

# FY2021 Major Service Changes Service Equity Analyses for Title VI Program

COVID-19 Pandemic Service Changes

Planning & Service Development Department

Port Authority of Allegheny County

April, July, and October 2021 (amended throughout year)

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## 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 that transit agencies evaluate, prior to implementation, all service changes that exceed the transit provider's major service change threshold, and to determine whether those changes will have a disparate 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 via its regulations that 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 in FY2021

Port Authority has historically centered a large portion of its service around downtown "9 to 5" commuters, with frequent service during rush hours and less service at midday, nights, and on weekends. The COVID-19 pandemic decimated Port Authority's historically strong commuter ridership: Many routes lost 90% of their ridership almost overnight. Meanwhile, continued demand on local routes serving essential workers, grocery stores, and hospitals strained capacity limits.

In November 2020, the Port Authority of Allegheny County implemented 30 major service changes. Major changes affect more than 30% of a route's weekly trips, directional miles or service hours, or addition of a service day. The intent of these changes was to rebalance service away from underused commute routes and toward routes serving low-income riders who were experiencing crowding and pass-ups on a regular basis. Ten of the major changes added permanent weekend service to connect transit-reliant riders to services and jobs on the weekend. The remaining 20 changes were considered temporary changes responding to COVID-19, including cutting commuter routes, and adding trips to infrequent "lifeline" routes.

While Port Authority believed – and still consider – these changes to be temporary service modifications as a result of the persistent nature of the COVID-19 global pandemic, because ridership has yet to fully recover and the FTA considers changes under Title VI to be permanent if they remain in place for more than 12 months, it has triggered Port Authority's requirement to conduct a formal Title VI analysis and a public comment and hearing period for the pandemic-related major service changes. The FTA has not modified this 12-month threshold in light of the COVID-19 pandemic to reflect the fact the most transit agencies continue to operate long-term temporary service cuts until ridership returns.

Although the FTA considers changes that remain in place for more than 12 months to be permanent, Port Authority is continuing to monitor ridership and route performance and plans to continue modifying service as ridership changes.

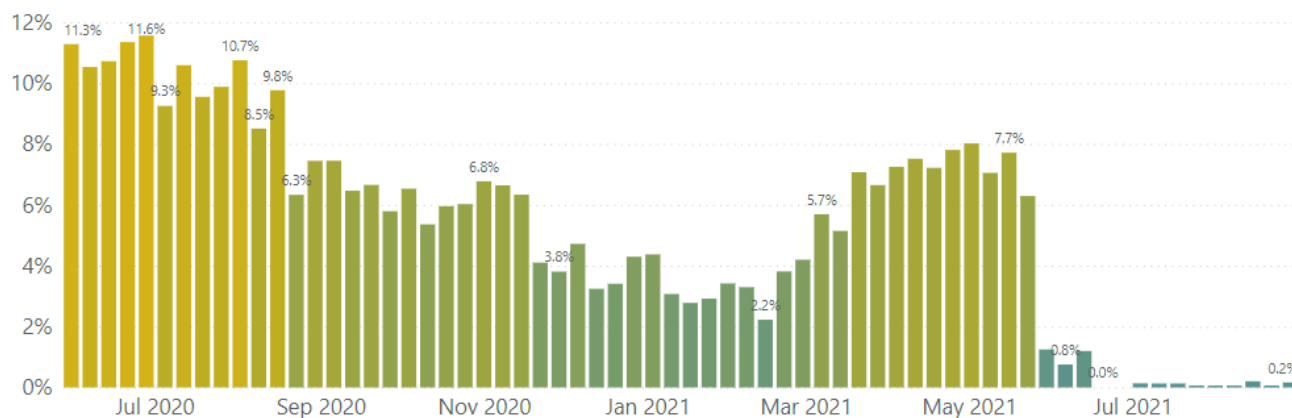
**Table 1: MAJOR SERVICE CHANGES AND FINDINGS BY ROUTE**

Route	Type of Major Service Change	Change Category	Title VI Results
Route 1	Additional trips added to all service days	Addition of weekly trips	No impacts
Route 12	Additional trips added to all service days	Addition of weekly trips	No impacts
Route 38	Reduction of weekday Service	Reduction of weekly trips	No impacts
Route 58	Reduction of weekday Service	Reduction of weekly trips	<b>Disproportionate burden</b>
Route 59	Addition of weekday Service	Addition of weekly trips	Both disparate impact and disproportionate burden, but positive change
Route 65	Reduction of weekday Service	Reduction of weekly trips	<b>Disproportionate burden</b>
Route 19L	Reduction of weekday Service	Reduction of weekly trips	No impacts
Route G2	Reduction of weekday Service	Reduction of weekly trips	No impacts
Route G3	Reduction of weekday Service	Reduction of weekly trips	No impacts
Route G31	Reduction of weekday Service	Reduction of weekly trips	No impacts
Route O1	Reduction of weekday Service	Reduction of weekly trips	No impacts
Route O12	Reduction of weekday Service	Reduction of weekly trips	No impacts
Route P12	Reduction of weekday Service	Reduction of weekly trips	<b>Disparate impact</b>
Route P13	Reduction of weekday Service	Reduction of weekly trips	No impacts
Route P68	Extension of route on all service days	Extension of route	Disparate impact, but positive change
Route P7	Reduction of weekday Service	Reduction of weekly trips	<b>Both disparate impact and disproportionate burden</b>
Route P76	Reduction of weekday Service	Reduction of weekly trips	<b>Disparate impact</b>
Route Y1	Reduction of weekday Service	Reduction of weekly trips	No impacts
Route Y45	Reduction of weekday Service	Reduction of weekly trips	No impacts
RED line	Addition of weekday Service	Addition of weekly trips	No impacts

For the service reductions, it is observed that routes 58 and 65 show disproportionate burdens on low-income persons, routes P12 and P76 show a disparate impact on minority people, and route P7 shows both. The routes will be further evaluated and closely monitored to minimize adverse impact on the target populations. The return of service to these routes will be prioritized as demand increases a, pending the availability of budgetary and other resources. More detail can be found in the sections below detailing each route’s changes and impacts.

To ensure the health and safety of our riders and employees, temporary vehicle capacity restrictions were put in place as part of Port Authority’s COVID-19 response plan. Although ridership dropped more than 70% for the overall system during the pandemic, it was not equal across the board and some routes were experiencing crowding and pass-ups because of the capacity restrictions. To improve service and passenger safety, trips were added to routes 1, 12, 59, and P68 by reducing service in places where it was not being well utilized (namely on commuter-oriented services). Given manpower constraints, it would not have been possible to make major additions on these routes without cutting service elsewhere. Routes 19L, 58, G31, Y45, 65, P76, P7, O1, 38, P12, Y1, G3, P13, O12, and G2 had reductions in weekly trips to facilitate increasing service on the aforementioned routes.

Figure 01 shows the increased crowding on the aforementioned major service change routes in the summer of 2020, and the decreased crowding as the trips adjusted in September 2020. As ridership began to return in Spring 2021, the crowding crept up, which went back down when capacity restrictions were lifted in June of 2021. In Figure 02, it can be seen that routes 1, 59, 12 and P68 had the highest levels during this period, which led to the decision to add trips on these routes in November 2020.



Limited to routes with major service changes FY21 per filter pane.

**Figure 01: Crowding on major service change routes by week, June 2020 to August 2021.**

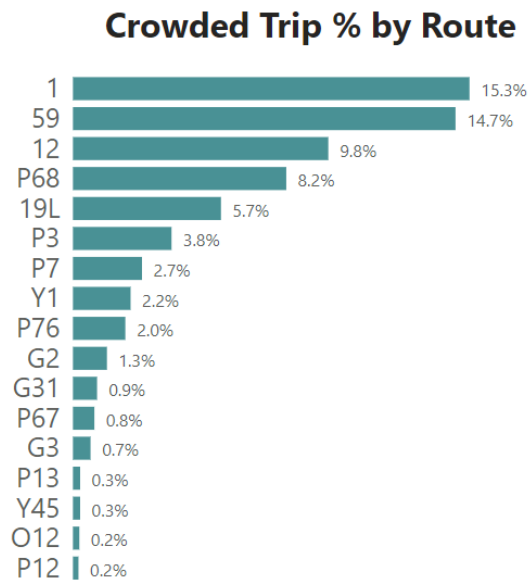


Figure 02: **Crowding on major service change routes by route, June 2020 to August 2021.**

Another interesting circumstance observed for pre-pandemic (February 2020 is used as the baseline) and during pandemic period is how ridership on the different route types was affected (and continues to be affected) during the pandemic. As per Figure 03, at the beginning of the pandemic (April 2020) ridership dropped significantly on the commute routes (94%) compared to only an 80% drop on local routes. As of August 2021, the commute routes are still down by 87%, while the local routes are only down by 68% from pre-pandemic levels.

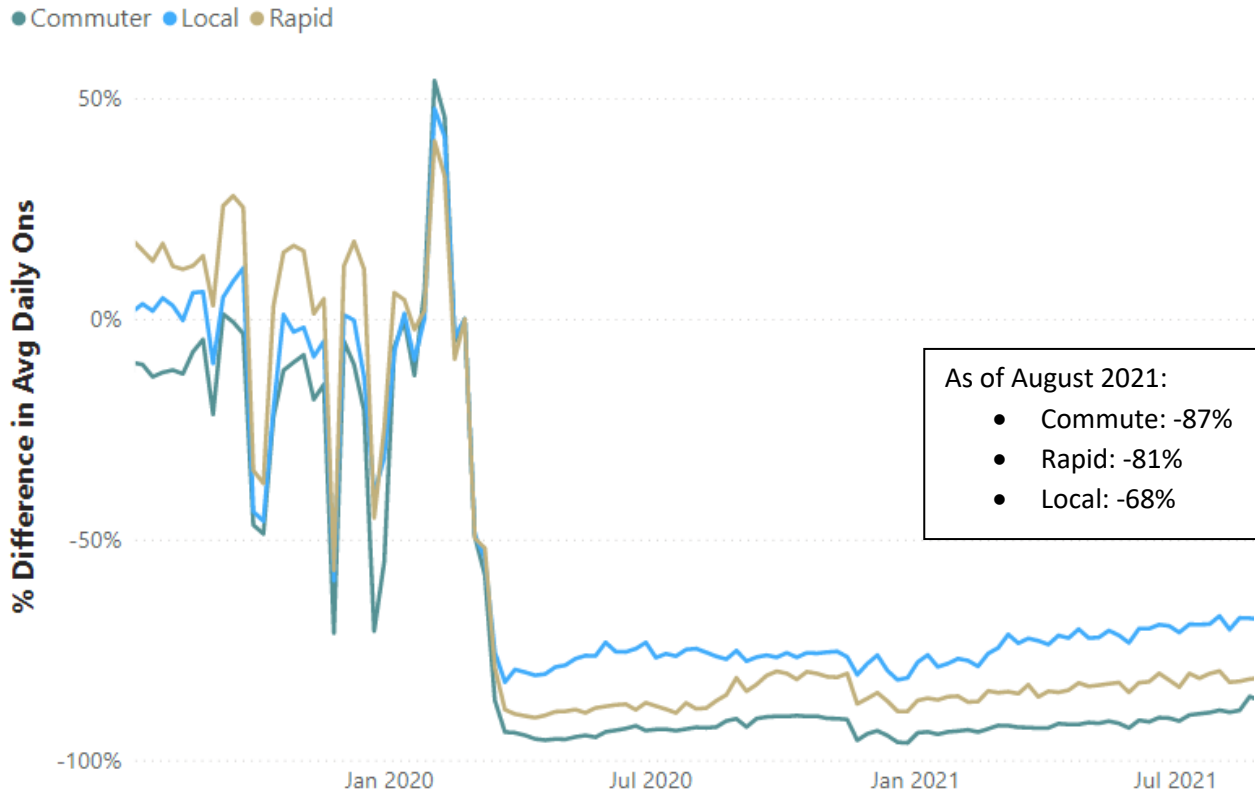


Figure 03: Percent ridership change by route type (compared to pre-pandemic same month).

Below is a summary of pre-pandemic and current ridership on the routes undergoing major service change. The routes in grey rows are those with added service.

Table 2: Change in Weekly Hours and Ridership by Route before and after the Service Change in November 2020

Route	Weekly Hours Before November 2020 Changes	Weekly hours After November 2020 Changes	Pre-pandemic August 2019 Avg Weekday Riders	Pandemic August 2021 Avg Weekday Riders	Service Change	Riders % Change
59	557.5	869.4	2209	1700	+56%	-23%
1	413.3	592.1	1863	1363	+43%	-27%
12	352.0	553.9	1272	858	+57%	-33%
P68	256.1	349.7	1439	844	+37%	-41%
RED	751.7	1023.8	10045	3056	+36%	-70%
19L	80.4	49.3	669	201	-39%	-70%
Y45	52.9	35.0	251	74	-34%	-71%

G2	435.2	298.4	3913	1132	-31%	-71%
58	215.7	148.2	1111	296	-31%	-73%
P7	127.9	79.6	712	173	-38%	-76%
P76	132.9	84.0	989	214	-37%	-78%
O12	185.1	76.6	1376	254	-58%	-82%
G31	96.3	61.8	689	120	-35%	-83%
P12	186.6	103.5	1219	192	-44%	-84%
65	53.3	32.7	436	62	-38%	-86%
38	450.0	268.4	3267	443	-40%	-86%
P13	52.7	22.1	376	49	-58%	-87%
O1	82.8	24.0	1263	158	-71%	-87%
G3	151.8	68.8	982	117	-55%	-88%
Y1	73.3	34.3	741	81	-53%	-89%

Comparing pre-pandemic and current ridership, it is observed that routes 1, 12, 59 and P68 experienced less than a 50% reduction in ridership from pre-pandemic levels. The graph in Figure 04 depicts the correlation between service change and ridership change. As can be seen by the dotted trendline, it is apparent that these service changes are well aligned with their matching changes in ridership due to the pandemic, except for the RED line, which seems to have proportionally more service than ridership change warrants. However, as will be noted in the RED line analysis, this major service increase was coupled with an opposing service reduction (slightly under the threshold to consider it “major”) on the BLUE line.



