

Downtown-Uptown-Oakland Bus Rapid Transit Project

Major Service Changes Title VI Service Equity Analyses

For Calendar Year 2023 Service Changes

Planning & Service Development Department
Port Authority of Allegheny County d/b/a Pittsburgh Regional Transit (PRT)
DRAFT as of September 2022

Purpose and Definitions of Title VI

Title VI is a Federal statute and provides that no person 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. The program mandates transit agencies to evaluate, prior to implementation, all service changes that exceed the transit provider's major service change threshold (30% service hours per PRT's policy), and to determine whether those changes will have a discriminatory impact based on race, color, or national origin. Even though low-income populations are not a protected class under Title VI, the Federal Transit Administration (FTA) also requires transit providers to evaluate proposed service changes to determine whether low-income populations will bear a disproportionate burden of the changes.

Minority persons include American Indian and Alaska Natives, Asian persons, Black or African Americans, Hispanic or Latino persons and Native Hawaiian or other Pacific Islanders. The minority race and ethnicity data used in the analysis is from the American Community Survey (ACS) 2018 dataset from the U.S. Census.

A low-income household is defined as a household whose median household income is at or below the U.S. Department of Health and Human Services (HHS) poverty guidelines. The data for persons under poverty used in the analysis is from the American Community Survey (ACS) 2018 dataset from the U.S. Census.

Major Service Changes – Service Impact Analyses

Bus Rapid Transit, or BRT, is a high-quality bus-based transit system that delivers fast, comfortable, and cost-effective services via dedicated lanes and frequent operations. While BRT often looks different in each area it's implemented, it generally contains features similar to a light rail or metro system and is therefore more reliable, convenient, and faster than regular bus services. With the right features, BRT can avoid the causes of delay that typically slow regular bus services, such as frequent stops, traffic delays, and fare payment delays.

Pittsburgh Regional Transit's Downtown-Uptown-Oakland-East End BRT service plan calls for a "core" service operated across five bus routes that go east to Highland Park, Wilkinsburg, Braddock, and McKeesport. Current regular bus routes 61A, 61B, 61C, 71B and P3 will become BRT routes.

With the infrastructure improvements to implement the BRT service forthcoming, four other bus routes currently serving downtown and uptown will turn around earlier in their routes, with their innermost point becoming Craft Avenue in Oakland, and will no longer directly serve the Uptown and Downtown neighborhoods. These changes will occur on the 61D, 71A, 71C, and 71D bus routes. A fifth bus route, the P3, will be shortened on its outer end to only go as far west as Wilkinsburg Station along the Martin Luther King, Jr. East Busway and will no longer serve the Swissvale and Rankin communities along the

outer edge of the busway. Additionally, the P3 route will be extended from its current inbound/eastern terminus in the Oakland neighborhoods into Uptown and Downtown, so this route will experience two major changes to its service. Weekend service will also be added on the P3 route.

The changes in route miles and hours on these five bus routes may impact residents and employees along this corridor. The following analyses summarize the potential impacts to those residing in these locations and recommend changes to coincide with these major service changes to mitigate any potential for negative impacts to riders.

Table 1: Service Changes and Findings by Route

Route	Change Category	Title VI Results	Weekly Hours Before Changes	Weekly Hours After Changes	Percent Change	Type
Route 61D	Reduction of route miles and hours	Disproportionate burden for low-income populations	607	458	-25%	*Considering Major
Route 71A	Reduction of route miles and hours	Disproportionate burden for low-income populations	559	357	-36%	Major
Route 71C	Reduction of route miles and hours	Disproportionate burden for low-income populations	629	444	-29%	*Considering Major
Route 71D	Reduction of route miles and hours	Disproportionate burden for low-income populations	568	342	-40%	Major
Route P3	Extension and reduction of route miles and hours	Disparate Impact for minority race and ethnicity populations (for the reduced area of service)	213	468	+55%	Major

*Though two of the above proposed changes are technically minor, PRT has opted to include them in these analyses because it wants to give the community an opportunity to engage further on these proposed changes and will allow for any potential final tweaks to ensure that proper outreach and engagement on these changes has occurred, especially for the 71C route, which is right on the edge of being considered a major change.

Service Equity Analyses for Major Service Changes FY2022

Route 61D Reduction of Route

Description

The inbound 61D route will serve the Fifth Ave at Chesterfield Road bus stop, turn left on Craft Ave in Oakland, turn left again on Forbes Ave in Oakland, and then begin its outbound routing at the Forbes Ave at Craft Ave far side bus stop.

