorado Springs (Mountain Metropolitan Transit)	Similar size
Luzerne County Transportation Authority (LCTA)	Pennsylvania agency
Port Authority of Allegheny County (Pittsburgh Regional Transit)	Pennsylvania agency
Butler Transit Authority (theBus)	Pennsylvania agency

Service Standards

The service standards of the six agencies chosen for comparison are presented in **Table 3**.

Table 3: Service Standards of Peer Agencies

Agency	Load (Riders to Seated Capacity)	Headway	On-Time Performance	Availability	Amenities	Vehicle Assignment
Salem Area Mass Transit District (Cherriots)	Not more than 1.5 for more than 20 minutes	15, 30, or 60 minutes for routes with at least 25, 20, or 10 boardings per hour, respectively	90% depart within 4 minutes late; 100% not early; missed trips less than 0.5% of total trips	one-fifth to one-quarter mile spacing for stops	Stop amenities to be distributed equally depending on conditions. The agency aims to provide shelters at stops with more than 20 boardings per day	Random, except that different route types get different vehicles, i.e., charter-type buses run on commuter routes
Lexington Transit Authority (Lex Tran)	1.0-1.88 depending on bus type, but not greater than 1.2 for more than 10-minute intervals	35 at peak, 70 minute off-peak. 7-10 minutes for Circulator routes	90% within 1 minute early and 7 minutes late	The agency "tries to provide service in good places." Stop spacing one-fifth miles, with variation	Stops with 25 boardings per day are candidates for shelters; stops with 15-25 per day are candidates for benches	Not discussed
City of Colorado Springs (Mountain Metropolitan Transit)	1 during off-peak periods; 1.2 seated capacity during peak periods	Weekday high ridership: 15 min. Other high ridership: 30 min. Weekday above average ridership: 30 min. Other: 60 min.	85% within 1 min early and 5 min late	Goal for 90% of UZA population within one-quarter mile of transit; Buses stop every one-quarter mile in transit supportive areas and every one-half mile in non-transit supportive areas	Shelters at stops that with more than 25 daily boardings, serve multiple routes, or are in high-traffic areas with advertising potential	Rotates buses of similar sizes between route
Luzerne County Transportation Authority (LCTA)	Vehicles assigned to avoid overcrowding; no numerical load standard stated	Does not state headway standard	90% within 1 minute early and 5 minutes late	60% of residents in each municipality within one-half mile of a bus route; stops spaced every one-quarter and one-half mile, with 90% of stops within one-half mile	Amenities are the responsibility of local municipalities	Random assignment of vehicles

Agency	Load (Riders to Seated Capacity)	Headway	On-Time Performance	Availability	Amenities	Vehicle Assignment
Port Authority of Allegheny County (Pittsburgh Regional Transit)	Rapid routes: 1.4 during peak, 1.2 off-peak. Local and coverage routes: 1.0 all day	Rapid Routes: 10 minutes during peak periods and 30 minutes off-peak Local Routes: 30 minutes during peak, 60 minutes off-peak	75% between 1 min early and 5 min late	80% of census tracts have a stop. 40% of people within one-quarter mile of a bus or one-half mile of rail or incline	Where needed based on service and demography. A variance of 20% or more between amenities in minority and non-minority areas will require "additional efforts."	Newest vehicles assigned to high-frequency routes first. Also takes into consideration street types and other factors
Butler Transit Authority (theBus)	Local fixed route: 1.2 Commuter service: 1.3	64 minutes before 11AM; 68 minutes between 11AM and 5PM	85% between 0 minutes early and 10 minutes late	Within three-quarter miles of 85% of all residents in service area	Each route has at least one public or private wait shelter	Vehicles are rotated between the four routes

Peer Thresholds for Major Service Change, Disparate Impact, and Disproportionate Burden Policies

The peer agencies’ policies reviewed for this report varied in both their approach and methodology. The Circular does not provide a single definition for a major service change, disparate impact, or disproportionate burden, so comparing SCTA’s Title VI policies to its peers can be challenging.

However, in general, SCTA’s major service change threshold of 25 percent is comparable with the standards used by the peer agencies, which ranged from 20 to 30 percent. Under SCTA’s disparate impact and disproportionate burden policies, a disparate impact and/or disproportionate burden occur if “the absolute difference between 1) the percentage of the minority and/or low-income population impacted by the change and 2) the percentage of minority and/or low-income population using a particular mode of transportation within the service area is 15 percent or greater.” This threshold of 15 percent or more is higher than the thresholds of the peer agencies whose policies are comparable in structure to SCTA’s.⁴ For example, Cherriots, in Salem, OR, uses a disproportionate burden/disparate impact threshold of 5 percent. Pittsburgh Regional Transit, in Pittsburgh, uses a disproportionate burden/disparate impact threshold of 20 percent; however, their threshold refers to *the percentage difference between the minority percentage in the affected area and the minority percentage in the service area*, which results in an effective threshold that is substantially lower than SCTA’s.

For example, consider the SEA conducted by the Port Authority to study the impact of the addition of weekend service to Route 67 (**Table 4**). 26.11 percent of the population in the service change area is minority, compared with 21.2 percent of the Port Authority’s service area; the percentage difference between those percentages is 23 percent, which exceeds the agency’s 20% percent threshold. In this case, the change did not result in an adverse impact, so a disparate impact was not found.

