

## Title VI Service Equity Analysis

On August 7, 2019, the Board of Directors held a public hearing to receive public comment on a set of proposed service changes for FY 2019/20. The proposed changes are significant enough to be considered “major adjustments of transit service” according to Board Policy and so trigger the requirement to conduct a service equity analysis (SEA) to assess the impact of the proposed changes on populations protected by Title VI of the Civil Rights Act of 1964. The analysis, conducted in August 2019, found that **people of color would not bear any disparate impacts, and low-income populations would not bear any disproportionate burdens as a result of the proposals codified in Resolution No. 19-028.**

An additional requirement of the Title VI process is to report to the Board of Directors about what public engagement was conducted to publicize the proposed service changes and to solicit comments and feedback about the proposals. The public engagement process is described in this report, and results of that process will be presented to the Board on September 11, 2019. In addition, a summary of the public engagement is contained in Staff Report 19-171b, Attachment 5.

### Background

Title VI of the Civil Rights Act of 1964 states: "No persons in the United States shall, on the grounds 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." Commitment to Title VI compliance is an essential element of the AC Transit Title VI Program and the District's operation. It is AC Transit's goal to ensure that all transit service is equitably distributed and provided without regard to race, color, national origin, or low-income status. It is also AC Transit's goal to ensure equal opportunities for all persons to participate in the planning and decision-making processes related to providing that service without regard to race, color, national origin, low-income status, or limited English proficiency.

Board Policy 518, Title VI and Environmental Justice Service Review and Compliance Report Policy, requires staff to conduct a Title VI service equity analysis whenever there is a major service change (as defined by Board Policy 110, Public Hearing Process for the Board of Directors). The policy requires staff to assess the quantity and quality of service provided and populations affected. The analysis aims to identify if, in implementing proposed changes, people of color or low-income populations or riders would experience disproportionately high and adverse impacts compared to non-Latino/a white or not low-income populations or riders.

### Proposals

The proposals under consideration span a range of service changes, and the analysis was targeted to the details of each proposal under consideration. Some of the service changes proposed in this report were so small that normally the threshold that triggers the requirement to conduct a SEA would not be met. However, each proposal did trigger the threshold to hold a public hearing at the time the public hearing was set, which in turn triggered the requirement to conduct a SEA in Board Policy 518.

- BRT and Lines 1, and 801:  
The District's Bus Rapid Transit (BRT) line between downtown Oakland and the San Leandro BART station is scheduled to open during FY2020. The new BRT service will replace Line 1 during the day, with a slightly different alignment north of 14<sup>th</sup> Avenue and in downtown Oakland, and will replace the San Leandro BART to downtown Oakland section of Line 801 OWL, or overnight, service. The analysis considered the impact of elimination of Line 1, truncation of Line 801, and implementation of the BRT together.
- Lines 14 and 47:  
Implementation of BRT service will also require a small routing change on both Lines 14 and 47 – moving them off of International Boulevard and on to San Leandro Street for a short stretch. Although the proposed changes are associated with the BRT project, the impacts of these changes were considered separately and individually.
- Lines 71 & 376:  
Both of these lines operate through Parchester Village in Richmond, a community with narrow streets and difficult bus access. Two proposals to improve the ability of the bus to navigate and be on time through the neighborhood are under consideration and both proposals were analyzed.
- Line 60:  
The proposed service change for Line 60 would increase service along the entire length of the line. Note that this proposal is contingent upon receiving funding to cover the cost of this expansion.
- Line 96:  
There are two proposals for Line 96. One proposal would re-align the route slightly in the Alameda Point area to serve the first phase of new development (called "Site A") and would maintain existing Line 96 frequency. The second proposal would add additional service between Site A and downtown Oakland, doubling the amount of service along that alignment during peak hours only; this proposal is contingent upon receiving funding to cover the costs. The two proposals were analyzed individually.

## Methodology

Board Policy 518 states that the measure of disparate impact – that is, whether communities of color bear an unfair burden of service changes – involves the comparison of impacts borne by those populations compared to impacts borne by people who are not people of color. Similarly, the measure of disproportionate burden involves the comparison of impacts borne by low-income populations compared to impacts borne by not low-income populations.

In order to conduct this comparison, staff investigated how many people in populations protected by Title VI regulations (people of color and low-income people) could access existing service and how many people in those same populations would be able to access the proposed service. Staff repeated that process for non-protected populations' access to the existing and proposed service. The change in access for protected populations was compared to the change in access for non-protected populations.

A variety of data sources, software, and methods were used for this analysis, including

- U.S. American Community Survey 2011-2015 5-year estimates,
- U.S. Census Bureau Block Group data population counts, and
- ESRI ArcGIS and Microsoft Office Excel software used to carry out the various calculations contained in the analysis.

To conduct the analysis, staff first acquired demographic data. Following Federal Transit Administration (FTA) guidance, U.S. Census geographic areas that have a larger population of people of color than the AC Transit service area as a whole were designated People of Color Census Block Groups (CBGs) and all others were designated as Non-Latino White CBGs for the purpose of Title VI analysis. Staff used a similar process and the same source data to classify Block Groups as “Low-Income” or “Not Low-Income.” For reference, the AC Transit service area population of over 1.5 million people is approximately 71.31% people of color, and 30.24% people who live in low-income households.