Demographics of Population within Major Service Change Area

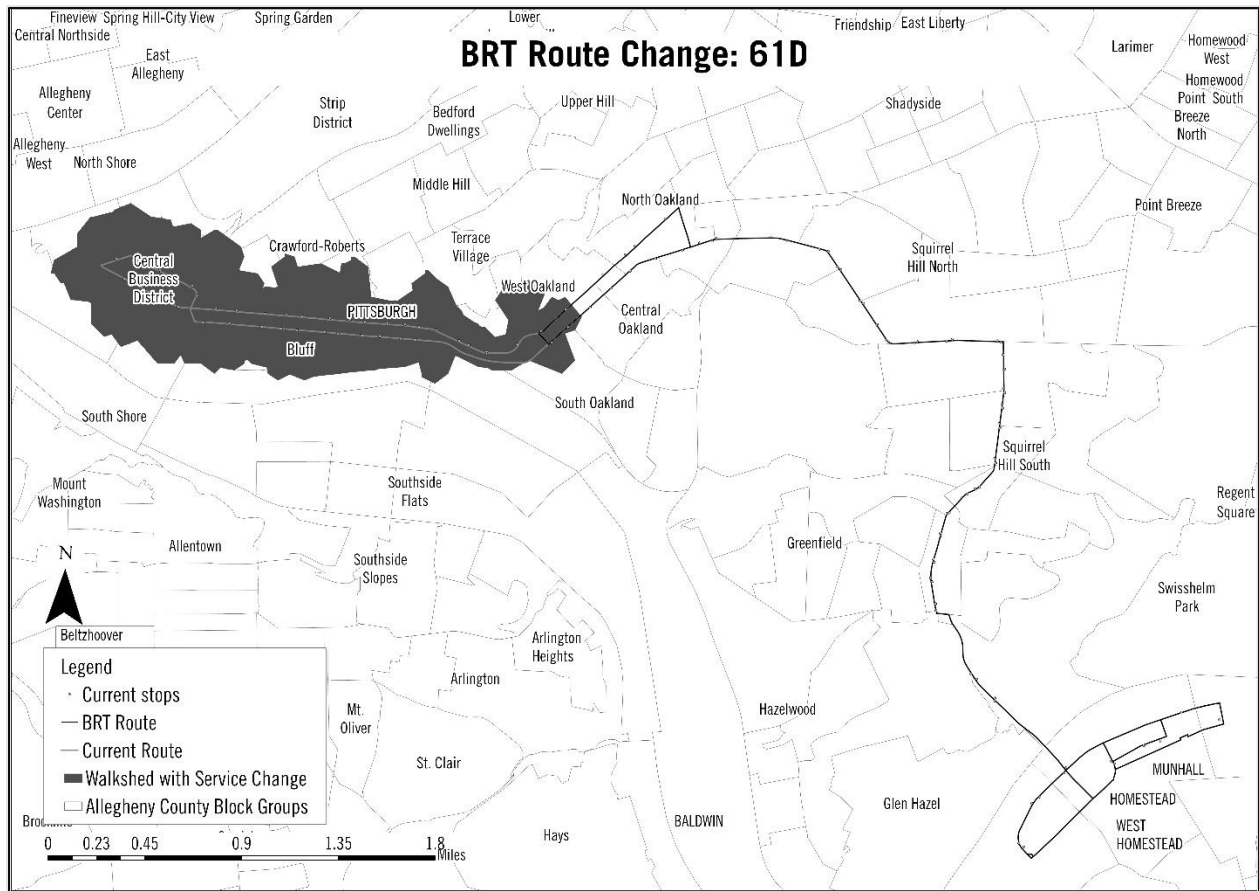
Walksheds were developed to geographically constrain the service area before and after the change. The walkshed is defined as ¼ mile on street areas around each bus stop serving the route after the new service provision.

Map 01 shows the service area for the Route 61D service reduction. The demographic analysis selects Census blocks with centroids within the walkshed and finds the percent of minority race and low-income populations within the new service area.

Table 2: Disparate impact and disproportionate burden analysis for changes in Route 61D

Route	Minority Population in Major Service Change Area Census Tracts	Allegheny County Minority Population	Percent Change from Service Area	Exceeds Disparate Impact Threshold of +20%	Low Income Population in Major Service Change Area Census Tracts	Allegheny County Low Income Population	Percent Change from Service Area	Exceeds Disproportionate Burden Threshold of +20%
Route 61D	2,831 / 8,893 = 31.8%	30.8%	3%	No	2,068 / 5,447 = 38.0%	18.6%	104%	Yes – There are adverse effects, negative change. Will be served by BRT routes instead

As seen in the chart, the block groups served by Route 61D have lower proportions of minority race income populations than the service area at large. So, it does not exceed the disparate impact threshold. On the other hand, the block groups served by the route have higher proportions of low-income populations than the service area at large. Therefore, the proposed service reduction might have a disproportionate burden on the low-income population in this area.