By contrast, if the SEA had used SCTA’s methodology, the service area minority percentage would have been subtracted from the service change area minority percentage, giving 4.9 percent, which is lower than both the Port Authority’s threshold (20 percent) and the SCTA threshold (15 percent).

Table 4: Port Authority of Allegheny County Route 67 Service Equity Analysis

Route	Minority Population in Major Service Change Area Census Block Groups	Allegheny County Minority Population	Percent Change from Service Area	Exceeds Disparate Impact Threshold of +20%
67 Weekends	2,432/9,315 = 26.11%	21.20%	23%	Yes – No adverse effects; positive change

Source: [FY2020 Major Service Changes Title VI Analysis, Port Authority of Allegheny County](#)

⁴ Some of the agencies whose policies were reviewed for this memo were different enough from SCTA’s to preclude meaningful comparison.

3. Recommendations

Based on comparison with peer agencies, SCTA should consider making the following changes in advance of its next Title VI program update.

Clarify on-time performance policy to explicitly include a standard regarding early departures.

BARTA and RRTA’s on-time performance standard is:

95 percent on-time during the peak and 90 percent during the off-peak time periods for its fixed-route bus operation, where a bus is considered on-time if it leaves its time point between zero and five minutes late.

SCTA internally interprets this standard to mean that a bus departing before the scheduled time is not considered on time. BARTA and RRTA might consider revising their standards slightly to make explicit this understanding. For example, the on-time performance standard could be revised as follows (changes in bold):

95 percent on-time during the peak and 90 percent during the off-peak time periods for its fixed-route bus operation, where a bus is considered on-time if it leaves its time point **no earlier than scheduled and no more than 5 minutes late.**

Monitor on-time performance and provide results in Title VI program update reports.

As required under the FTA’s Circular 4701.1b, SCTA’s future Title VI program updates should include results of monitoring of on-time performance. SCTA’s Title VI program report indicates that on-time performance is assessed “with random samples conducted by supervisory personnel” (p. 16). This method of measuring on-time performance is acceptable under Title VI, but SCTA could also consider using its automated vehicle location system to report data on on-time performance, which would be more comprehensive.

Clarify the disparate impact/disproportionate burden policy.

An agency’s disproportionate burden and disparate impact policies are the standards used to ensure that changes in service are nondiscriminatory. To align more closely with industry best practice and the current interpretation of SCTA staff, the disproportionate burden and disparate impact policies for BARTA and RRTA could be revised to clarify two points.

First, the current policy refers to the “percentage of the minority population affected by the change,” which leaves some ambiguity about how to assess disproportionate burden and disparate impact.

Second, the current policy refers to the “percentage of minority using a particular mode of transportation.” However, SCTA leadership has indicated that the intention of the policy is to use the minority composition of residents, rather than riders, in Service Equity Analyses.

To address these issues, we recommend SCTA revise its disparate impact/disproportionate burden policies as follows:

A Disparate Impact occurs if the absolute difference between 1) the percentage of residents in the area affected by a change who are members of a minority group and 2) the percentage of residents in the agency’s service area who are members of a minority group is 15% or greater.

A Disproportionate Burden occurs if the absolute difference between 1) the percentage of households in the area affected by a change who are low-income and 2) the percentage of households in the agency service area who are low-income is 15% or greater.

In addition, SCTA should state the definition it uses for determining whether a certain area is “affected” by a service change. Many agencies define an “affected area” to be the Census tracts where some portion of the tract is within a quarter mile of a bus stop with a change in service.

Formally adopt disparate impact and disproportionate burden policies

FTA requires agencies adopting or changing their Title VI policies to under a formal approval process, which includes soliciting and responding to public comment and gaining approval by the agency’s board of directors. RRTA and BARTA should seek to gain formal approval of its disparate impact and disproportionate burden polices before the next SCTA Title VI program submission.

Example Application of Disparate Impact and Disproportionate Burden Policy

Even the most clearly stated disparate impact and disproportionate burden policies can be difficult to parse. One way to ensure SCTA’s board, stakeholders, and staff are aligned in their understanding is to provide a numerical example as is provided below.

In this hypothetical example, suppose that the length of BARTA Route Z is to be shortened by 35 percent. Since SCTA’s Major service change threshold is 25 percent, this service change qualifies as a Major service change and an SEA must be completed. In the SEA, the agency compares the population of the impacted area with the population of the BARTA service area. Per FTA Circular 4702.1B, the impacted area is comprised of all the Census tracts with some portion of their area within one-quarter mile of a bus stop.

The SEA reveals that the proposed service reduction does not impose a disproportionate burden but does impose a disparate impact (**Table 5**). The agency would therefore need to take action to avoid, minimize, or mitigate the impact of the service change on minority persons.

Table 5: Hypothetical Service Equity Analysis: Effect of 35% Reduction of Revenue Miles of BARTA Route Z

Minority Percentage of the Population					Low-Income Percentage of the Population				
Impacted Area	Service Area	Δ	Threshold	DI Present?	Impacted Area	Service Area	Δ	Threshold	DB Present?
60%	32%	28%	15%	YES	30%	18%	12%	15%	NO

Note: DI stands for “disparate impact;” DB stands for “disproportionate burden.”