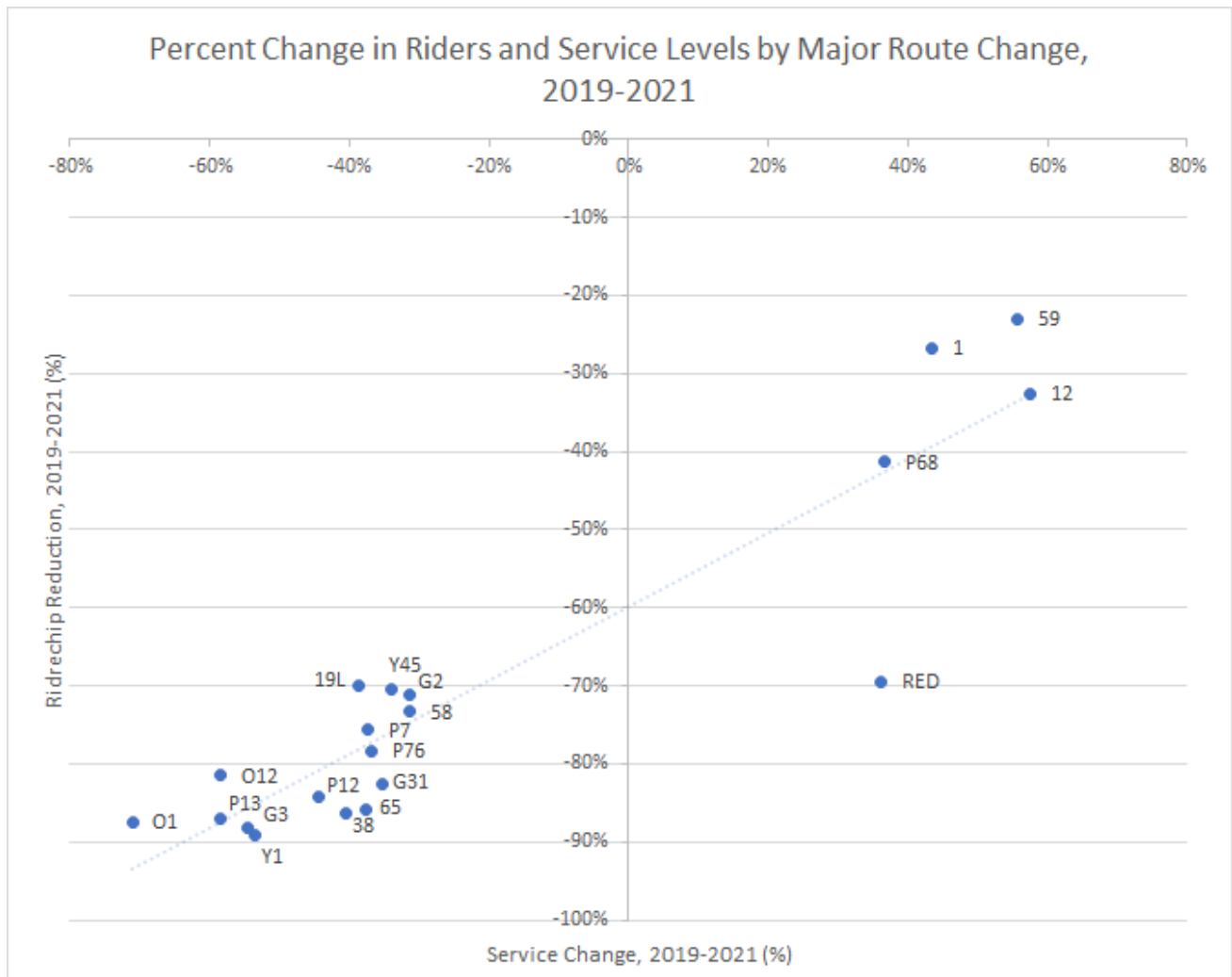


Figure 04: **Correlation between ridership and service levels on major service change routes, 2019-2021.**

The following section of the report provides a breakdown of each individual route’s major service change and impacts to key communities as required under Title VI.

## Service Impact Analyses Process Overview

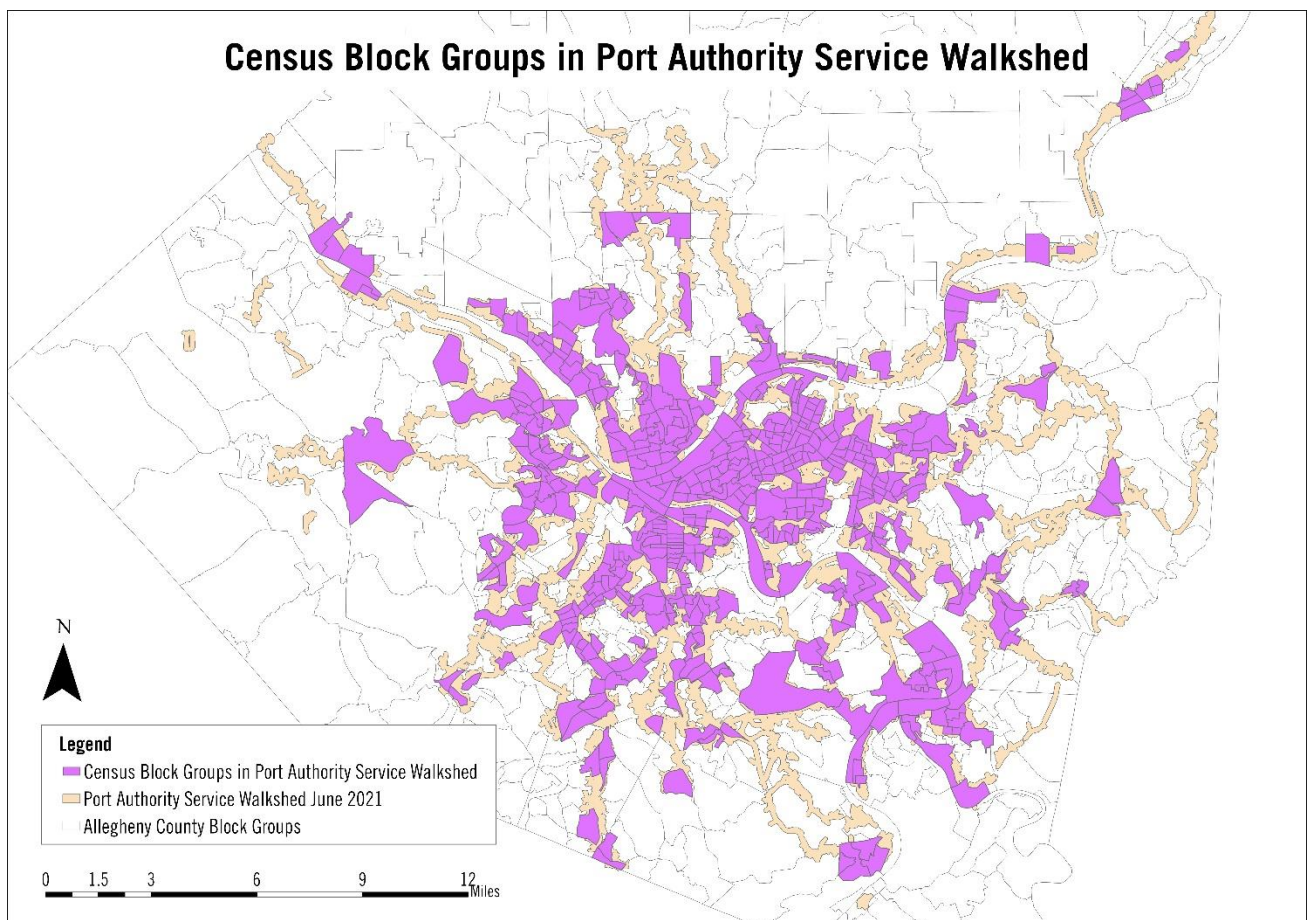
The following analyses are done by comparing a subset of the system's population along a route with proposed changes to the overall system population. For this set of analyses, the system population used is the ACS Census data within each Census block group which has a centroid within our transit walkshed. The transit walkshed is developed using the Network Analyst tool in ArcGIS and incorporates all on-street locations within ½ mile of a rapid transit station and within ¼ mile of a non-rapid transit stop. Using this analysis, the overall percentages of minority and low-income persons within the Port Authority's service area are:

Table 3: Demographics in Port Authority System Walkshed

	Minority Persons	Total Persons	Percentage Minority	Low-Income Persons	Total Persons	Percentage Low-Income
Transit System Walkshed	144,670	470,031	30.8%	83,804	450,935	18.6%

\*The total population in the minority and low-income ACS datasets are different due to sampling differences and marginal error.

Map 01 shows the block groups used for this selection process within the Authority's walkshed.



Map 01: Census Block Groups in Port Authority of Allegheny County System Walkshed

A similar method of demographic analysis was used for the disparate impact and disproportionate burden analyses for each route change. Census block groups with centroids within the walkshed were selected only for the walkshed of that transit route. The percentage of minority races and low-income populations within the route's service area are then calculated from this selection and compared against the system walkshed averages above. In the case of routes traversing through extremely suburban areas walksheds are limited in geography due to the limited street grid (seen in the previous map as peach colored walkshed areas with no overlapping Census block group), the intersect method is utilized to select census block groups in the walkshed for these routes instead of a centroid analysis. For this set of analyses, the centroid method of analysis was used for all routes except for routes 12, O1, O12, P13, and P68, which used the intersect method.

## Service Impact Analyses: Major Additions

### Route 1 Addition of Daily Trips

#### Description

Port Authority provided Route 1 Freeport Road with added trips on all service days. In the September 2020 to November 2020 period Route 1 provided service for more than 413 hours weekly. Since November 2020 the route provided service for more than 592 weekly hours which accounts for more than 43% addition to the 2009 weekly hours. This is more than 30% change in service hours, which qualifies as a major service change for the Authority.

#### Demographics of Population within Major Service Change Area

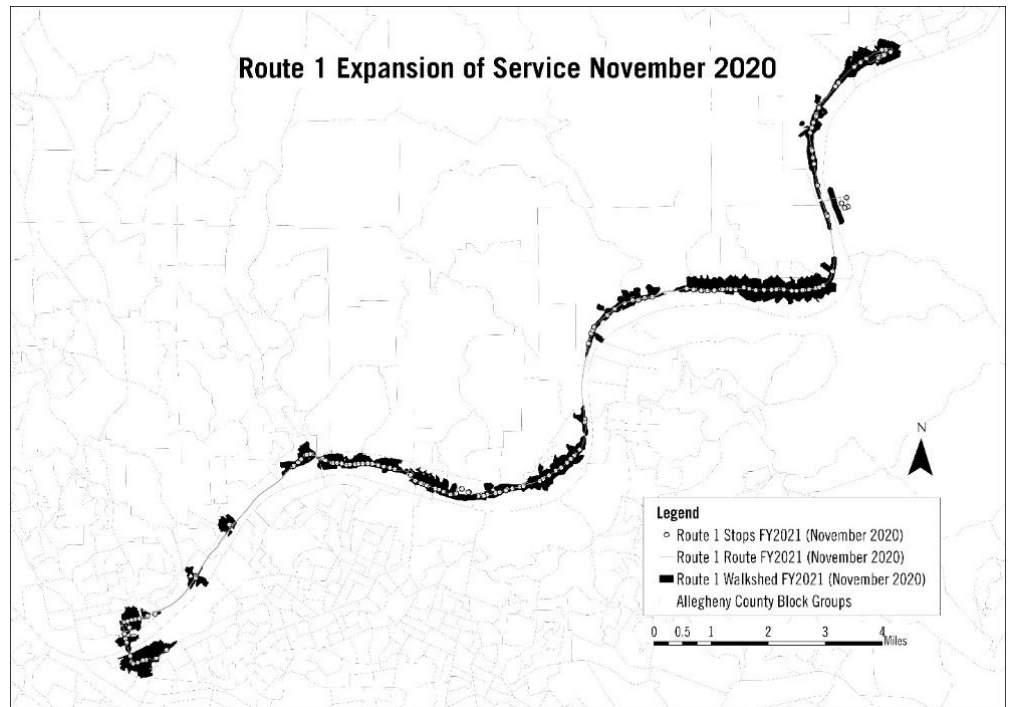
Walksheds were developed to geographically constrain the service area before and after the change. The walkshed is defined as ¼ mile on street areas around each bus stop serving the route after the new service provision.

Map 02 shows the service area for the Route 1 service addition. 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 4: Disparate impact and disproportionate burden analysis for changes in Route 01

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%
1 Freeport Road	1,558/ 10,686 = 14.6%	30.8%	-53%	No	1,308/ 10,655/ = 12.3%	18.6%	-34%	No

As seen in the chart, the block groups served by Route 1 service expansion have lower proportions of low-income and minority race populations than the service area at large. So, there is no disparate impact or disproportionate burden would be borne by the served populations.