Route 71A Reduction of Route

Description

The inbound 71A route will serve the Fifth Ave at Chesterfield Road bus stop, then turn left on Craft Ave in Oakland, turn left again on Forbes Ave in Oakland, and then begin its outbound routing at the Forbes Ave at Craft Ave far side bus stop. It will serve Forbes Ave bus stops in Oakland before turning left on Bellefield Ave and then right onto Fifth Ave to continue its normal outbound route beginning at the Fifth Ave at Bellefield Ave intersection.

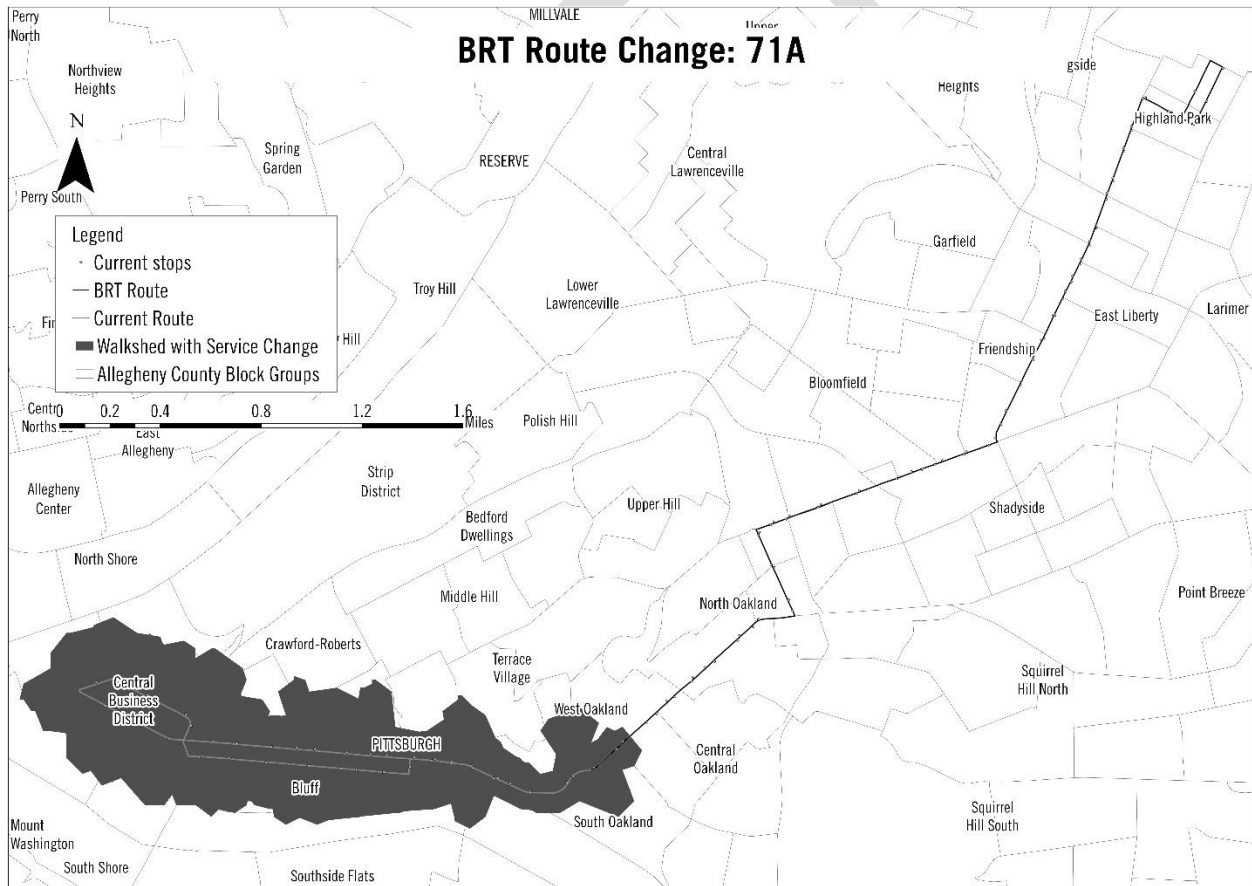
Demographics of Population within Major Service Change Area

Walksheds were developed in the same manner as the Route 61D service change. Map 02 shows the service area for the Route 71A service reduction.

Table 3: Disparate impact and disproportionate burden analysis for changes in Route 71A

Route	Minority Population in Major Service Change Area Census Tracts	Allegheny County Minority Population	Percent Change from Service Area	Exceeds Disparate Impact Threshold of +20%	Low Income Population in Major Service Change Area Census Tracts	Allegheny County Low Income Population	Percent Change from Service Area	Exceeds Disproportionate Burden Threshold of +20%
Route 71A	2,831 / 8,893 = 31.8%	30.8%	3%	No	2,068 / 5,447 = 38.0%	18.6%	104%	Yes – There are adverse effects, negative change. Will be served by BRT routes instead

As seen in the chart, proposed service reduction for 71A might have a disproportionate burden on the low-income population in this area.