To count the populations in the analysis, staff used a geographic information system (GIS), created a graphical data image for each route in the proposal, and generated a quarter-mile “walkshed” buffer around the route, or around the stops associated with the route. This walkshed represents the distance a rider might realistically be expected to walk to get to a bus. The GIS was used to select the Census Blocks Groups that intersected each buffer. An example of this process is illustrated in Figure 1.

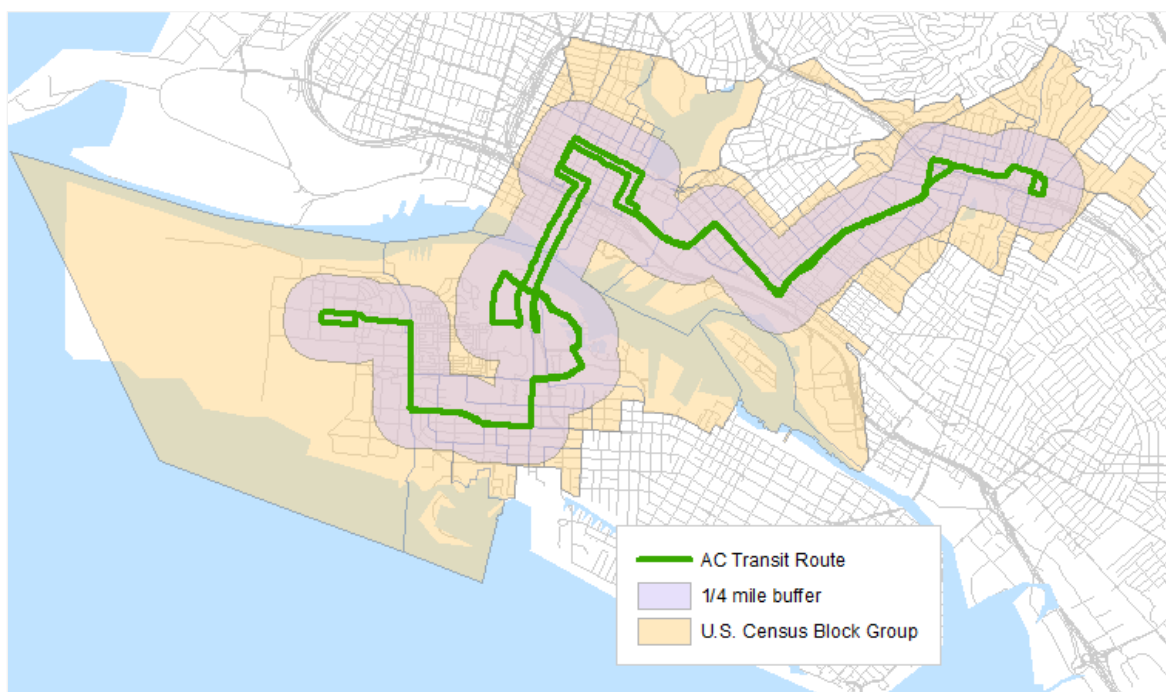


Figure 1: Example of route with ¼ mile buffer and block group selection

Population counts are included in Block Group data, although the data for race/ethnicity and for income are different, because the number of people who answer the income questions is smaller than the number of people who answer questions about their race and ethnicity. The numbers of people of color, non-Latino white, low-income, and not low-income people who live within the affected intersecting Block Groups were extracted and collected in a table.

## Determination of Findings

In order to assess whether a service change carries a discriminatory impact, Board Policy 518 directs staff to compare the adverse effects (or negative impacts) borne by protected populations to the impacts borne by non-protected populations. If a service change would impose a 15% or more greater adverse effect on people of color than on non-Latino whites, the change would be considered to have a disparate impact. Similarly, if a service change would impose a 15% or more greater adverse effect on low-income people than on not low-income people, the change would be considered to have a disproportionate burden.

## Analysis

### **BRT and Line 1**

In the proposal, BRT would replace Line 1 during the day, with a slightly different alignment north of 14<sup>th</sup> Avenue and in downtown Oakland. Line 1 provides service to a population of over 122,000 people, who are 89% people of color, and 54% who live in low-income households. While BRT stations will be further apart than existing bus stops in the corridor, BRT will provide service to over 122,000 people, who are also 89% people of color, and to a slightly larger percentage (55%) of people who live in low-income households.

Currently, there are 214 one-way trips on Line 1 each weekday. BRT is proposed to provide 284 one-way trips each weekday when it reaches full operation with a BRT bus arriving every 7 minutes. The analysis measures the anticipated impact of the proposed change from Line 1 to BRT service, by comparing persontrips – population in the corridor times daily trip count – for each route.