Map 02: Expansion of Service on Route 01

## Route 12 Addition of Daily Trips

### Description

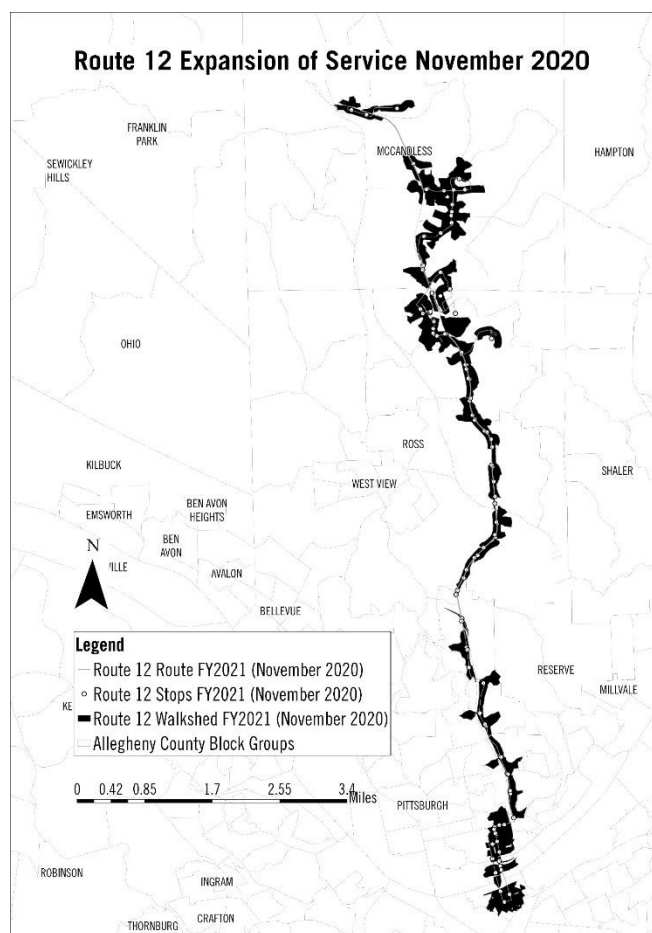
Port Authority provided Route 12 McKnight with additional trips on all service days. In the September 2020 to November 2020 period, route 12 provided service for more than 352 hours weekly. Since November 2020 the route provided service for almost 554 weekly hours which accounts for more than a 57% addition to the 2009 weekly hours. This is more than 30% change of the current service hours, which qualifies as a major service change for the Authority.

### 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 03 shows the service area for Route 12 service expansion. The demographic analysis selects Census blocks that intersect with the walkshed and finds the percent of minority race and low-income populations within the new service area.

Table 5: Disparate impact and disproportionate burden analysis for changes in Route 12



Map 03: Expansion of Service on Route 12

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%
12 Daily	10,653/ 46,055 = 23.1%	30.8%	-25%	No	5,181/ 43,677 = 11.9%	18.6%	-36%	No

As seen in the chart, the block groups served by Route 1 service expansion have lower proportions of low income and minority race populations than the service area at large. So, there is no disparate impact or disproportionate burden would be borne by the served populations.



## Route 59 Addition of Weekday Trips

### Description

Port Authority provided Route 59 Mon Valley with added trips on weekday service. In the September 2020 to November 2020 period (2009 pick) route 59 provided service for almost 560 hours weekly. Since November 2020 (2011 pick) the route provided service for nearly 870 weekly hours which accounts for about 56% addition to the 2009 weekly hours. This is more than 30% change of the current service hours, which qualifies as a major service change for the Authority.

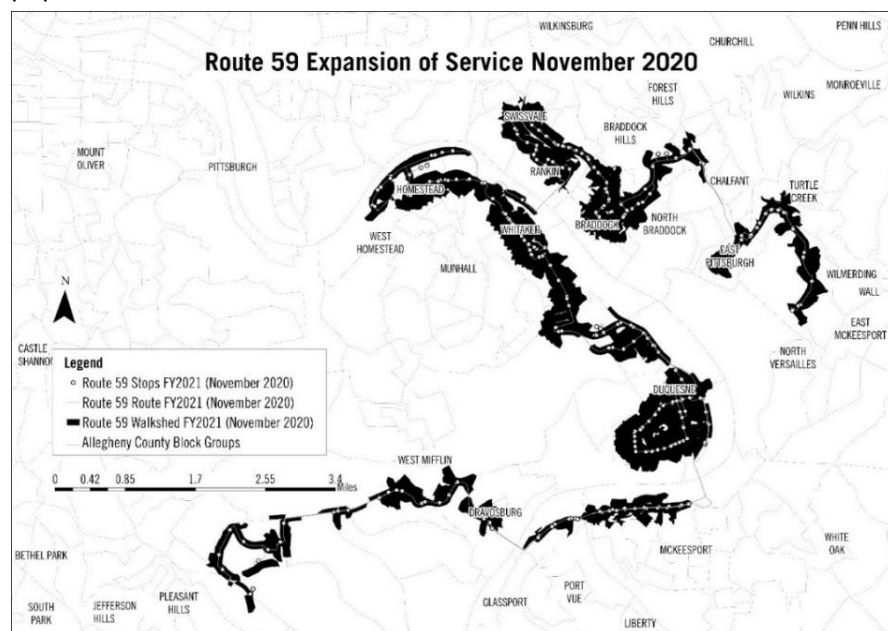
### Demographics of Population within Major Service Change Area

Walksheds and selection of Census data were developed in the same manner as the Route 1 service change. Map 04 shows the service area for Route 59 weekday service.

Table 6: Disparate impact and disproportionate burden analysis for changes in Route 59

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%
59 Weekday	10,389/ 21,239 = 48.9%	30.8%	59%	Yes – No adverse effects; positive change	5,674/ 20,766 = 27.3%	18.6%	47%	Yes – No adverse effects; positive change

As seen in the chart, the block groups served by Route 59 service expansion have higher proportions of low income and minority race populations than the service area at large. However, this is a proposed service addition and a positive change, so no disparate impact or disproportionate burden would be borne by these populations.



Map 04: Expansion of Service on Route 59

## Route P68 Route Extension and Addition of Trips on all Service Days

### Description

Port Authority extended service and added frequency on Route P68 Braddock Hills Flyer. In the September 2020 to November 2020 period route P68 provided service for about 256 hours weekly. Since November 2020 the route provided service for nearly 350 weekly hours which accounts for almost 37% addition to the 2009 weekly hours. This is more than 30% change of the current service hours, which qualifies as a major service change for the Authority.

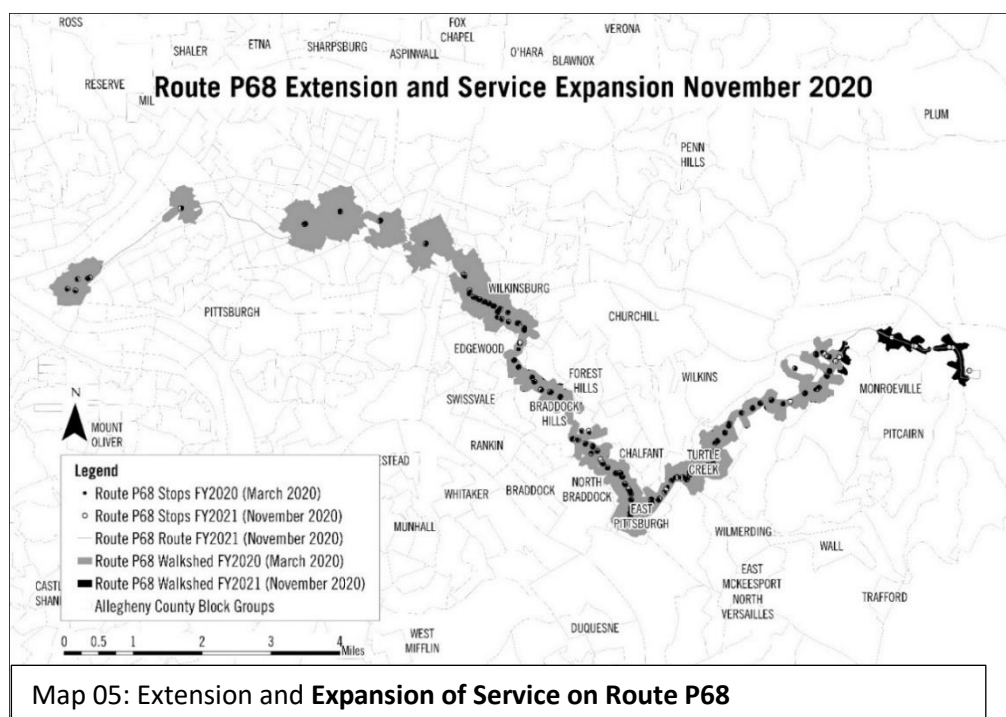
### Demographics of Population within Major Service Change Area

Walksheds and selection of Census data were developed in the same manner as the Route 12 service change. Map 05 shows the service area for Route P68 weekday service.

Table 7: Disparate impact and disproportionate burden analysis for changes in Route P68

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%
P68 Daily	4,574/ 62,822 = 39.1%	30.8%	27%	Yes – No adverse effects; positive change	12,400/ 61,539 = 20.1%	18.6%	8%	No

As seen in the chart, the block groups served by Route P68 service expansion have higher proportions of low income and minority race populations than the service area at large. The low-income population does not cross the disproportionate burden threshold, though the minority population does cross the disparate impact threshold. However, this is a proposed service addition and a positive change, so no disparate impact or disproportionate burden would be borne by these populations.



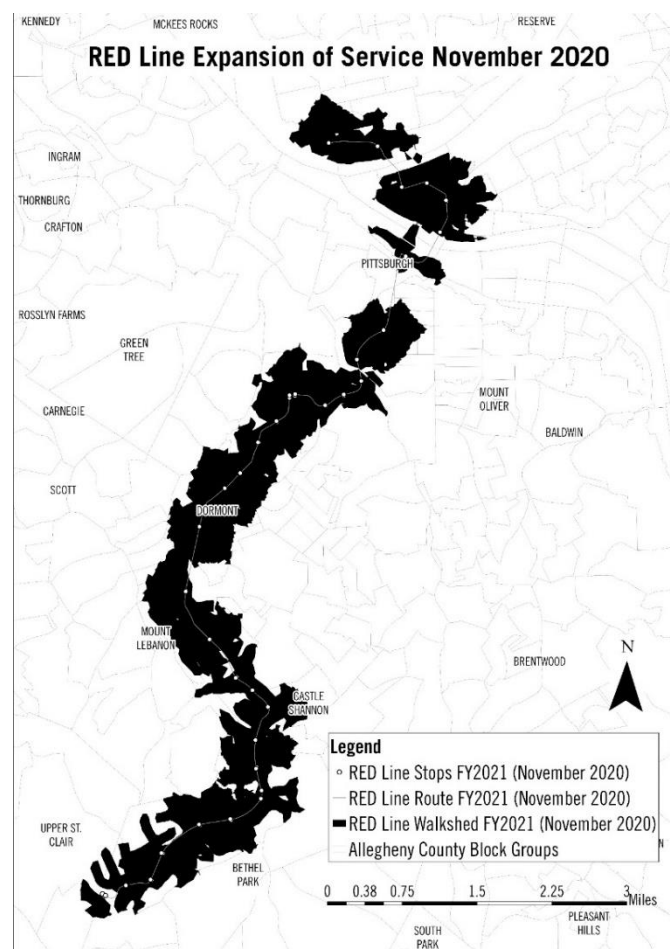
## RED Line Addition of Weekday Trips

### Description

Port Authority provided the RED line light rail with added trips on weekday service. In the September 2020 to November 2020 period (2009 pick) RED line provided service for almost 752 hours weekly. Since November 2020 (2011 pick) the route provided service for nearly 1024 weekly hours which accounts for about 36% addition to the 2009 weekly hours. This is more than 30% change of the current service hours, which qualifies as a major service change for the Authority. This change was made in conjunction with a reduction in service on the BLUE line. Together, the two changes equate to a neutral overall change in light rail service levels. These changes were made to reduce transfers for both passengers and light rail operators during the pandemic to limit potential exposures.

### Demographics of Population within Major Service Change Area

Walksheds and selection of Census data were developed in the same manner as the Route 1 service change. Map 06 shows the service area for Red Line weekday service.



Map 06: Expansion of Service on the RED line

Table 8: Disparate impact and disproportionate burden analysis for changes in RED line

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%
RED Weekday	6,229/ 39,744 = 15.7%	30.8%	-49%	No	3,687/ 34,940 = 10.6%	18.6%	-43%	No



As seen in the chart, the block groups served by the RED line service expansion have lower proportions of low income and minority race populations than the service area at large. So, there is no disparate impact or disproportionate burden would be borne by the served populations.

## Service Impact Analyses: Major Reductions

### Route 38 Reduction of Weekday Trips

#### Description

Port Authority reduced weekday peak frequency on Route 38 Green Tree. In the September 2020 to November 2020 period (2009 pick) route 38 provided service for almost 450 hours weekly. Since November 2020 (2011 pick) the route provided service for a little over 268 weekly hours which accounts for more than a 40% reduction from the 2009 weekly hours. This is more than 30% change of the current service hours, which qualifies as a major service change for the Authority.