Route 71C Reduction of Route
Description

The inbound 71C route will serve the Fifth Ave at Chesterfield Road bus stop, then turn left on Craft Ave in Oakland, turn left again on Forbes Ave in Oakland, and then begin its outbound routing at the Forbes Ave at Craft Ave far side bus stop. It will serve Forbes Ave bus stops in Oakland before turning left on Bellefield Ave and then right onto Fifth Ave to continue its normal outbound route beginning at the Fifth Ave at Bellefield Ave intersection.

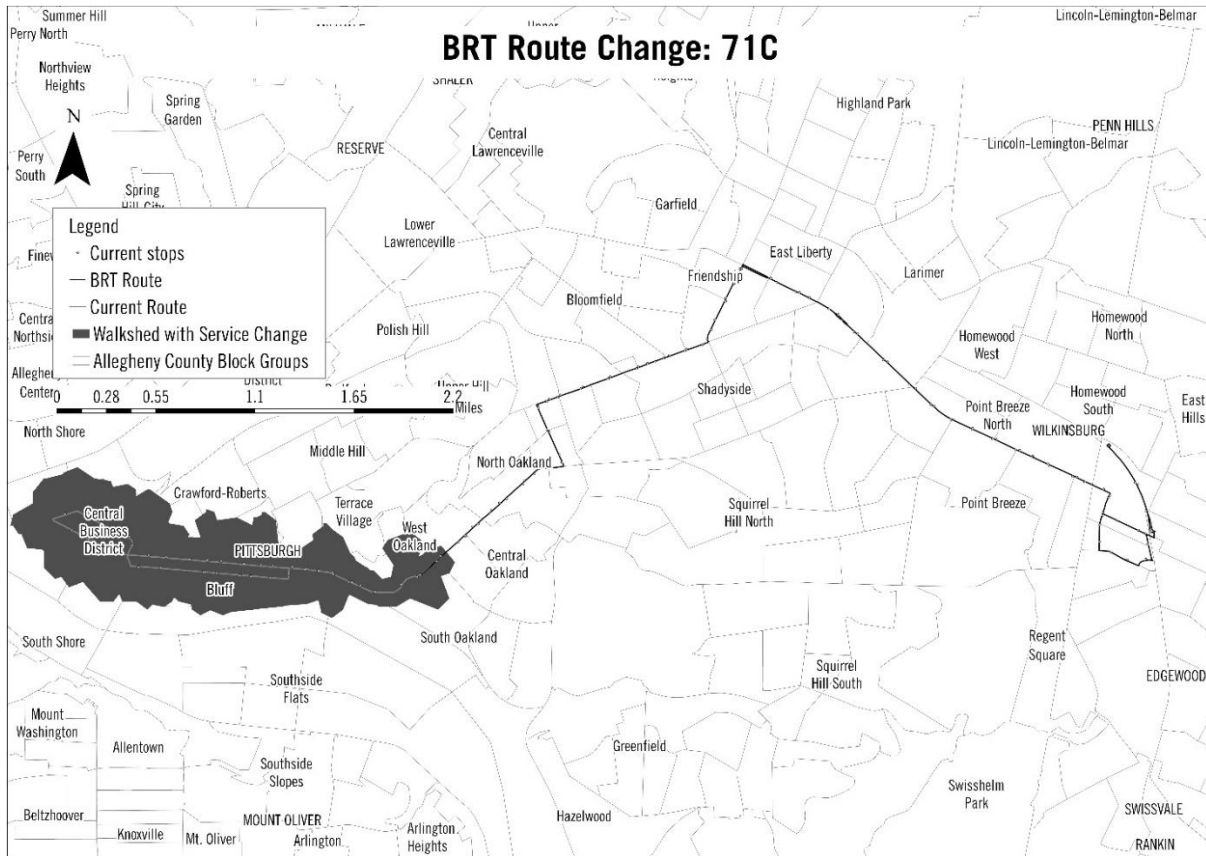
Demographics of Population within Major Service Change Area

Walksheds were developed in the same manner as the Route 61D service change. Map 03 shows the service area for the Route 71C service reduction.

Table 4: Disparate impact and disproportionate burden analysis for changes in Route 71C

Route	Minority Population in Major Service Change Area Census Tracts	Allegheny County Minority Population	Percent Change from Service Area	Exceeds Disparate Impact Threshold of +20%	Low Income Population in Major Service Change Area Census Tracts	Allegheny County Low Income Population	Percent Change from Service Area	Exceeds Disproportionate Burden Threshold of +20%
Route 71C	2,831 / 8,893 = 31.8%	30.8%	3%	No	2,068 / 5,447 = 38.0%	18.6%	104%	Yes – There are adverse effects, negative change. Will be served by BRT routes instead

As seen in the chart, proposed service reduction for 71C might have a disproportionate burden on the low-income population in this area.