Line 1 & BRT	Current Line 1 persontrips	Proposed BRT persontrips	Change	Percent Change
People of Color	23,348,911	30,824,970	+ 7,476,059	+ 32.02%
Non-Latino White	2,774,283	3,946,570	+ 1,172,287	+ 42.26%
			<b>Difference</b>	<b>10.24%</b>
Low-Income	13,397,005	17,810,811	+ 4,413,806	+ 32.95%
Not Low-Income	11,261,573	14,803,749	+ 3,542,176	+ 31.45%
			<b>Difference</b>	<b>1.49%</b>

Table 1: Line 1 and BRT service change

The analysis shows that people in both protected and non-protected classes will see a substantial service increase of between 31 and 42% when Line 1 is replaced by BRT, so there are no adverse effects associated with the proposal. In addition, the difference in outcomes between protected and non-protected classes is less than the thresholds established in Board Policy for finding discriminatory impact. Therefore, **the analysis finds the proposal to replace Line 1 with BRT service would result in no disparate impact on people of color, and also no disproportionate burden on low-income populations.**

In the early months of BRT service, as traffic signal coordination is fine-tuned and as community members learn how to drive with median stations operational, it is possible BRT will run less often, with a minimum of service every 10 minutes, or 196 one-way trips each weekday. Because this temporary service would last less than 12 months, it is not considered a major service change according to Board

Policy, and is exempt from the requirement to conduct a service equity analysis.

### BRT and Line 801

In the proposal, BRT would replace the downtown Oakland to San Leandro section of Line 801 OWL, or overnight, service. The proposed BRT alignment would provide service to a slightly larger number of people than Line 801, with the same racial/ethnic demographic profile: 89% people of color. BRT would provide service to a slightly larger percentage of people who live in low-income households: 55% compared to 54% in the Line 801 corridor.

BRT service is proposed to have the same number of trips counts as existing Line 801: 12 one-way trips during the week (and double that on weekends).

Line 801 & BRT	Current Line 801 persontrips	Proposed BRT persontrips	Change	Percent Change
People of Color	1,291,332	1,302,464	11,132	+ 0.86%
Non-Latino White	153,288	166,756	13,468	+ 8.79%
			<b>Difference</b>	<b>7.92%</b>
Low-Income	739,656	752,569	12,913	+ 1.75%
Not Low-Income	624,948	625,511	563	+ 0.09%
			<b>Difference</b>	<b>1.66%</b>

Table 2: Line 801 and BRT service change

As shown in Table 2, replacement of Line 801 with BRT would result in an increase in access to service for all affected populations, so there are no adverse effects associated with the proposal. In addition, the difference between outcomes for protected and non-protected classes is less than the thresholds established in Board Policy for finding discriminatory impact. Therefore, **the analysis finds the proposal to replace Line 801 with BRT service in the section between San Leandro BART and downtown Oakland would result in no disparate impact on people of color, and also no disproportionate burden on low-income populations.**

### Line 14

The proposal for Line 14 is a small routing change which would move the route off of International Boulevard and on to San Leandro Street for a short stretch. It triggers the service equity analysis requirement because the proposed change moves the service onto streets not previously served by transit; the change is not otherwise big enough to be considered a major service change.

The proposal would eliminate four existing stops on International Boulevard and implement two new stops on San Leandro Street. The analysis only looked at the section of the route that was impacted: a quarter-mile buffer around eliminated stops and proposed new stops. While the proposed alignment serves fewer people than the existing alignment, both the existing and proposed alignments are heavily people of color (92% and 93% respectively), and both alignments serve the same percentage of low-income people (61%).

Table 3, which counts population within a quarter-mile walk of the 6 affected bus stops, shows that the proposed change would affect people of color less than non-Latino whites, and would affect low-income people less than not low-income people.

Line 14 and 47	Current Persontrips	Proposed Persontrips	Change	Percent Change
People of Color	13,608	10,473	-3,135	- 23.04%
Non-Latino White	1,158	813	-345	- 29.79%
			<b>Difference</b>	<b>6.75%</b>
Low-Income	7,977	6,012	-1,965	- 24.63%
Not Low-Income	5,057	3,796	-1,261	- 24.94%
			<b>Difference</b>	<b>0.30%</b>

Table 3: Lines 14 and 47 service change

It's also worth noting that people who are affected by the change – those who live nearby the eliminated stops – would be able to take the BRT service which is scheduled to run 24-hours per day and come every 7 minutes during the day, a substantial increase in service compared to Line 14.

Considering the above, **the analysis finds the proposed routing change of Line 14 would result in no disparate impact on people of color, and also no disproportionate burden on low-income populations.**

#### Line 47

The routing change proposal for Line 47 is identical to the change proposed for Line 14, and, like the Line 14 proposal, it triggers the equity analysis requirement only because it would put service onto streets not previously served by transit. The analysis area around the 4 eliminated and 2 new bus stops and the findings for the Line 47 proposed service change are identical to Line 14, as shown above in Table 3, and **the analysis finds the proposed routing change of Line 47 would result in no disparate impact on people of color, and also no disproportionate burden on low-income populations.**

#### Lines 71 and 376

Parchester Village is a defined residential neighborhood bounded by railroad tracks on the east, parkland to the west and north, and an industrial area to the south. The analysis looked at the population around affected stops in that neighborhood only, rather than looking at the entire length of the routes which would dilute the results.

Two alternatives are proposed to improve the ability of the bus to navigate through the neighborhood. A service equity analysis is required because both proposals would move service onto streets not previously served by transit; the change is not otherwise big enough to be considered a major service change. No change to the number of trips or span of service provided by these routes is proposed.

Following the methodology outlined above, staff drew a quarter-mile buffer around the stops proposed for elimination, then investigated the population in Census Block Groups (CBGs) which intersected that buffer – this is considered the “before” dataset. The process was repeated for stops proposed for inclusion in Option A, and again for stops proposed for inclusion in Option B (the “after” datasets). The maps below show the CBGs intersected by the buffer around existing stops and the CBGs intersected by the buffer around new stops in each proposal. Note that although the maps below refer to Line 71, Line 376 service in Parchester Village and the associated findings are identical.