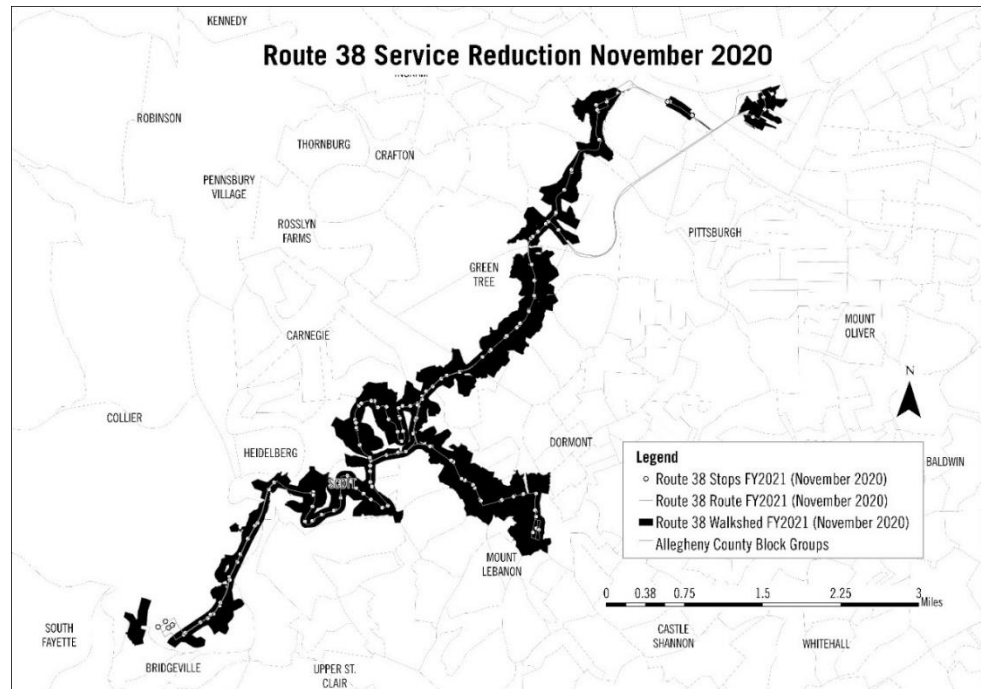
#### Demographics of Population within Major Service Change Area

Walksheds and selection of Census data were developed in the same manner as the Route 1 service change. Map 07 shows the service area for Route 38 weekend service.

Table 9: Disparate impact and disproportionate burden analysis for changes in Route 38

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%
38 Weekday	1,303/8,721 = 14.9%	30.8%	-51%	No	703/7,450 = 9.4%	18.6%	-49%	No

As seen in the chart, the block groups served by Route 38 have lower proportions minority race and lower income populations than the service area at large. So, it does not exceed the disparate impact threshold and disproportionate burden thresholds and thus there was no adverse impact on minority and low-income populations due to the service reduction



Map 07: Service Reduction on Route 38

## Route 58 Reduction of Weekday Trips

### Description

Port Authority reduced weekday frequency on Route 58 Greenfield. In the September 2020 to November 2020 period (2009 pick) route 58 provided service for just over 215 hours weekly. Since November 2020 (2011 pick) the route provided service for nearly 150 weekly hours which accounts for more than a 30% reduction from the 2009 weekly hours. This is more than 30% change of the current service hours, which qualifies as a major service change for the Authority.

### Demographics of Population within Major Service Change Area

Walksheds and selection of Census data were developed in the same manner as the Route 1 service change. Map 08 shows the service area for Route 58 weekday service.

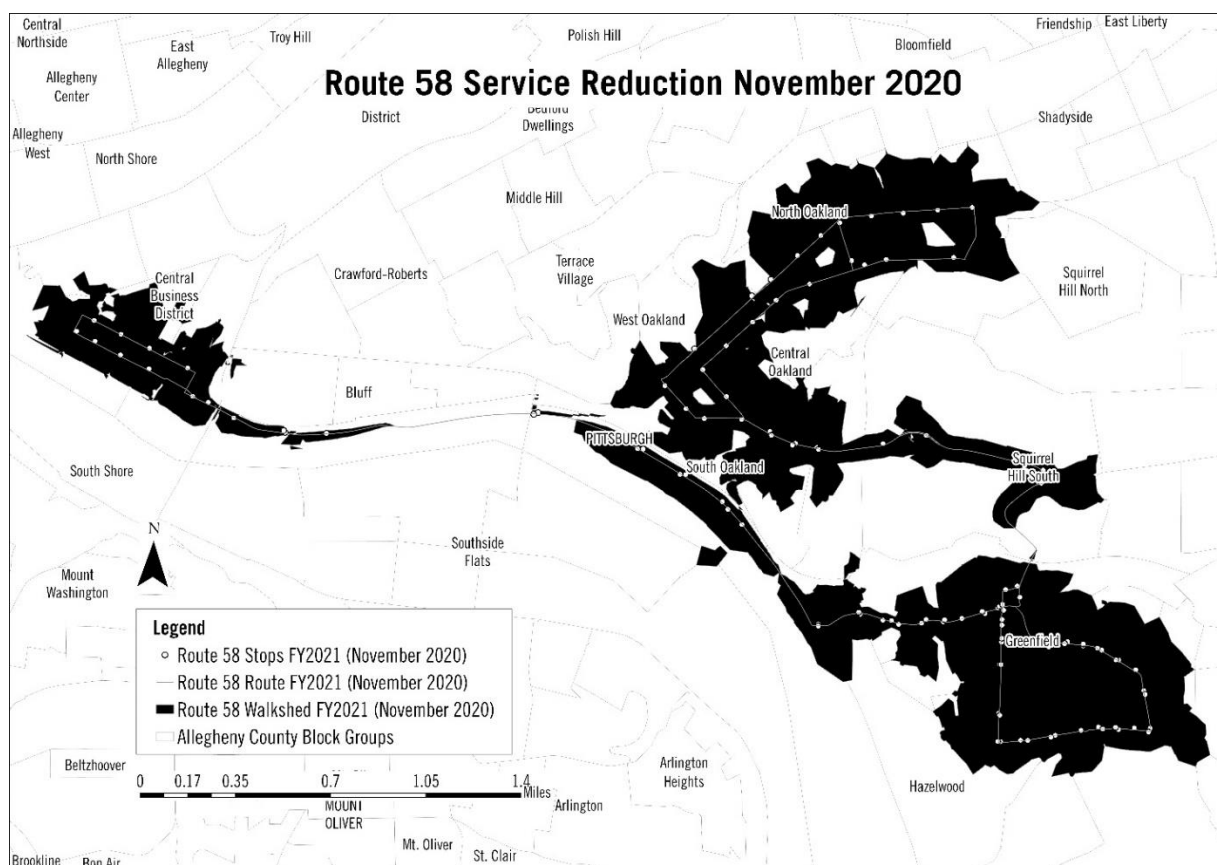
Table 10: Disparate impact and disproportionate burden analysis for changes in Route 58

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%
58 Weekday	6,353/ 27,794 = 22.9%	30.8%	-26%	No	6,770/ 19,531 = 34.7%	18.6%	86%	Yes – There are adverse effects; negative change; prioritize return of service as situations improve.

As seen in the chart, the block groups served by Route 58 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 people in this area. On the other hand, the proportion of minority race populations in the location is lower than the service area, so there is no disparate impact on minority persons.

### Evaluation of Alternatives

In July 2021, the Service Development team reviewed alternatives to put back service on Route 58 in order to avoid a disproportionate burden. The main alternative considered was to add service back to the route, which has seen a 31% reduction in service, and was, as of July, accompanied by an 73% reduction in ridership. It was noted at that time that increasing service to this area was not justified due to the extremely low continued ridership (more than 2.4x the drop than the drop in service level) as a result of the pandemic. Additionally, 83% of the route's walkshed is covered by other bus route walksheds on 5-day a week routes, so people using this route have other alternatives available, though they may not come at exactly the same time or route in exactly the same way as Route 58. There is currently a substantial legitimate justification for the proposed service change with ridership being so heavily reduced at 2.4x the service drop. This route is being closely monitored for ridership increases, and Port Authority will increase service to replace what has been lost as ridership returns to the extent that funding and resources continue to be available to do so.



Map 08: Service Reduction on Route 58

## Route 65 Reduction of Weekday Trips

### Description

Port Authority reduced weekday frequency on Route 65 Squirrel Hill. In the September 2020 to November 2020 period (2009 pick) route 65 provided service for a little over 53 hours weekly. Since November 2020 (2011 pick) the route provided service for more than 32 weekly hours which accounts for a 39% reduction from the 2009 weekly hours. This is more than 30% change of the current service hours, which qualifies as a major service change for the Authority.

### Demographics of Population within Major Service Change Area

Walksheds and selection of Census data were developed in the same manner as the Route 1 service change. Map 09 shows the service area for Route 65 weekday service.

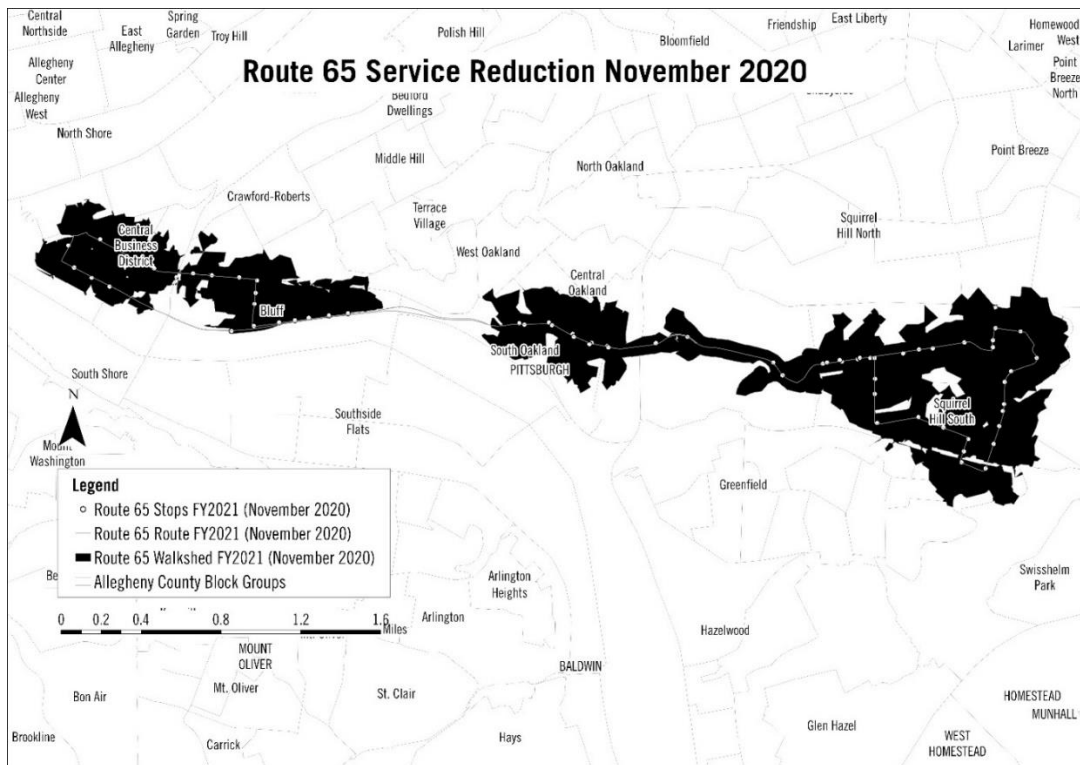
Table 11: Disparate impact and disproportionate burden analysis for changes in Route 65

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%
65 Weekday	5,639/ 22,176 = 25.4%	30.8%	-17%	No	6,143/ 20,481 = 30%	18.6%	61%	Yes – There are adverse effects; negative change; prioritize return of service as situations improve.

As seen in the chart, the block groups served by Route 65 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 people in this area. On the other hand, the proportion of minority race populations in the location is lower than the service area, so there is no disparate impact on minority persons.

### Evaluation of Alternatives

In July 2021, the Service Development team reviewed alternatives to put back service on Route 65 in order to avoid a disproportionate burden. The main alternative considered was to add service back to the route, which has seen a 38% reduction in service, and was, as of July, accompanied by an 86% reduction in ridership. It was noted at that time that increasing service to this area was not justified due to the extremely low continued ridership (more than 2.3x the drop than the drop in service level) as a result of the pandemic. Additionally, 92% of the route's walkshed is covered by other bus route walksheds on 5-day a week routes, so people using this route have other alternatives available, though they may not come at exactly the same time or route in exactly the same way as Route 65. There is currently a substantial legitimate justification for the proposed service change with ridership being so heavily reduced at 2.3x the service drop. This route is being closely monitored for ridership increases and will increase service to replace what has been lost as ridership returns to the extent that funding and resources continue to be available to do so.



**Map 09: Service Reduction on Route 65**

## Route 19L Reduction of Weekday Trips

### Description

Port Authority reduced weekday peak frequency on Route 19L Emsworth Limited. In the September 2020 to November 2020 period (2009 pick) route 19L provided service for just over 80 hours weekly. Since November 2020 (2011 pick) the route provided service for almost 50 weekly hours which accounts for a 39% reduction from the 2009 weekly hours. This is more than 30% change of the current service hours, which qualifies as a major service change for the Authority.