Route 71D Reduction of Route

Description

The inbound 71D route will serve the Fifth Ave at Chesterfield Road bus stop, then turn left on Craft Ave in Oakland, turn left again on Forbes Ave in Oakland, and then begin its outbound routing at the Forbes Ave at Craft Ave far side bus stop. It will serve Forbes Ave bus stops in Oakland before turning left on Bellefield Ave and then right onto Fifth Ave to continue its normal outbound route beginning at the Fifth Ave at Bellefield Ave intersection.

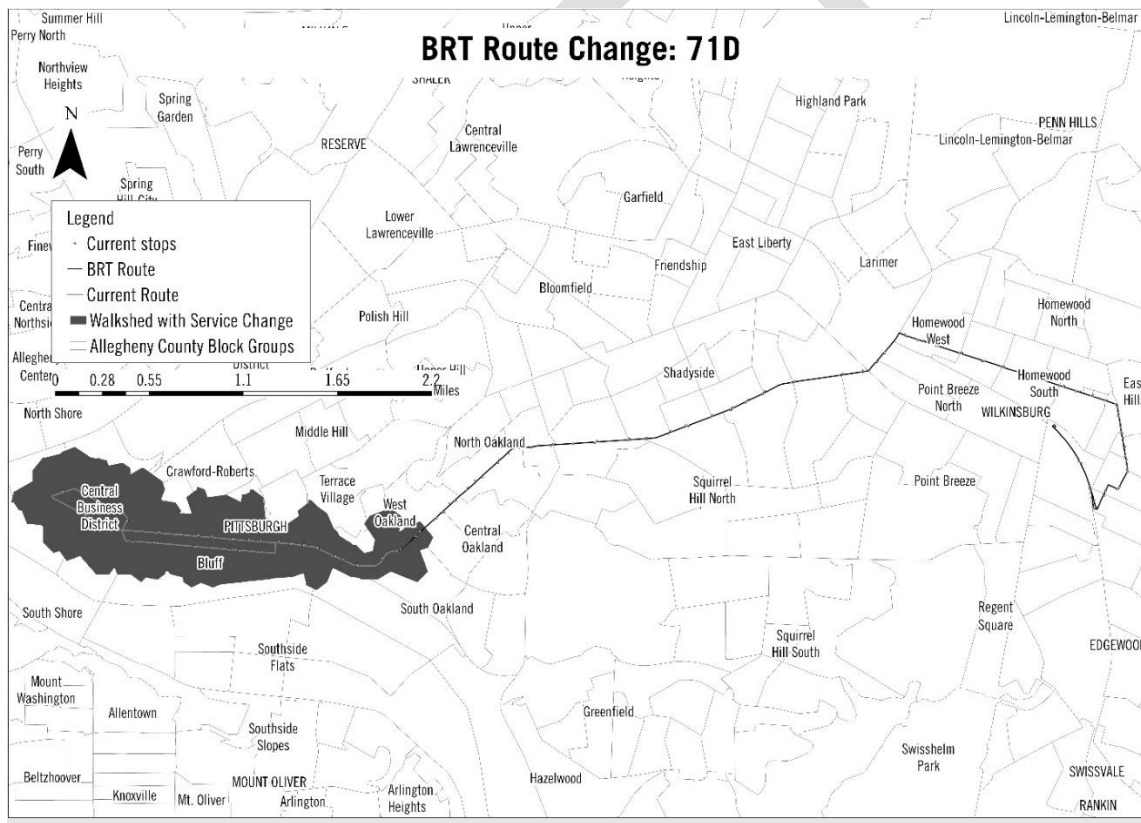
Demographics of Population within Major Service Change Area

Walksheds were developed in the same manner as the Route 61D service change. Map 04 shows the service area for the Route 71D service reduction.

Table 5: Disparate impact and disproportionate burden analysis for changes in Route 71D

Route	Minority Population in Major Service Change Area Census Tracts	Allegheny County Minority Population	Percent Change from Service Area	Exceeds Disparate Impact Threshold of +20%	Low Income Population in Major Service Change Area Census Tracts	Allegheny County Low Income Population	Percent Change from Service Area	Exceeds Disproportionate Burden Threshold of +20%
Route 71D	2,831 / 8,893 = 31.8%	30.8%	3%	No	2,068 / 5,447 = 38.0%	18.6%	104%	Yes – There are adverse effects, negative change. Will be served by BRT routes instead

As seen in the chart, proposed service reduction for 71D might have a disproportionate burden on the low-income population in this area.