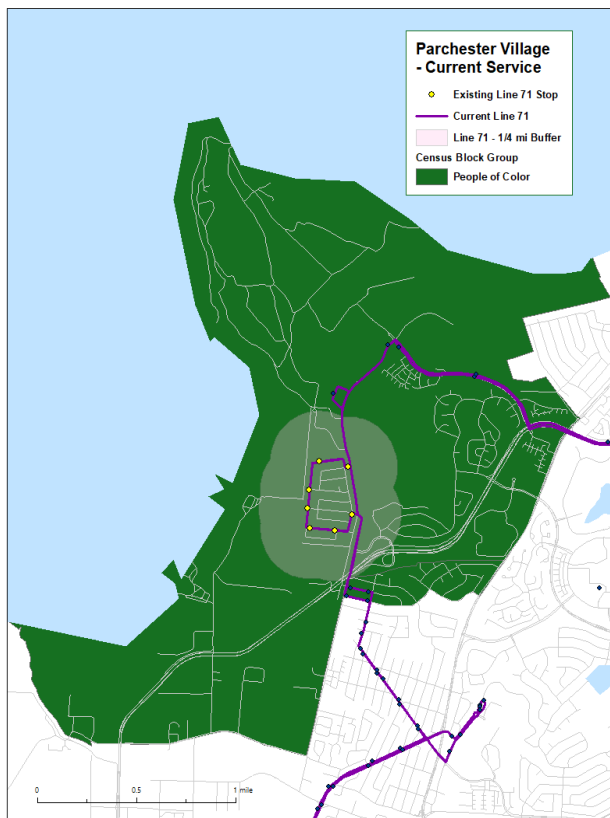


Figure 2: Current Parchester Village analysis area

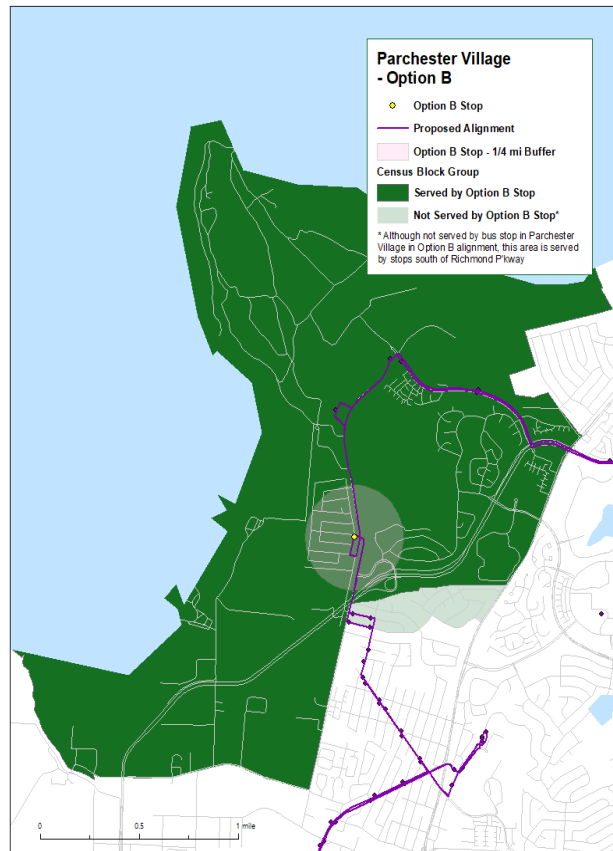
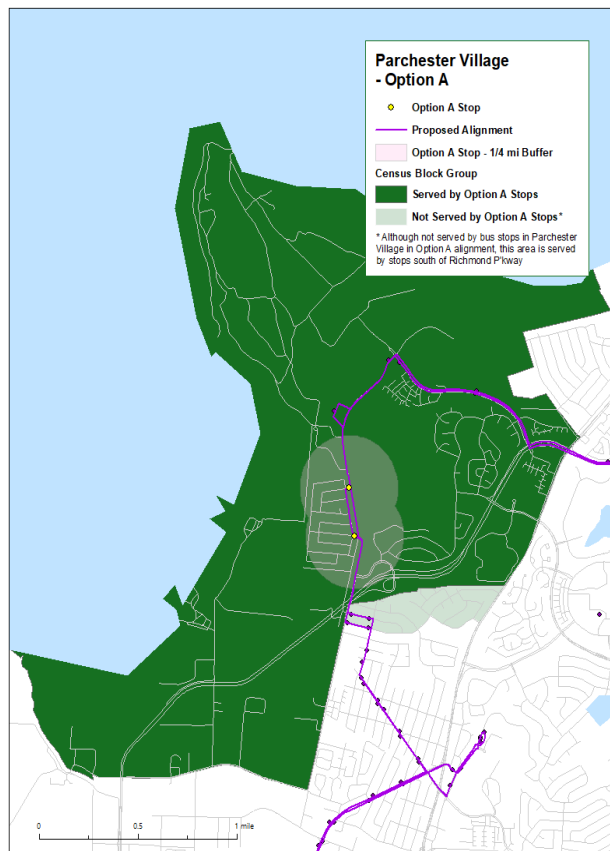


Figure 3: Parchester Village analysis area for options A and B

As can be seen in these maps, the CBGs included in the analysis areas are almost identical. There is a small CBG that intersects the ¼ mile buffer around existing stops only, but that area is more easily accessed by stops outside Parchester Village and is appropriately excluded from the analysis. A simple numerical count of people able to access bus stops in existing and proposed service, therefore, would return a finding of no change, which translates into a finding of no discrimination.