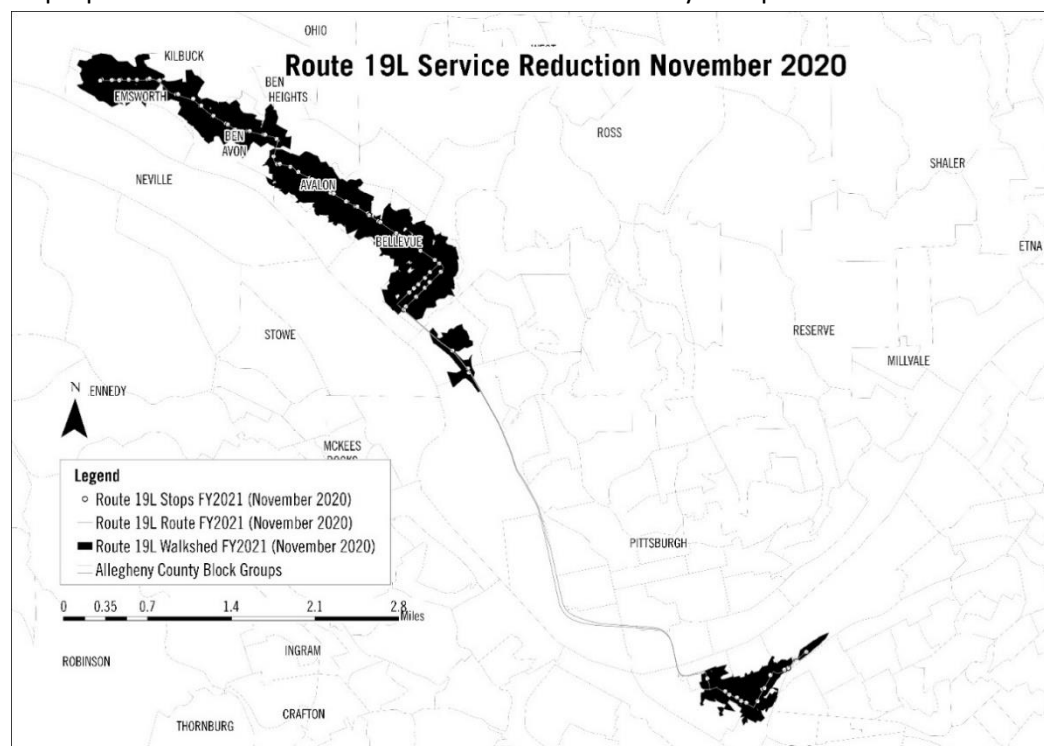
### Demographics of Population within Major Service Change Area

Walksheds and selection of Census data were developed in the same manner as the Route 1 service change. Map 10 shows the service area for Route 19L weekday service.

Table 12: Disparate impact and disproportionate burden analysis for changes in Route 19L

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%
19L Week day	1,889/ 12,757 = 14.8%	30.8%	-52%	No	1,356/ 12,735 = 10.6%	18.6%	-43%	No

As seen in the chart, the block groups served by Route 19L have lower proportions of low income and minority race populations than the service area at large. Therefore, the proposed service reduction does not have a disproportionate burden on the low-income and minority race persons in this area.



Map 10: Service Reduction on Route 19L



## Route G2 Reduction of Weekday Trips

### Description

Port Authority reduced weekday peak frequency on Route G2 West Busway. In the September 2020 to November 2020 period (2009 pick) route G2 provided service for more than 435 hours weekly. Since November 2020 (2011 pick) the route provided service for just over 298 weekly hours which accounts for more than 31% reduction from the 2009 weekly hours. This is more than 30% change of the current service hours, which qualifies as a major service change for the Authority.

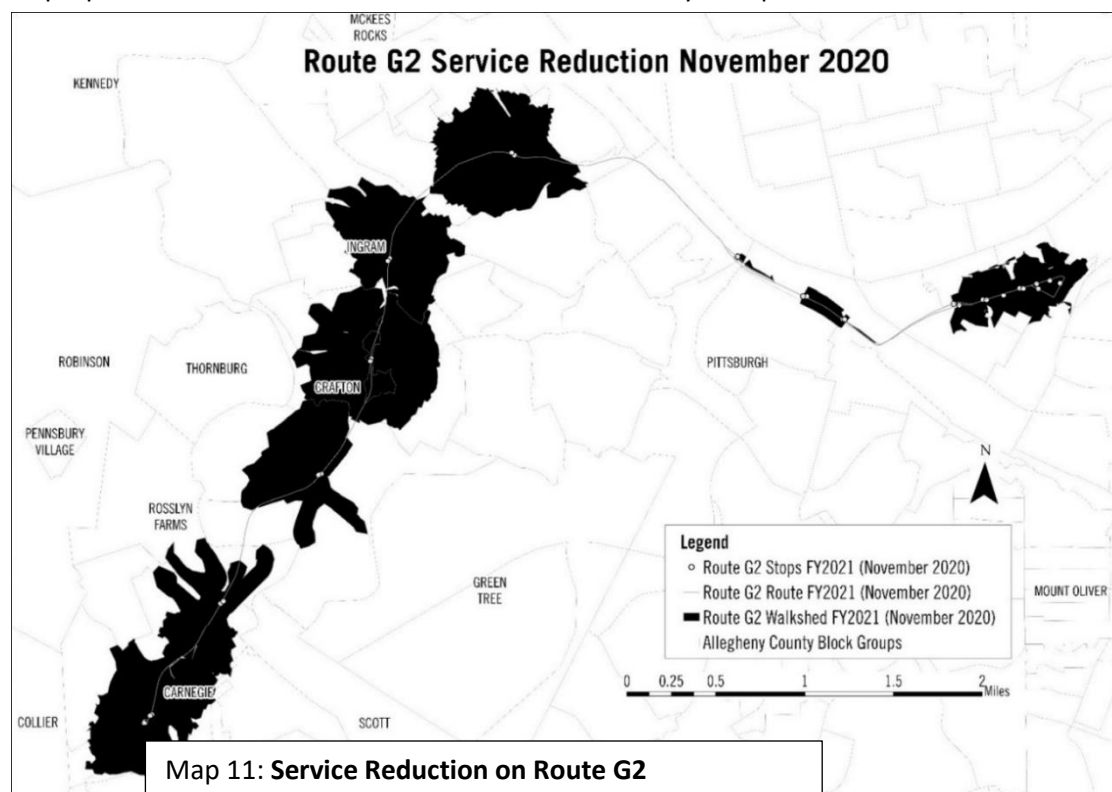
### Demographics of Population within Major Service Change Area

Walksheds and selection of Census data were developed in the same manner as the Route 1 service change. Map 11 shows the service area for Route G2 weekday service.

Table 13: Disparate impact and disproportionate burden analysis for changes in Route G2

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%
G2 Weekday	2,909/ 14,863 = 19.6%	30.8%	-36%	No	2,164/ 14,803 = 14.6%	18.6%	-21%	No

As seen in the chart, the block groups served by Route G2 have lower proportions of low income and minority race populations than the service area at large. Therefore, the proposed service reduction does not have a disproportionate burden on the low-income and minority race persons in this area.



## Route G3 Reduction of Weekday Trips

### Description

Port Authority reduced weekday frequency on Route G3 Moon Flyer. In the September 2020 to November 2020 period (2009 pick) route G3 provided service for nearly 152 hours weekly. Since November 2020 (2011 pick) the route provided service for almost 69 weekly hours which accounts for a reduction of about 36% from the 2009 weekly hours. This is more than 30% change of the current service hours, which qualifies as a major service change for the Authority.

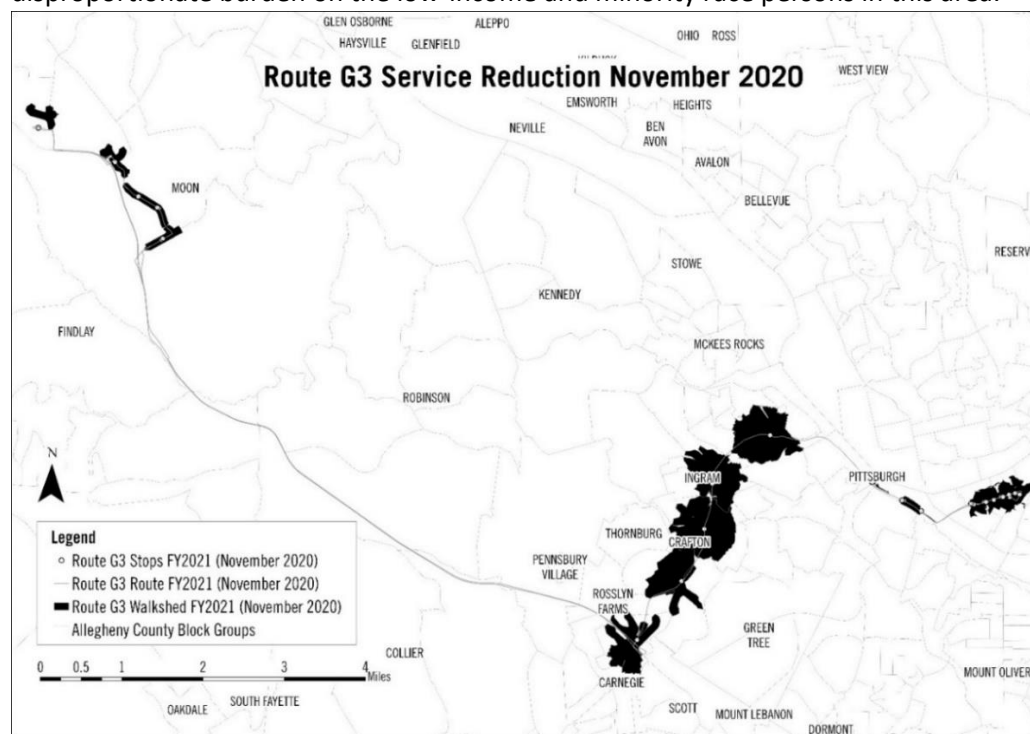
### Demographics of Population within Major Service Change Area

Walksheds and selection of Census data were developed in the same manner as the Route 1 service change. Map 12 below shows the service area for Route G3 weekday service.

Table 14: Disparate impact and disproportionate burden analysis for changes in Route G3

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%
G3 Weekday	2,677 / 13,538 = 19.8%	30.8%	-36%	No	1,925 / 13,478 = 14.3%	18.6%	-23%	No

As seen in the chart, the block groups served by Route G3 have lower proportions of low income and minority race populations than the service area at large. Therefore, the proposed service reduction does not have a disproportionate burden on the low-income and minority race persons in this area.



Map 12: Service Reduction on Route G3



## Route G31 Reduction of Weekday Trips

### Description

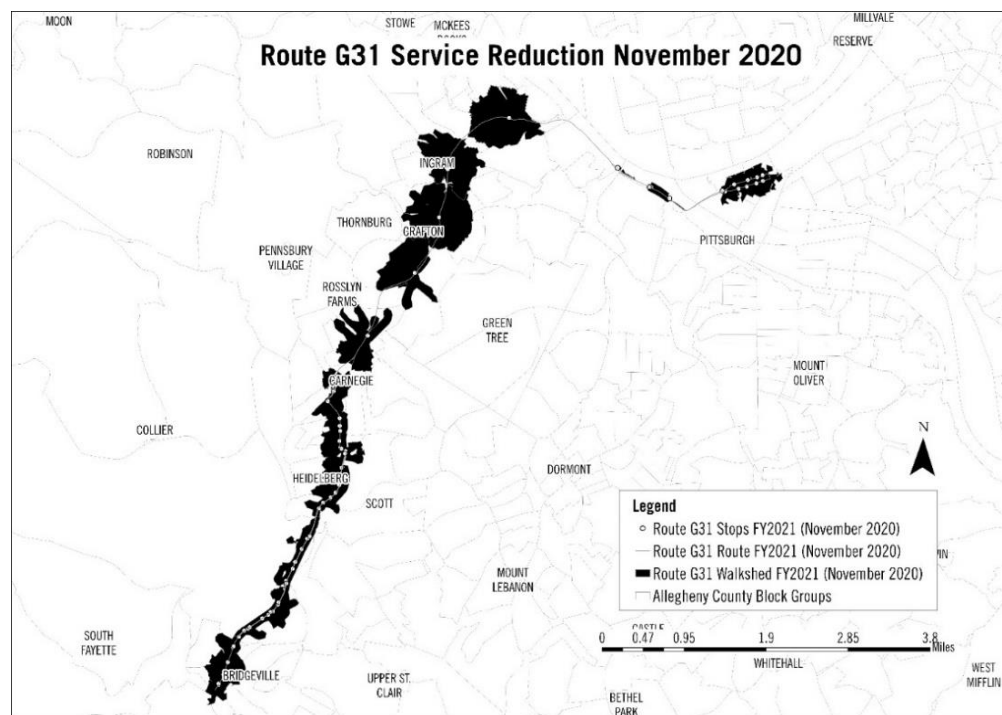
Port Authority reduced weekday frequency on Route G31 Bridgeville Flyer. In the September 2020 to November 2020 period (2009 pick) route G31 provided service for over 96 hours weekly. Since November 2020 (2011 pick) the route provided service about 62 weekly hours which accounts for a 36% reduction from the 2009 weekly hours. This is more than 30% change of the current service hours, which qualifies as a major service change for the Authority.