Route P3 Extension and Reduction of Route

Description

Route P3 will have two routing changes. The first change is a shortening of the outer end of the route. The P3 will terminate outbound at Wilkinsburg Station and will no longer serve Hamnett, Rosslyn, and Swissvale Stations on the East Busway. The second change is an extension of the inner end of the route. Rather than turning around at Robinson Ave in Oakland, the P3 will continue to Uptown and Downtown. It will continue inbound on Fifth Ave, turn right on Liberty Ave in Downtown Pittsburgh, turn right on Sixth Ave, turn left on Forbes Ave, and continue on Forbes Ave in Downtown Pittsburgh, Uptown, and

Oakland before turning left onto Bellefield Ave in Oakland, then turning right onto Fifth Ave in Oakland to continue its outbound trip.

Additionally, the P3 will have day of service additions. The route will begin offering approximately 30-minute service on Saturdays and Sundays. Saturday span of service will be from approximately 6:30 AM to 11:00 PM. Sunday span of service will be from approximately 7:00 AM to 11:00 PM.

Demographics of Population within Major Service Change Area

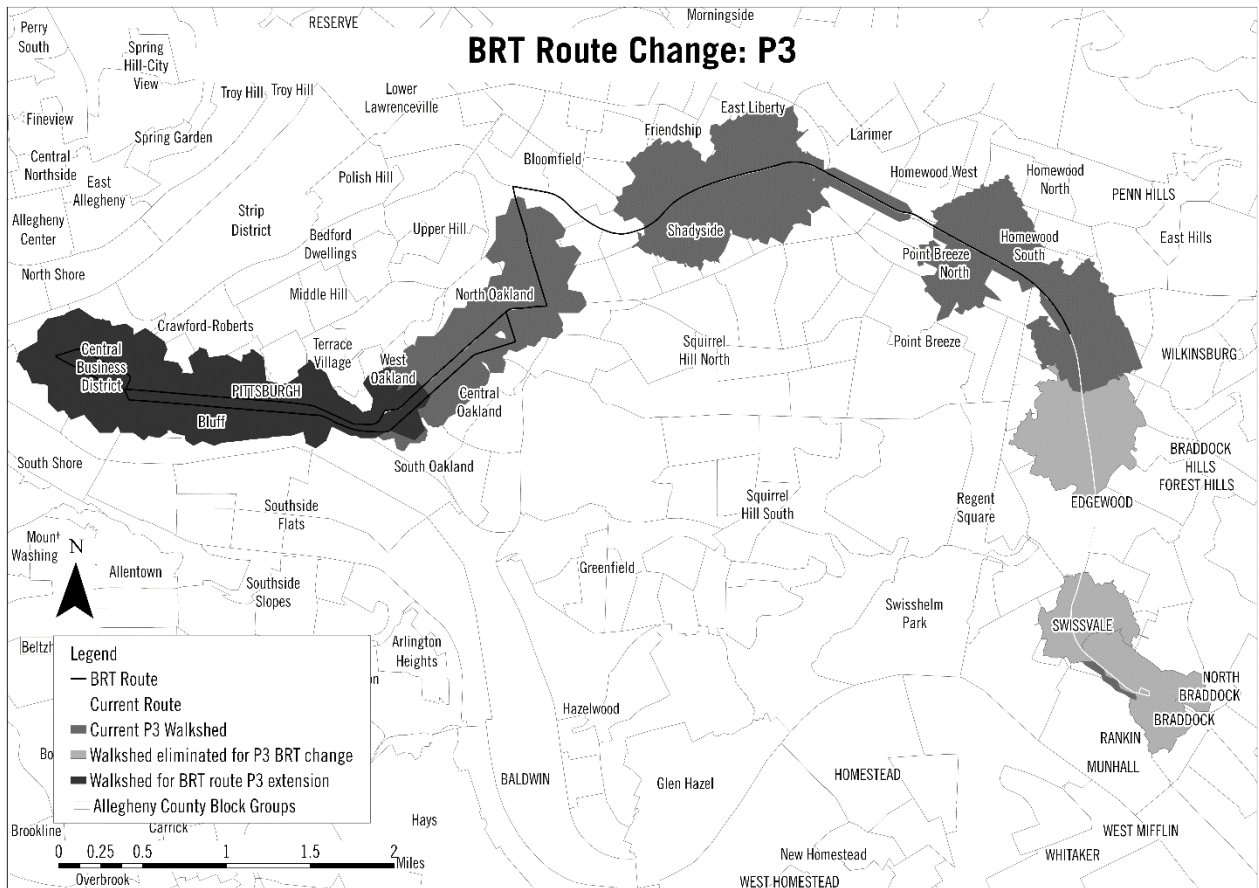
Walksheds were developed in the same manner as the Route 61D service change. Map 05 shows the service area for the Route P3 service extension and reduction.

Table 6: Disparate impact and disproportionate burden analysis for changes in Route P3.