Although this analysis aligns with District methodology, because of the small population in the area and the relatively large analysis areas, it does not provide detail at the small level that is Parchester Village. Staff took the additional step to overlay the quarter-mile buffers (around proposed new stops) on top of existing bus stops in Parchester Village. The results, as seen in Figure 4, show that Option A would still provide access to all existing bus stops, and Option B would provide access to all stops except one.

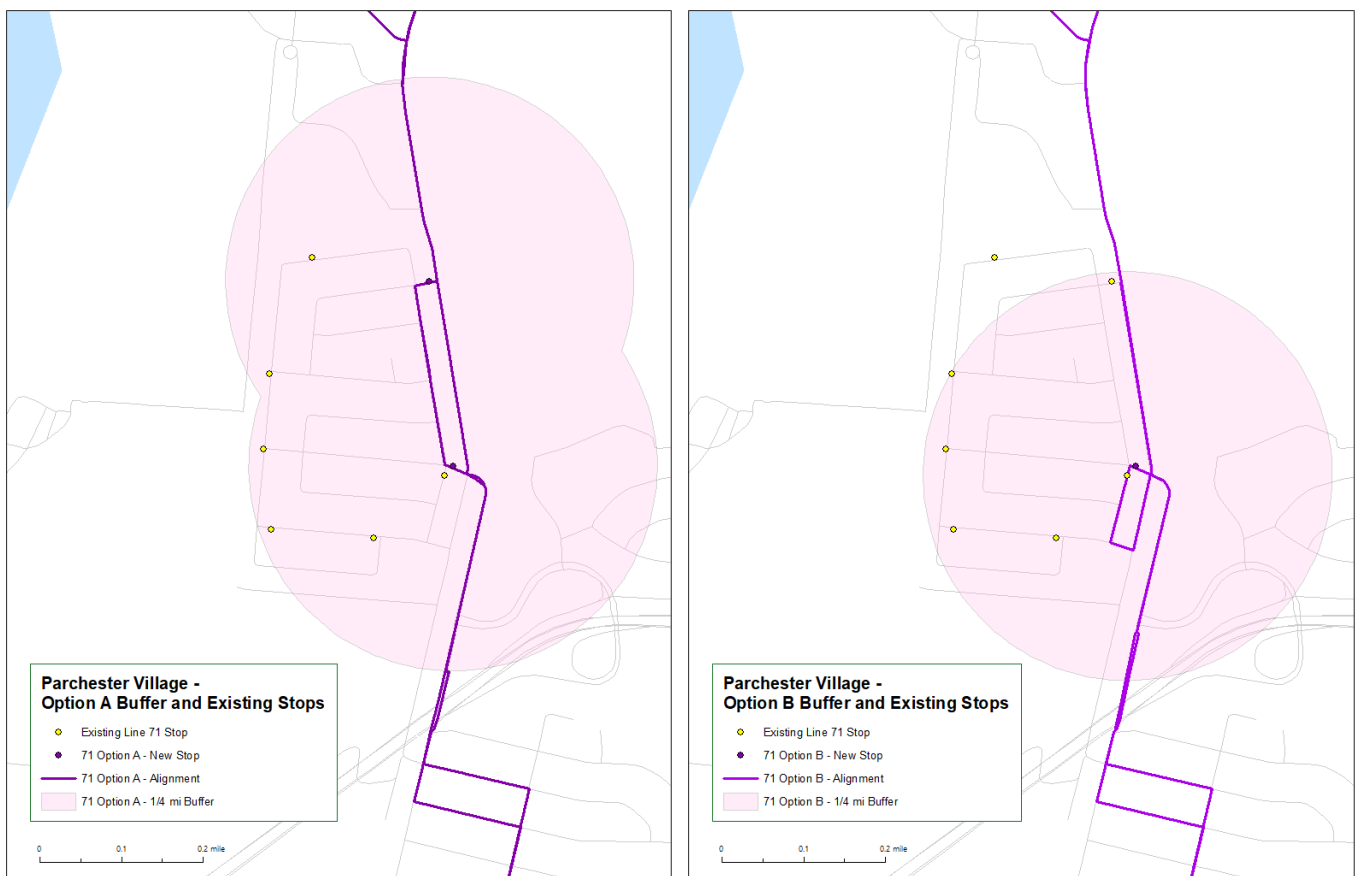


Figure 4: Buffers around proposed new service and Parchester Village existing stops

Although not required by Board Policy or past practice, this step was conducted to provide additional information for the Board as they consider changes to service in Parchester Village. It may be considered alongside the comment provided by residents and riders leading up to and during the public hearing held on August 7.