### Demographics of Population within Major Service Change Area

Walksheds and selection of Census data were developed in the same manner as the Route 1 service change. Map 13 shows the service area for Route G31 weekday service.

Table 15: Disparate impact and disproportionate burden analysis for changes in Route G31

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%
G31 Weekday	2,889/ 15,381 = 18.8%	30.8%	-39%	No	2,238/ 15,291 = 14.6%	18.6%	-21%	No



Map 13: Service Reduction on Route G31

As seen in the chart, the block groups served by Route G31 have lower proportions of low-income and minority race populations than the service area at large. Therefore, the proposed service reduction does not have a disproportionate burden on the low-income and minority race persons in this area.

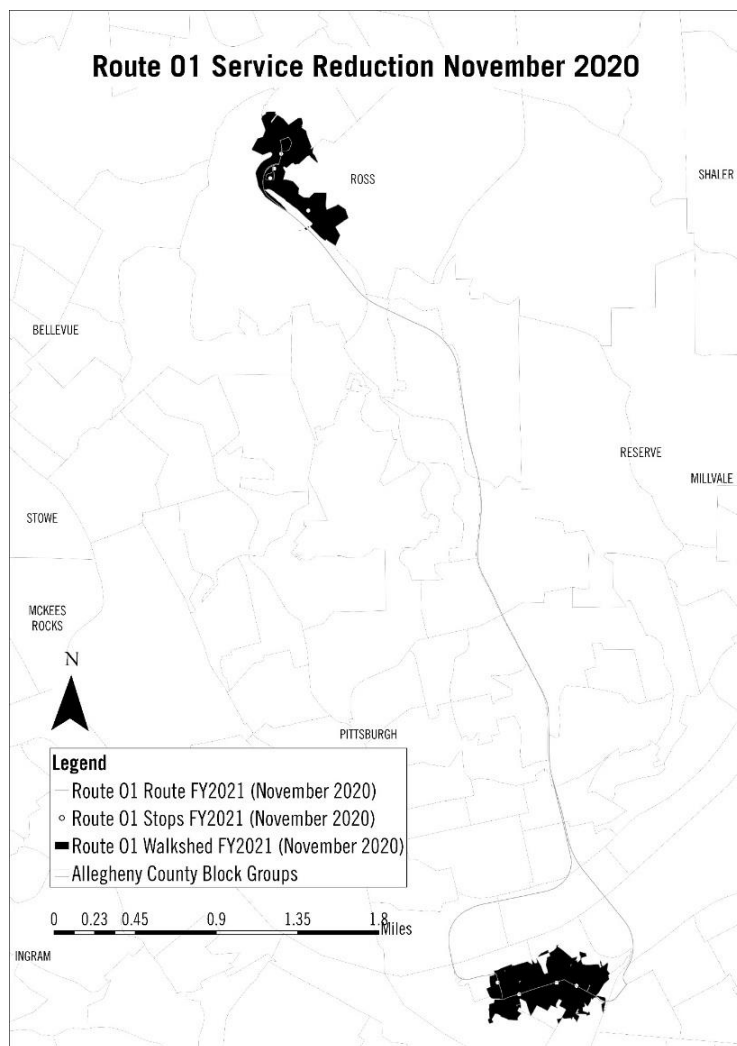
## Route O1 Reduction of Weekday Trips

### Description

Port Authority reduced weekday frequency on Route O1 Ross Flyer. In the September 2020 to November 2020 period (2009 pick) route O1 provided service for about 83 hours weekly. Since November 2020 (2011 pick) the route provided service for about 24 weekly hours which accounts for a 71% reduction from the 2009 weekly hours. This is more than 30% change of the current service hours, which qualifies as a major service change for the Authority.

### Demographics of Population within Major Service Change Area

Walksheds and selection of Census data were developed in the same manner as the Route 12 service change. Map 14 shows the service area for Route O1 weekday service.



Map 14: Service Reduction on Route O1

Table 16: Disparate impact and disproportionate burden analysis for changes in Route O1

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%
O1 Weekday	1,261/ 8,396 = 15%	30.8%	-51%	No	807/ 7,298 = 11.1%	18.6%	-41%	No

As seen in the chart, the block groups served by Route O1 have lower proportions of low income and minority race populations than the service area at large. Therefore, the proposed service reduction does not have a disproportionate burden on the low-income and minority race persons in this area.

## Route O12 Reduction of Weekday Trips

### Description

Port Authority reduced weekday frequency on Route O12 McKnight Flyer. In the September 2020 to November 2020 period (2009 pick) route O12 provided service for 185 hours weekly. Since November 2020 (2011 pick) the route provided service for just over 76 weekly hours which accounts for more than 58% reduction from the 2009 weekly hours. This is more than 30% change of the current service hours, which qualifies as a major service change for the Authority.

### Demographics of Population within Major Service Change Area

Walksheds and selection of Census data were developed in the same manner as the Route 1 service change. Map 15 shows the service area for Route O12 weekday service.

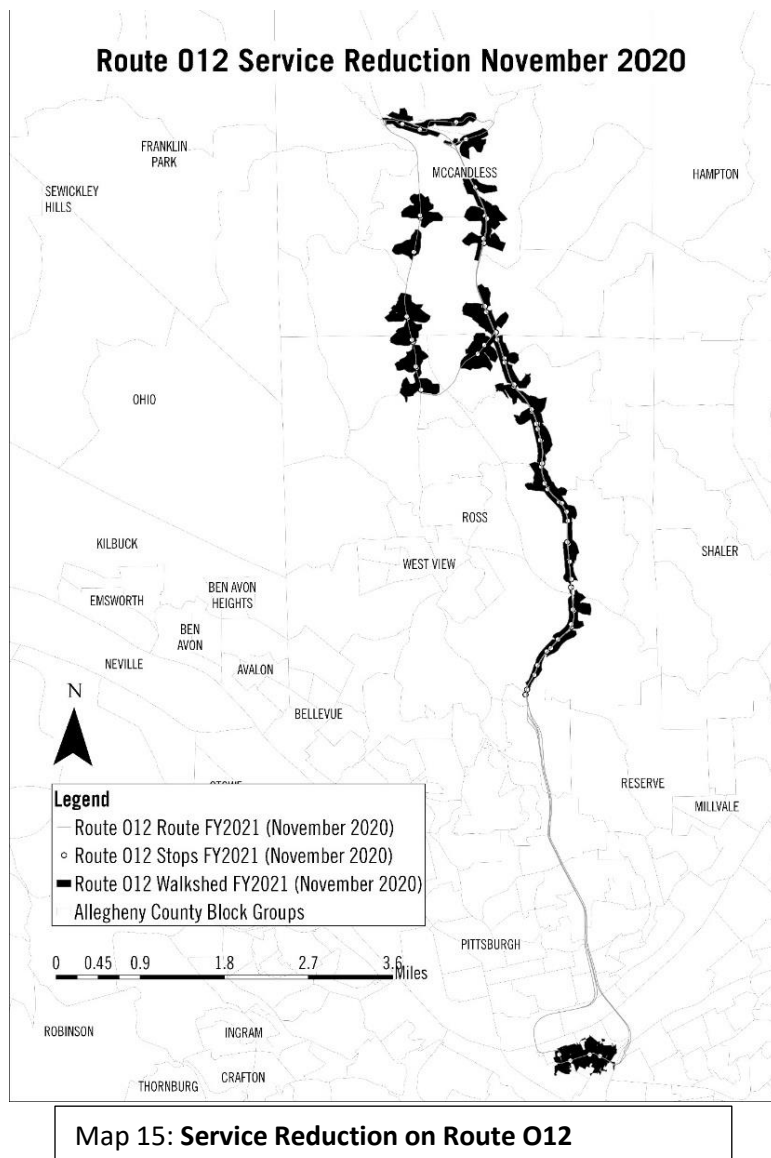


Table 17: Disparate impact and disproportionate burden analysis for changes in Route O12

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%
O12 Weekday	5,289/ 37,707 = 14%	30.8%	-54%	No	2,078/ 35,725 = 5.8%	18.6%	-69%	No

As seen in the chart, the block groups served by Route O12 have lower proportions of low-income and minority race populations than the service area at large. Therefore, the proposed service reduction does not have a disproportionate burden on the low-income and minority race persons in this area.

## Route P12 Reduction of Weekday Trips

### Description

Port Authority reduced weekday peak frequency on Route P12 Holiday Park Flyer. In the September 2020 to November 2020 period (2009 pick) route P12 provided service for more than 186 hours weekly. Since November 2020 (2011 pick) the route provided service for just over 103 weekly hours which accounts for a 45% reduction from the 2009 weekly hours. This is more than 30% change of the current service hours, which qualifies as a major service change for the Authority.

### Demographics of Population within Major Service Change Area

Walksheds and selection of Census data were developed in the same manner as the Route 1 service change. Map 16 shows the service area for Route P12 weekday service.

Table 18: Disparate impact and disproportionate burden analysis for changes in Route P12

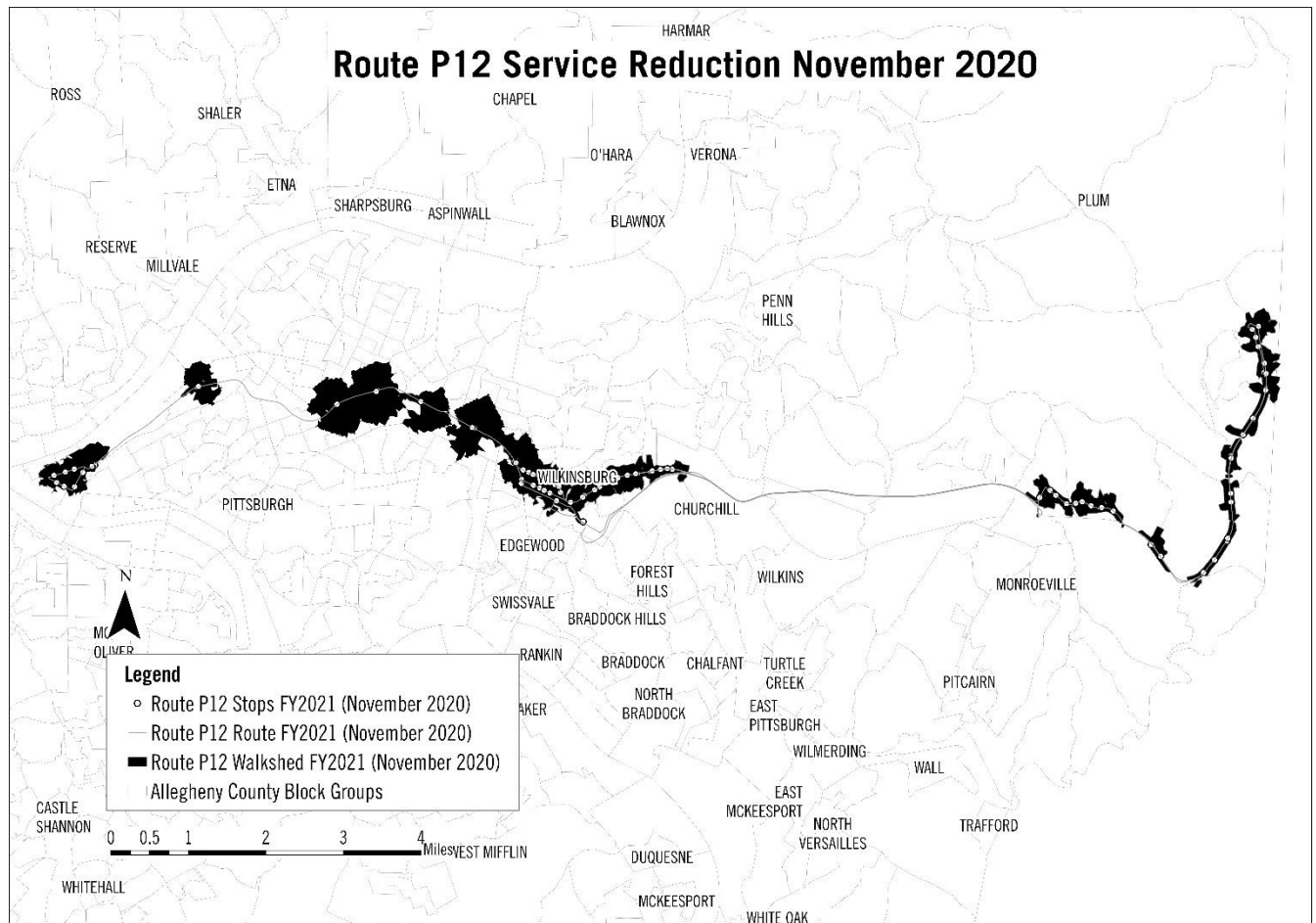
Route	Minority Population in Major Service Change Area Census Tracts	Allegheny County Minority Population	Percent Change from Service Area	Exceeds Disparate Impact Threshold of +20%	Low Income Population in Major Service Change Area Census Tracts	Allegheny County Low Income Population	Percent Change from Service Area	Exceeds Disproportionate Burden Threshold of +20%
P12 Weekday	8,943/18,034 = 49.6%	30.8%	61%	Yes – There are adverse effects; negative change; prioritize return of service as situations improve.	3,809/17,806 = 21.4%	18.6%	15%	No

As seen in the chart, the block groups served by Route P12 have higher proportions of low income and minority race populations than the service area at large, and one that exceeds the disparate impact threshold for minority race populations. Therefore, the proposed service reduction might have a disparate impact on the minority race persons in this area. The low-income population proportion does not exceed the disproportionate burden threshold, so it might be said that the adverse impact might not be severe on these populations.