Route	Minority Population in Major Service Change Area Census Tracts	Allegheny County Minority Population	Percent Change from Service Area	Exceeds Disparate Impact Threshold of +20%	Low Income Population in Major Service Change Area Census Tracts	Allegheny County Low Income Population	Percent Change from Service Area	Exceeds Disproportionate Burden Threshold of +20%
P3 extended to Downtown and adding weekend service	2,831 / 8,893 = 31.8%	30.8%	3%	No	2,068 / 5,447 = 378.0%	18.6%	104%	No- positive change

Route	Minority Population in Major Service Change Area Census Tracts	Allegheny County Minority Population	Percent Change from Service Area	Exceeds Disparate Impact Threshold of +20%	Low Income Population in Major Service Change Area Census Tracts	Allegheny County Low Income Population	Percent Change from Service Area	Exceeds Disproportionate Burden Threshold of +20%
P3 stopping at Wilkinsburg	3,530 / 7,302 = 48.3%	30.8%	57%	Yes – There are adverse effects, negative change.	1,514 / 7,271 = 20.8%	18.6%	12%	No

As seen in the tables, this proposed service extension will disproportionately benefit the low-income population in the area. Additionally, reducing service beyond Wilkinsburg might have a disparate impact in that area.



Summarizing the Impact of Major Service Changes on Service Area

The demographic impact of changes for routes 61D, 71A, 71C, and 71D is in the same area, so the impact is on the same population group. Route P3 will stop serving Hamnett, Roslyn, and Swissvale stations. Together, the reduction of service on the above five routes will have both a disparate impact and a disproportionate burden on the populations in areas expected to lose service.

Route P3, on the other hand, will be extended through Uptown to Downtown- the area routes 61D, 71A, 71C, and 71D will lose service. This provides a benefit to the population and will help to offset the loss of service. A summary of these summarized findings is in the following table. Additional mitigation efforts are discussed within this report.

Route	Minority Population in Major Service Change Area Census Tracts	Allegheny County Minority Population	Percent Change from Service Area	Exceeds Disparate Impact Threshold of +20%	Low Income Population in Major Service Change Area Census Tracts	Allegheny County Low Income Population	Percent Change from Service Area	Exceeds Disproportionate Burden Threshold of +20%
Route reductions for 61D, 71A, 71C, 71D and P3	6,361 / 16,195 = 39.3%	30.8%	28%	Yes – There are adverse effects, negative change.	3,582 / 12,718 = 28.2%	18.6%	51%	Yes – There are adverse effects, negative change.

Route	Minority Population in Major Service Change Area Census Tracts	Allegheny County Minority Population	Percent Change from Service Area	Exceeds Disparate Impact Threshold of +20%	Low Income Population in Major Service Change Area Census Tracts	Allegheny County Low Income Population	Percent Change from Service Area	Exceeds Disproportionate Burden Threshold of +20%
P3 extended to Downtown	2,831 / 8,893 = 31.8%	30.8%	3%	No	2,068 / 5,447 = 38.0%	18.6%	104%	No- positive change

Mitigations

The Title VI analysis found a disproportionate burden for the service area reductions on the 61D, 71A, 71C and 71D, and a disparate impact for the reduction in service area on the P3. However, PRT believes these changes also have positive effects that will mitigate any potential hardships created by the service changes.

Direct Mitigation of Lost Direct Downtown Service Connection

1. **The Downtown-Uptown-Oakland Bus Rapid Transit project proposes to improve the transit amenity and reliability experience for all users** of the corridor between the three neighborhood areas in the City of Pittsburgh. Five bus routes, the 61A, 61B, 61C, 71B, and P3 will become “BRT” routes, and provide upgraded service from Oakland heading west to Downtown Pittsburgh. However, even users of the non-BRT routes, which include routes 61D, 71A, 71C and 71D with shortened service, will experience the benefits of the BRT amenities in Oakland. In this area, all bus riders will experience upgraded stations with

amenities, dedicated bus lanes, and transit signal priority. East of the Oakland area, these routes will continue to have the benefit of more reliable service by providing reliability improvements in Oakland.

While these BRT improvements will bring benefits to the community, PRT is proposing to make these reductions before the improvements are fully built to optimize vehicle and staff hours during construction and in an environment where PRT is very short-staffed for bus operators and is struggling to maintain 100% of scheduled service. Therefore, PRT also has a proposed list of service improvements to implement concurrently with the BRT service changes that will mitigate harm to riders in the interim period before the BRT project is fully realized.

2. **Addition of the P3 into Uptown and Downtown and the addition of weekend service on the P3** – this service addition will assist with the loss of service from the four routes by adding this route to the corridor. This route has direct overlaps most notably with the 71D route and with parts of the outer ends of the 61A and 61B routes. It will operate 7 days a week.