Considering the above, **the analysis finds neither of the proposals for the routing of Lines 71 and 376 in Parchester Village would result in a disparate impact on people of color, nor would either result in a disproportionate burden on low-income populations.**



## Line 60

The proposal would increase the amount of service provided by Line 60 but would not otherwise change its alignment. Currently, Line 60 provides 106 weekday trips; if this proposal is adopted, the amount of service would increase by 17.6% or to approximately 124 trips.

Table 4 shows that the population with access to Line 60 is slightly more people of color than the service area as a whole. Line 60 also has a slightly lower percentage of low-income households than the service area as a whole. Figure 5 is a graphic representation of the distribution of residents near Line 60 displayed by race/ethnicity and by income

	Line 60	AC Transit Service Area
People of Color	75.29%	71.31%
Low-Income	29.91%	30.24%

Table 4: Demographics of Line 60

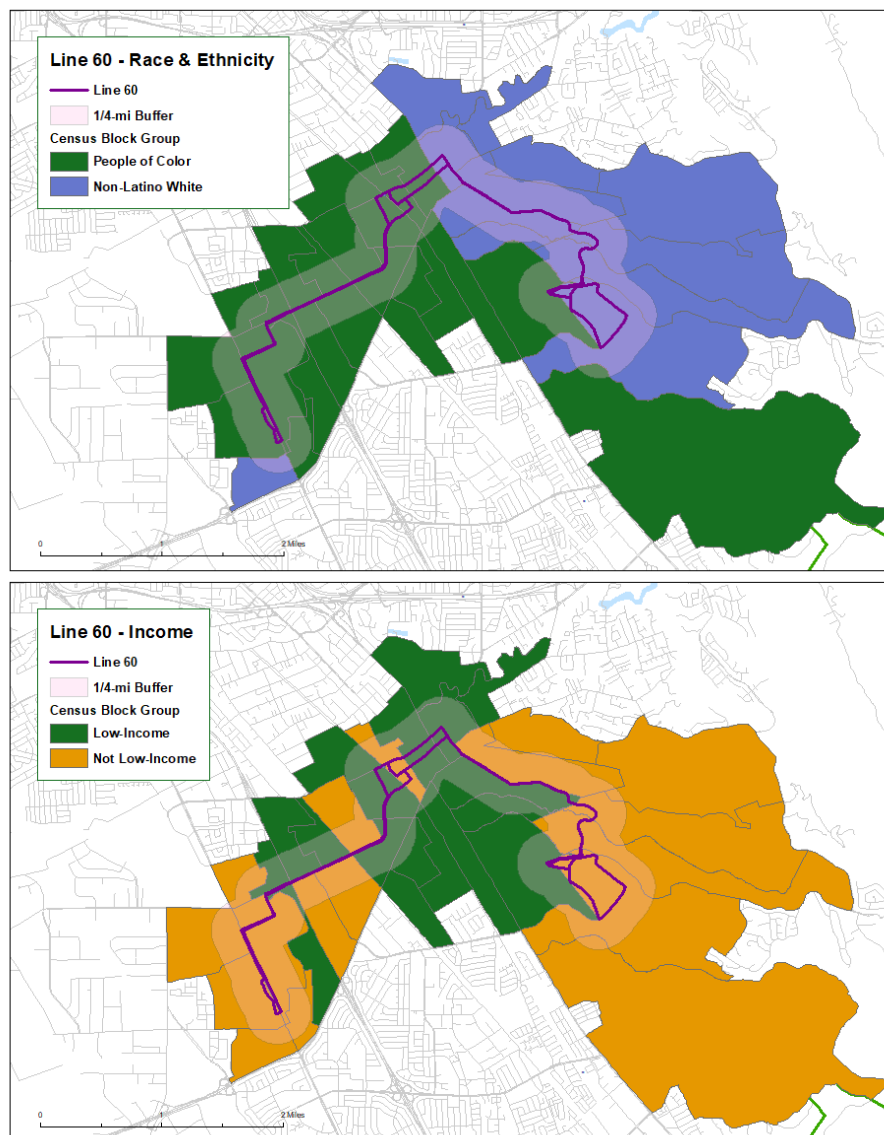


Figure 5: Demographics of Line 60

If the proposals are implemented, the number of trips – and so the number of persontrips – for each category will increase, so there are no adverse effects associated with the proposal. Accordingly, **the analysis finds the proposed increase in service to Line 60 would not result in disparate impacts on people of color, and also would not result in disproportionate burdens on low-income populations.**

### Line 96 - Realignment

The first proposal associated with Line 96 would slightly re-route Line 96 in Alameda to provide service to a new housing and retail development (Site A). The proposal triggers the service equity analysis requirement because it would put service onto streets not previously served by transit; the change is not otherwise big enough to be considered a major service change.

Under the proposal, existing Line 96 frequency would remain the same, and, as can be seen in Figure 6, one bus stop would be relocated, but no bus stops would be eliminated. The realignment would include the addition of stops at two new intersections, which translates into an additional service without extra cost or time.