### Evaluation of Alternatives

In July 2021, the Service Development team reviewed alternatives to put back service on Route P12 in order to avoid a disproportionate burden. The main alternative considered was to add service back to the route, which has seen a 44% reduction in service, and was, as of July, accompanied by an 84% reduction in ridership. It was noted at that time that increasing service to this area was not justified due to the extremely low continued ridership (more than 1.9x the drop than the drop in service level) as a result of the pandemic. Additionally, 66.4% of the route's walkshed is covered by other bus route walksheds on 5-day a week routes, so people using this route have other alternatives available, though they may not come at exactly the same time or route in exactly the same way as Route P12. There is currently a substantial legitimate justification for the proposed service change with ridership being so heavily reduced at 1.9x the service drop. This route is being closely

monitored for ridership increases and will increase service to replace what has been lost as ridership returns to the extent that funding and resources continue to be available to do so..





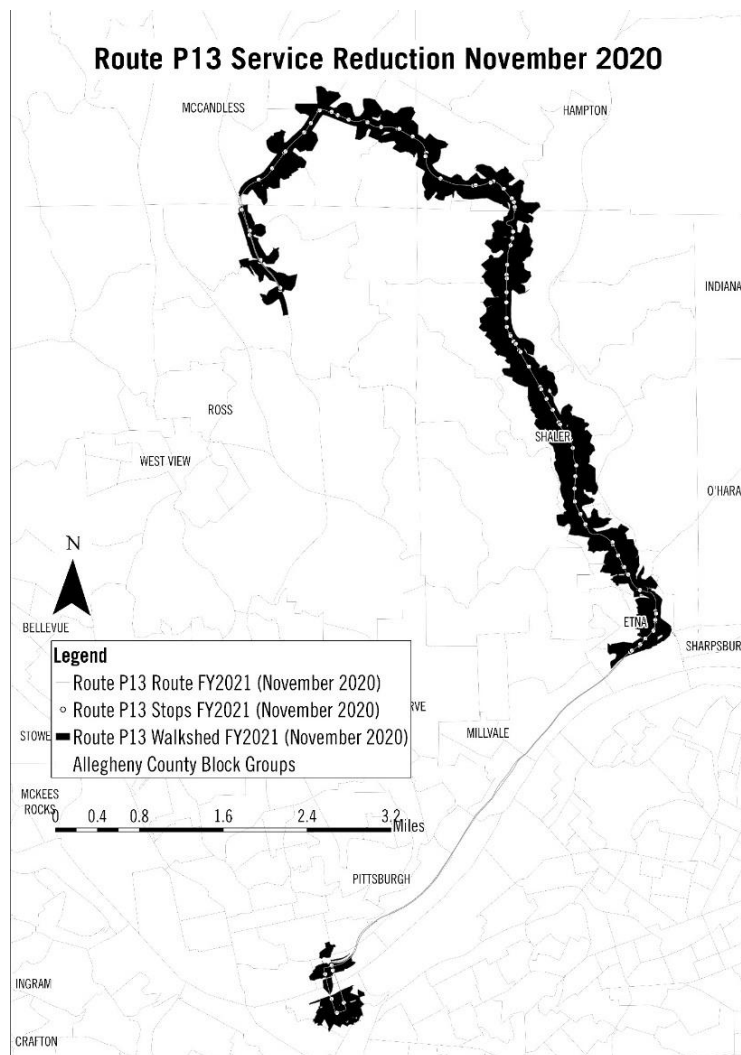
## Route P13 Reduction of Weekday Trips

### Description

Port Authority reduced weekday peak frequency on Route P13 Mount Royal Flyer. In the September 2020 to November 2020 period (2009 pick) route P13 provided service for over 52 hours weekly. Since November 2020 (2011 pick) the route provided service for about 22 weekly hours which accounts for a 58% reduction from the 2009 weekly hours. This is more than 30% change of the current service hours, which qualifies as a major service change for the Authority.

### Demographics of Population within Major Service Change Area

Walksheds and selection of Census data were developed in the same manner as the Route 12 service change. Map 17 shows the service area for Route P13 weekday service.



Map 17: Service Reduction on Route P13

Table 19: Disparate impact and disproportionate burden analysis for changes in Route P13

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%
P13 Weekday	6,020/ 43,813 = 13.7%	30.8%	-55%	No	3,215/ 41,879 = 7.7%	18.6%	-59%	No

As seen in the chart, the block groups served by Route P13 have lower proportions of low-income and minority race populations than the service area at large. Therefore, the proposed service reduction does not have a disproportionate burden on the low-income and minority race persons in this area.

## Route P7 Reduction of Weekday Trips

### Description

Port Authority reduced weekday frequency on Route P7 McKeesport Flyer. In the September 2020 to November 2020 period (2009 pick) route P7 provided service for nearly 128 hours weekly. Since November 2020 (2011 pick) the route provided service for almost 80 weekly hours which accounts for a 38% reduction from the 2009 weekly hours. This is more than 30% change of the current service hours, which qualifies as a major service change for the Authority.

### Demographics of Population within Major Service Change Area

Walksheds and selection of Census data were developed in the same manner as the Route 1 service change. Map 18 shows the service area for Route P7 weekday service.

Table 20: Disparate impact and disproportionate burden analysis for changes in Route P7

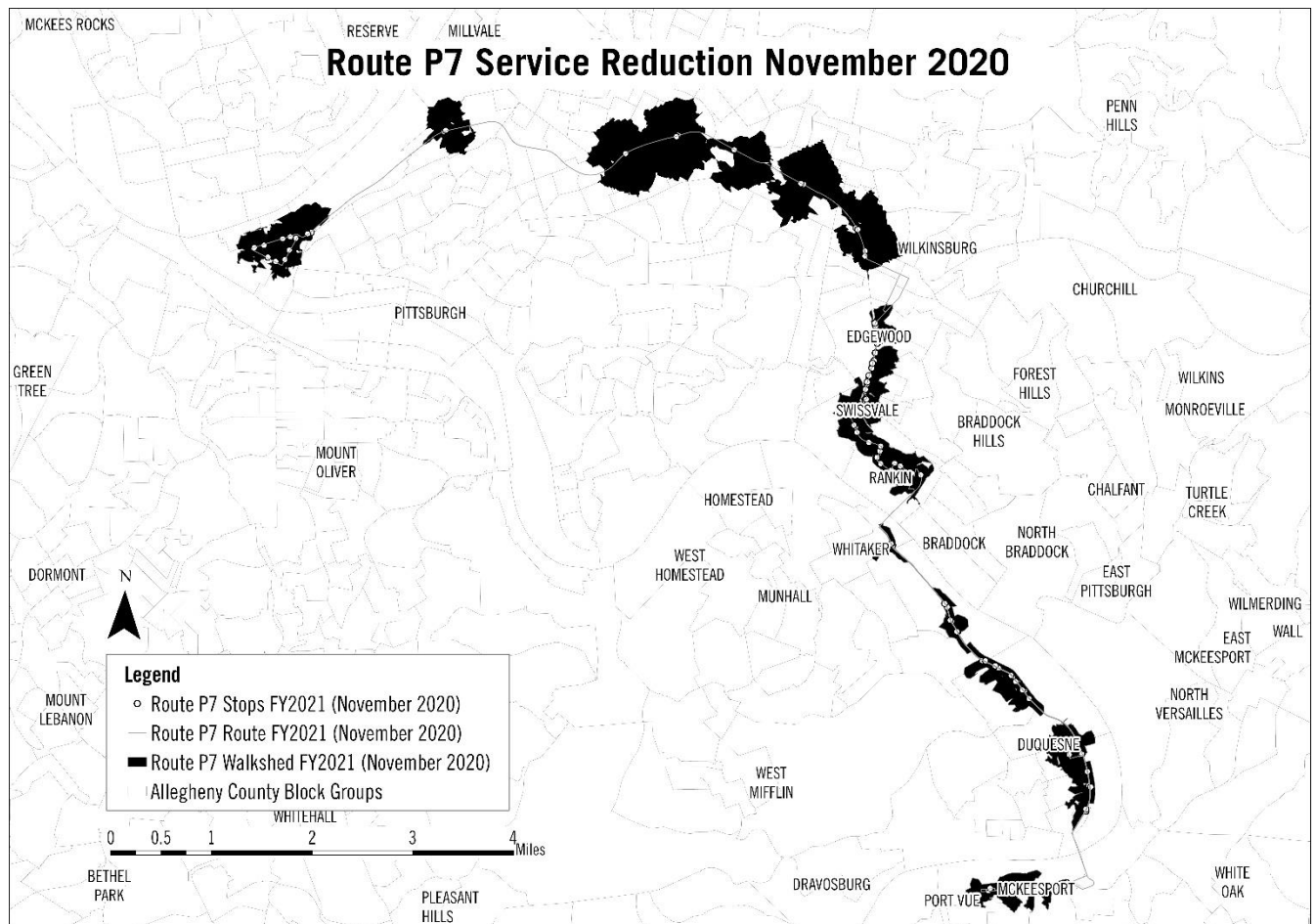
Route	Minority Population in Major Service Change Area Census Tracts	Allegheny County Minority Population	Percent Change from Service Area	Exceeds Disparate Impact Threshold of +20%	Low Income Population in Major Service Change Area Census Tracts	Allegheny County Low Income Population	Percent Change from Service Area	Exceeds Disproportionate Burden Threshold of +20%
P7 Weekday	10,433/ 21,454 = 48.6%	30.8%	58%	Yes – There are adverse effects; negative change; prioritize return of service as situations improve.	5,624/ 21,166 = 26.6%	18.6%	43%	Yes – There are adverse effects; negative change; prioritize return of service as situations improve.

As seen in the chart, the block groups served by Route P7 have higher proportions of low-income and minority race populations than the service area at large. Therefore, the proposed service reduction might have a disproportionate burden on the low-income and minority race persons in this area.

### Evaluation of Alternatives

In July 2021, the Service Development team reviewed alternatives to put back service on Route P7 in order to avoid a disproportionate burden. The main alternative considered was to add service back to the route, which has seen a 30% reduction in service, and was, as of July, accompanied by an 76% reduction in ridership. It was noted at that time that increasing service to this area was not justified due to the extremely low continued ridership (more than 2.5x the drop than the drop in service level) as a result of the pandemic. Additionally, 100% of the route's walkshed is covered by other bus route walksheds on 5-day a week routes, so people using this route have other alternatives available, though they may not come at exactly the same time or route in exactly the same way as Route P7. There is currently a substantial legitimate justification for the proposed service change with ridership being so heavily reduced at 2.5x the service drop. This route is being closely

monitored for ridership increases and will increase service to replace what has been lost as ridership returns to the extent that funding and resources continue to be available to do so..



Map 18: Service Reduction on Route P7



## Route P76 Reduction of Weekday Trips

### Description

Port Authority reduced weekday frequency on Route P76 Lincoln Highway Flyer. In the September 2020 to November 2020 period (2009 pick) route P76 provided service for about 133 hours weekly. Since November 2020 (2011 pick) the route provided service for about 84 weekly hours which accounts for a 37% reduction from the 2009 weekly hours. This is more than 30% change of the current service hours, which qualifies as a major service change for the Authority.

### Demographics of Population within Major Service Change Area

Walksheds and selection of Census data were developed in the same manner as the Route 1 service change. Map 19 shows the service area for Route P76 weekday service.