The five BRT routes (61ABC, 71B, P3) will directly serve 87% of the approximately 22,400 transit riders along the nine 61ABCD, 71ABCD, and P3 corridors (this is 2022 data; prior to the pandemic, it was 88% of 48,900 riders). For the 13% of riders not served directly at their stop by a BRT route, they will continue to have the same service levels through Oakland and will have reduced frequency of a one seat ride all the way to the Uptown and Downtown neighborhoods (but will retain similarly frequency via a one or two seat ride). Of these individuals, approximately 18% travel beyond Robinson Street in Oakland to either Uptown or Downtown. PRT analyzed the origin-destination data for these riders to detail locations where additional direct Downtown trips might be needed to minimize any impacts to these individuals. The frequency of all 61 and 71 series routes is proposed to be relatively unchanged once the BRT project is complete.

The most notable areas affecting riders who might no longer have a one seat ride include:

Micro-corridor	Neighborhood(s)	Weekday Boardings (2022) with alighting post (west of) Robinson Street	Routes still serving Downtown in direct (one-seat) trip	Reduction in Direct (one-seat) Downtown Trip	Proposed Schedule Change to Accommodate Riders with a one-seat ride
Centre Avenue (Craig to Aiken)	Bloomfield, Shadyside	67	82, 86 (77)	65%	Add 8 additional trips on the 82 Lincoln between 7-9am and at 4pm to accommodate additional riders going Downtown.
Negley Avenue (Centre to Bryant)	East Liberty, Friendship, Garfield, Highland Park	52	77, 87	76%	Add 2 additional trips on the 87 Friendship during the 7am hour to accommodate additional riders going downtown.
Hamilton Avenue (Washington to Wood)	Homewood South	15	None (P1/2, 77, 86 within 5-minute walk from all stops)	100%	No proposed changes.

The BRT service reductions on the 61D and 71A/C/D are expected to save **approximately 500** vehicle hours per week. PRT plans to apply the hours saved across four priorities, listed below.

3. **Add necessary frequency to the 82 Lincoln and to the 87 Friendship routes** as noted in the chart above to directly mitigate loss of direct Downtown connections along micro-corridors of the 61D, 71A, 71C, 71D routes.
 - Estimate of added weekly hours: **About 50**
4. **Improve reliability system-wide by restocking the extra board:** PRT currently has more scheduled service than it has operators available. This results in over 2% of scheduled trips being cancelled every day due to lack of operator availability. PRT's goal is to restock the extra board (a reserve pool of operators available to fill in where needed) to ultimately reduce cancelled trips to less than 1% of total service.
 - Estimate of added weekly hours: **up to 275** to reduce OS by 1%
5. **Restore November 2020 Pandemic-Related Reductions which had a disproportionate burden finding in Title VI where appropriate:** In November 2020, PRT made several reductions in commuter service due to the COVID-19 pandemic. Five of these routes were shown to have a disproportionate burden or disparate impact on minority or low-income populations. Restoring some service back to routes that had a disproportionate burden will help mitigate impacts to low-income communities, albeit not the same communities as those impacted by this change:

- Route 58 Greenfield - recommend moving to 30-minute service at peak hours, adding 4 additional round trips to total **about 30 hours**
 - Route 65 Squirrel Hill - not recommended for additions, as ridership remains down 80% from prepandemic levels and frequent service from Squirrel Hill to Oakland and Downtown exists on other routes.
 - Route P7 – recommend adding one additional AM and two PM trips to total **13 hours**
 - Estimate of added weekly hours from November 2020 changes: **About 65**
6. **Restore 2022 reductions:** In 2022, PRT made several service reductions on low-performing routes due to operator shortages. While none of these reductions were found to have a disparate burden, some of these routes have significant populations of low-income riders who depend on the service. A third priority for PRT would be to use some of the saved hours to add back some of the reduced service, focusing on routes that have maintained ridership and serve primarily low-income riders.
- Staff will prioritize these changes based on ridership and low income and/or minority race status in December 2022 and present its findings publicly. This will give more time for ridership changes and reactions to 2022 service changes to be analyzed.
 - Potential weekly hours available to put back service: 80+
7. **New service additions and extensions:** Finally, PRT plans to use any remaining available service hours to develop new additions to frequency and/or extensions. These could include more frequency on routes experiencing crowding, extending routes to connect riders to job and shopping centers, or increasing the span of service for routes with high late night or early morning ridership.

The changes to the system for the Downtown-Uptown-Oakland Bus Rapid Transit Project will provide positive reliability, safety, and amenity improvements for all users in this heavily transit-focused corridor. While these improvements are positive ones, the reductions in service to go along with these improvements need to be made in advance of the full project's construction completion to balance the needs of the current system with the workforce shortages that PRT continues to experience because of the ongoing pandemic and its effects on our community. Focusing the hours from the reductions on improving reliability for all system users and then toward reestablishing lost service, particularly on low-income and minority race and ethnicity routes, will ensure that PRT properly mitigates any negative impacts from these changes.