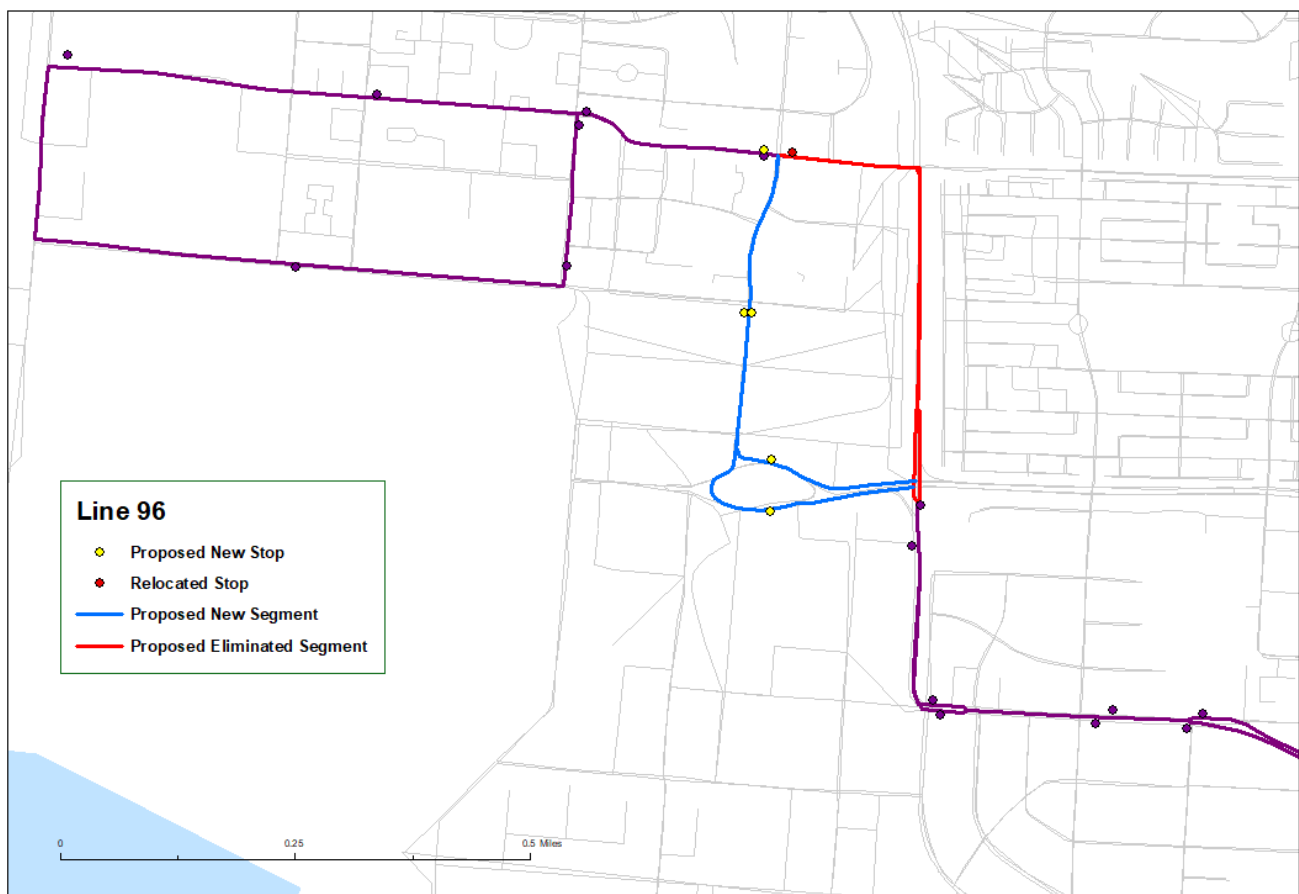


Figure 6: Proposed Realignment of Line 96

Because the area impacted by the proposed changes is so small, the Census Block Groups for both the existing and proposed service are the same. The population who can access the (existing and proposed) service is approximately 66% people of color and 33% low-income households. Compared to the District-wide service area population, the population with access to this section of Line 96 who would benefit

from the realignment are less people of color and slightly more low-income people than the District-wide service population (see Table 5).

	Line 96 Realignment Analysis Area	AC Transit Service Area
People of Color	66.30%	71.31%
Low-Income	33.41%	30.24%

Table 5: Demographics of Line 96

As residents begin to move into the new developments, the demographics of people impacted by this service proposal are likely to shift, however it is impossible to predict what that shift will look like, or to conduct any analysis of data that does not yet exist. For now, this analysis can show that although the proposed change will benefit a population that is currently less people of color and currently more low-income than the District-wide population, those populations in existing and proposed service scenarios is unchanged. Therefore, **the analysis finds the proposed realignment of Line 96 would not result in disparate impacts on people of color, and also would not result in disproportionate burdens on low-income populations.**

### Line 96 - Expansion

The second proposal for Line 96 would add additional service between new development in Alameda and downtown Oakland, doubling the amount of service along that alignment during peak hours only.