Table 21: Disparate impact and disproportionate burden analysis for changes in Route P76

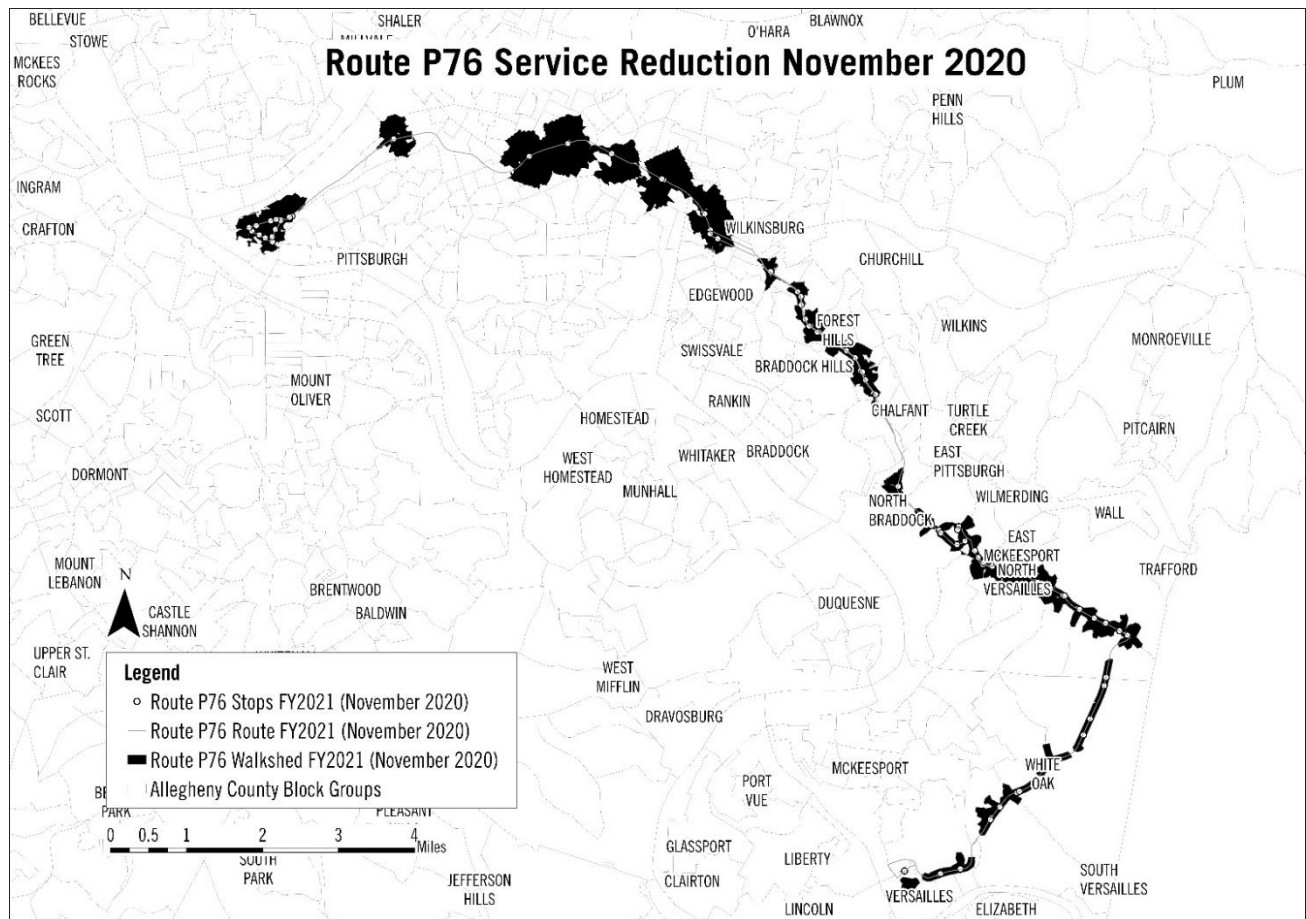
Route	Minority Population in Major Service Change Area Census Tracts	Allegheny County Minority Population	Percent Change from Service Area	Exceeds Disparate Impact Threshold of +20%	Low Income Population in Major Service Change Area Census Tracts	Allegheny County Low Income Population	Percent Change from Service Area	Exceeds Disproportionate Burden Threshold of +20%
P76 Weekday	6,449/ 15,827 = 40.7%	30.8%	32%	Yes – There are adverse effects; negative change; prioritize return of service as situations improve.	3,289/ 15,614= 21.1%	18.6%	13%	No

As seen in the chart, the block groups served by Route P76 have higher proportions of minority race and low-income populations than the service area at large. Therefore, the proposed service reduction might have a disparate impact on the minority race persons in this area. The low-income population, however, does not exceed the disproportionate burden threshold, so it might be said that the adverse impact might not be severe on these populations.

### Evaluation of Alternatives

In July 2021, the Service Development team reviewed alternatives to put back service on Route P76 in order to avoid a disproportionate burden. The main alternative considered was to add service back to the route, which has seen a 37% reduction in service, and was, as of July, accompanied by an 78% reduction in ridership. It was noted at that time that increasing service to this area was not justified due to the extremely low continued ridership (more than 2.1x the drop than the drop in service level) as a result of the pandemic. Additionally, 51.7% of the route's walkshed is covered by other bus route walksheds on 5-day a week routes, so people using this route have other alternatives available, though they may not come at exactly the same time or route in exactly the same way as Route P76. There is currently a substantial legitimate justification for the proposed service change with ridership being so heavily reduced at 2.1x the service drop. This route is being closely

monitored for ridership increases and will increase service to replace what has been lost as ridership returns to the extent that funding and resources continue to be available to do so.



Map 19: Service Reduction on Route P76

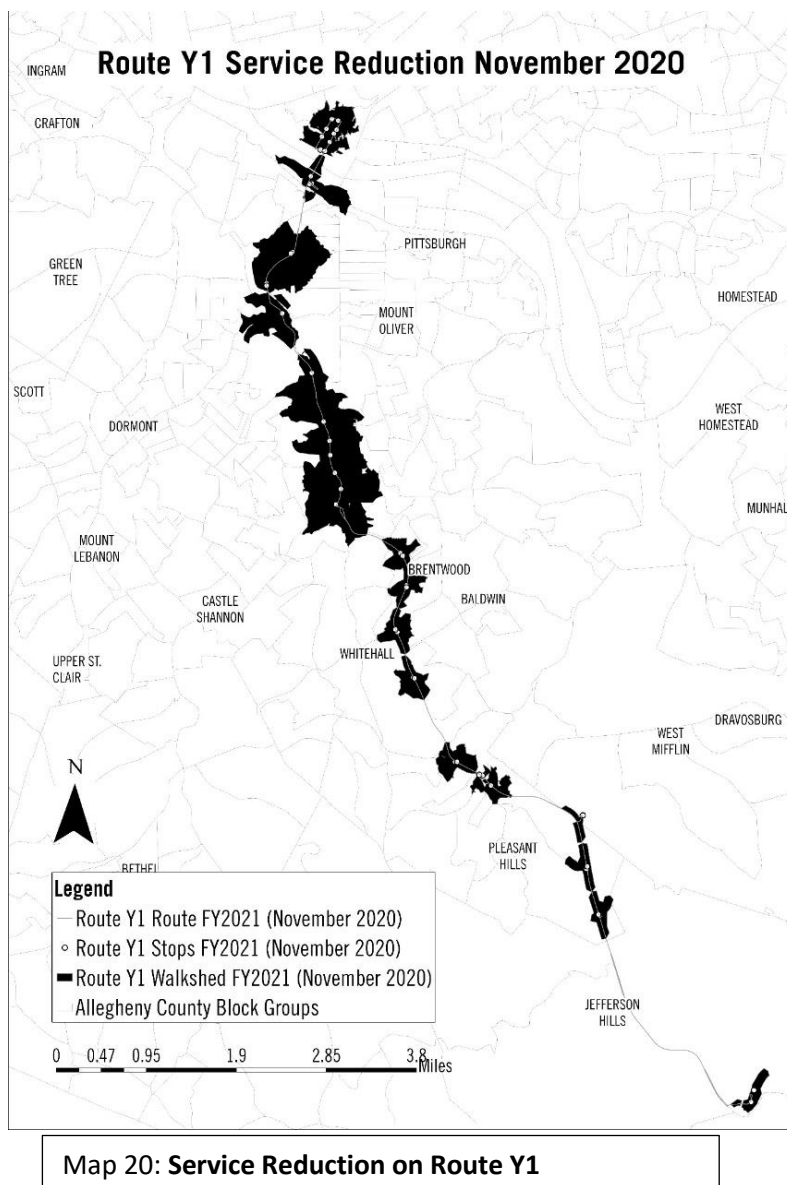
## Route Y1 Reduction of Weekday Trips

### Description

Port Authority reduced weekday frequency on Route Y1 Large Flyer. In the September 2020 to November 2020 period (2009 pick) route Y1 provided service for about 74 hours weekly. Since November 2020 (2011 pick) the route provided service for just over 34 weekly hours which accounts for a 53% reduction from the 2009 weekly hours. This is more than 30% change of the current service hours, which qualifies as a major service change for the Authority.

### Demographics of Population within Major Service Change Area

Walksheds and selection of Census data were developed in the same manner as the Route 1 service change. Map 20 shows the service area for Route Y1 weekday service.



Map 20: Service Reduction on Route Y1

Table 22: Disparate impact and disproportionate burden analysis for changes in Route Y1

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%
Y1 Weekday	1,298/ 8,107 = 16%	30.8%	-48%	No.	943/ 8,097 = 11.6%	18.6%	-37%	No

As seen in the chart, the block groups served by Route Y1 have lower proportions of low-income and minority race populations than the service area at large. Therefore, the proposed service reduction does not have a disproportionate burden on the low-income and minority race persons in this area.

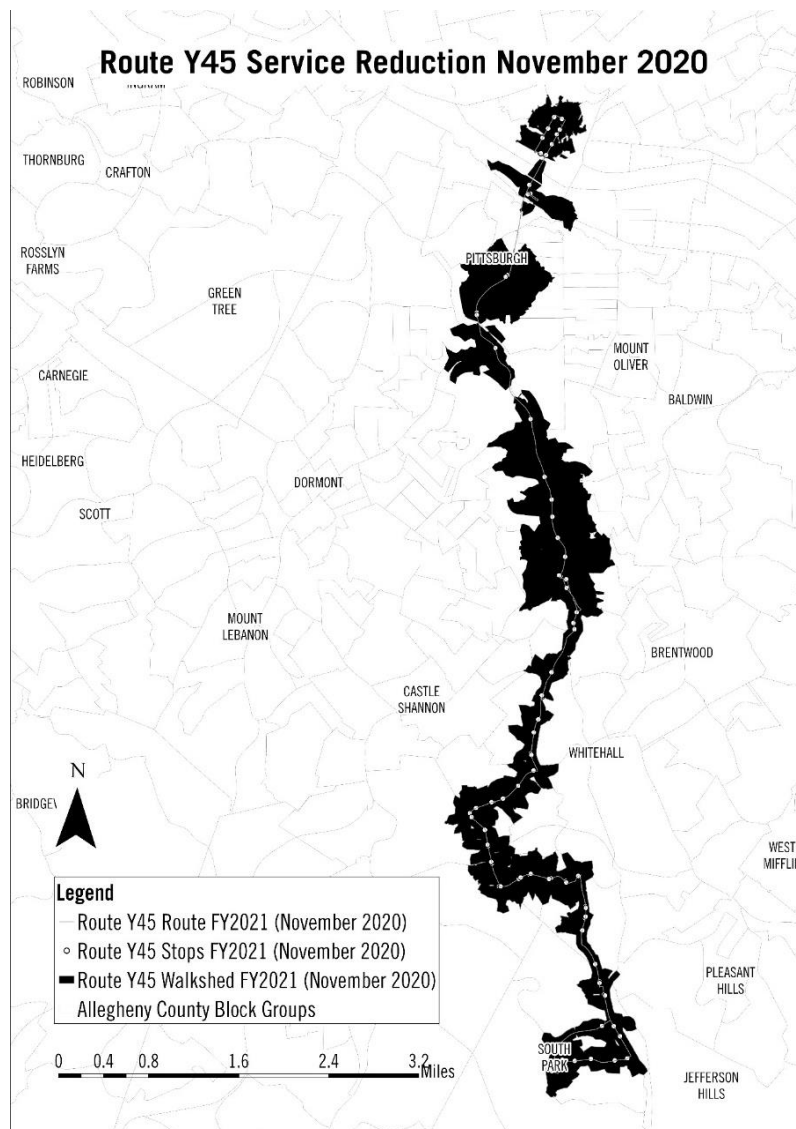
## Route Y45 Reduction of Weekday Trips

### Description

Port Authority reduced weekday frequency on Route Y45 Baldwin Manor Flyer. In the September 2020 to November 2020 period (2009 pick) route Y45 provided service for almost 53 hours weekly. Since November 2020 (2011 pick) the route provided service for about 35 weekly hours which accounts for a 34% reduction from the 2009 weekly hours. This is more than 30% change of the current service hours, which qualifies as a major service change for the Authority.

### Demographics of Population within Major Service Change Area

Walksheds and selection of Census data were developed in the same manner as the Route 1 service change. Map 21 shows the service area for Route Y45 weekday service.



Map 21: Service Reduction on Route Y45

Table 23: Disparate impact and disproportionate burden analysis for changes in Route Y45

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%
Y45 Weekday	1,171/ 9,474 = 12.4%	30.8%	-60%	No	930/ 9,472 = 9.8%	18.6%	-47%	No

As seen in the chart, the block groups served by Route Y45 have lower proportions of low-income and minority race populations than the service area at large. Therefore, the proposed service reduction does not have a disproportionate burden on the low-income and minority race persons in this area.

## Summarizing the Impact of All Major Service Changes on the Service Area

The demographic impact of changes by route are summarized in the tables below. From the summary below it can be seen that collectively the service additions on routes 1, 12, 59, P68 and RED line serve higher proportions of low income and minority race populations than the overall service area of Allegheny County and than that of the routes with service reductions. Therefore, the service additions provided an added benefit to the low income and minority race communities they serve.

As a result of the analyses for service additions, it is concluded that no disparate impacts or disproportionate burdens will be placed on minority race or low-income communities for these major service changes.

Table 24: Summary of disparate impact and disproportionate burden analysis for service additions

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%
Routes 1, 12, 59, P68 and RED	53,403/ 180,546 = 29.58%	30.8%	-4%	No	28,250/ 171,577 = 16.46%	18.6%	-11%	No

***Collectively as one large service change shown in the below table, there are no disparate impacts or disproportionate burdens placed on minority race or low-income communities for this group of major service changes.***

Table 25: Summary of disparate impact and disproportionate burden analysis for service reductions

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%
38, 58, 65, 19L, G2, G3, G31, O1, O12, P12, P13, P7, P76, Y1, and Y45	64,523/ 278,042 = 23.21%	30.8%	-25%	No	41,994/ 260,826 = 16.10%	18.6%	-13%	No

However, proposed service reductions to routes 58, 65, P12, P7, and P76 will be closely monitored as they may disproportionately burden low-income communities and have a disparate impact on minority race persons in their respective service areas. Return of service is a priority for these routes as ridership hopefully rebounds in 2022 and funding and resources continue to be available to support same.