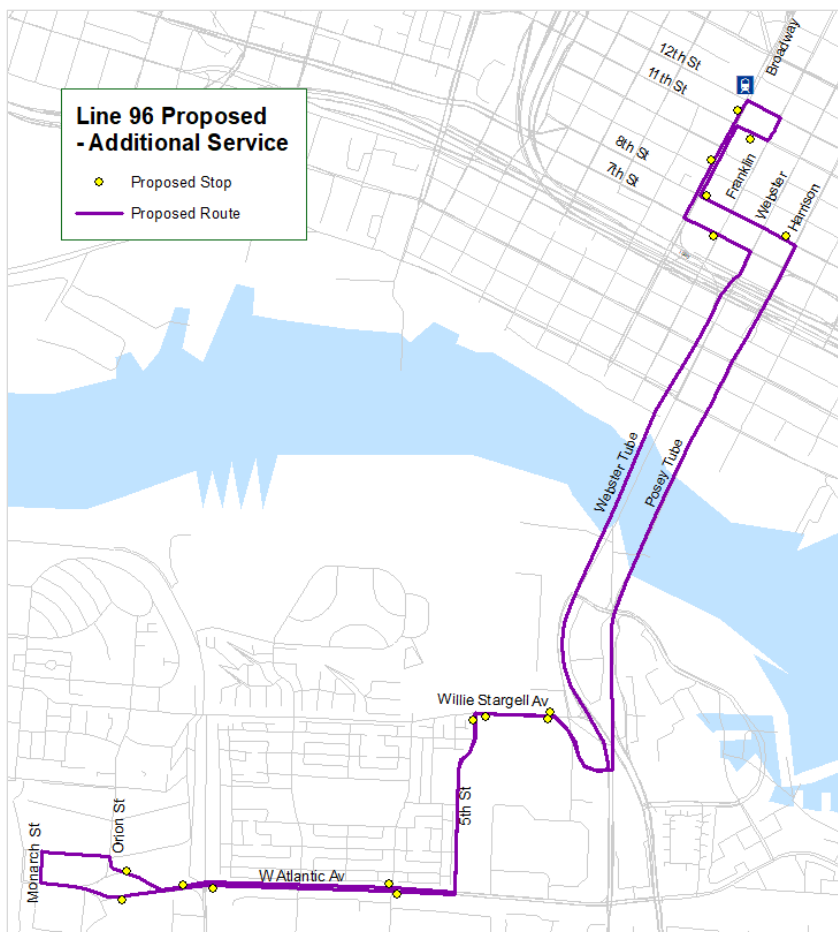


Figure 6: Alignment and stops for proposed Line 96 expansion

Figure 6 shows the alignment and stop locations for the proposed additional service. This proposal is contingent upon receiving funding to cover the costs and the proposal itself is in the planning stage, however there is sufficient information to conduct a service equity analysis. If the final proposal does not vary too much from the current information, this service equity analysis should be valid.

As shown below in Table 6, the proposal would provide expanded service to a population that is approximately 72% people of color with 40% low-income households. Compared to the District-wide service area population, the population with access to this service are slightly more people of color and more low-income people than the District-wide service population.

	Line 96 Expansion Area	AC Transit Service Area
People of Color	72.44%	71.31%
Low-Income	40.24%	30.24%

Table 6: Demographics of Line 96 expansion

Currently, there are 66 one-way trips on the full Line 96 each weekday. The proposal would add 28 one-way trips each weekday to the section of Line 96 between downtown Oakland and Site A, including segments on new streets that do not currently have service. The analysis measures the anticipated impact of the proposed change by comparing persontrips – population in the corridor times daily trip count – for the current service and for the proposed augmented service (current service plus proposed additional service).

Line 96	Current Persontrips	Proposed Persontrips	Change	Percent Change
People of Color	3,866,940	4,453,904	586,964	+ 15.18%
Non-Latino White	1,287,066	1,510,366	223,300	+ 17.35%
			<b>Difference</b>	<b>2.17%</b>
Low-Income	1,931,952	2,198,316	266,364	+ 13.79%
Not Low-Income	2,776,422	3,171,922	395,500	+ 14.24%
			<b>Difference</b>	<b>0.46%</b>

Table 7: Line 96 proposed service change

The analysis shows that if this proposal is adopted (and if staff are successful in identifying funds to support it), people in both protected and non-protected classes would see a service increase of between 13 and 18%. People of color would see a slightly smaller increase in service, when compared to non-Latino whites, and low-income households would see a slightly smaller increase when compared to not low-income households; in both cases, however, the difference between outcomes for protected and non-protected classes is substantially less than the thresholds established in Board Policy for finding discriminatory impact. Therefore, **the analysis finds the proposal to expand Line 96 service would result in no disparate impact on people of color, and also no disproportionate burden on low-income populations**

### Public Engagement

As part of the outreach leading up to the public hearing, AC Transit staff hosted four community meetings to provide additional opportunities for all customers, stakeholders, and the impacted neighborhoods to provide input regarding the proposed service changes. These meetings were promoted using a variety of digital and traditional strategies, including: website notices, eNews, social media posts, at-stop signage, brochures provided on buses and mailed to community based organizations and elected officials, signage in the AC Transit customer service centers, distribution via external stakeholders' newsletters and social media channels, and announcements and brochure distribution at community events and meetings.

In order to ensure that people with limited English proficiency who live near or ride the affected lines could understand the proposals and opportunities to provide comment about them, all materials and information were provided in four languages – English, Spanish, Chinese, and Vietnamese. Spanish, Chinese, and Vietnamese interpreters were provided at the AC Transit-sponsored meetings and at the public hearings, and notice of their availability was included in materials advertising the meetings.

In total, the District received 68 public comments and the four community meetings were attended by a total of 53 participants.

### Conclusions

Considering the findings of this service equity analysis and taking into account the public engagement carried out in advance of the public hearing, this report finds that people of color would not bear any disparate impacts, and low-income populations would not bear any disproportionate burdens as a result of the proposals codified in Resolution No. 19-028.