



TO: Planning & Stakeholder Relations Committee  
Jessica Walls-Lavelle  
Ann Ogoreuc  
Stephanie Turman

FROM: John Tague, Jr., Committee Chair

DATE: July 15, 2020

SUBJECT: Planning & Stakeholder Relations Committee – July 16, 2020

The next meeting of the Planning & Stakeholder Relations Committee is scheduled for Thursday, July 16, 2020, being held virtually via WebEx and conference call-in at 8:30am. The preliminary agenda is as follows:

1. Approval of Minutes of the June 18, 2020 Planning & Stakeholder Relations Committee
2. Authorization to Amend Port Authority of Allegheny County's Transit Service Standards (D. Huffaker and P. St. Pierre)
3. November 2020 Major Service Changes Overview (D. Huffaker and P. St. Pierre)
  - Authorization to Approve Title VI Analysis for November 2020 Major Service Changes (D. Huffaker)
4. Adjourn

cc: Other Port Authority Board Members

**Planning and Stakeholder Relations Committee  
Minutes  
June 18, 2020**

The meeting was called to order at 8:30 am in Port Authority's Neal H. Holmes Board Room at 345 Sixth Avenue, Fifth Floor, Pittsburgh, with the following in attendance:

Via WebEx Board Committee Members

John Tague, Jr., Chairman

Jessica Walls-Lavelle – via Conference Call

Ann Ogoreuc

Stephanie Turman

Board Members and Solicitor

Jeff Letwin

Representative Austin Davis

**Opening Remarks**

Mr. Tague, Committee Chair, opened the meeting and welcomed those in attendance.

**Approval of Minutes from the May 21, 2020 Planning and Stakeholder Relations Committee Meeting**

Mr. Tague asked Committee members if there were any corrections to the minutes. There were none and members approved the minutes.

**Service Planning and Delivery Updates (D. Huffaker, A. Silberman and P. St. Pierre)**

Mr. Huffaker, Chief Development Officer, provided a brief overview of the Service Planning and

Delivery updates. The Authority is using true time to provide real time passenger capacity to riders.

During this time period we did reinstate normal service on four routes to help to assist with social distancing. There were some trips, the Route 51 Carrick ridership did not decline as much as the rest of the system, needed to provide closer to normal schedule.

In May, we moved to the yellow phase and service level.

we knew that companies and businesses would continue to telework and we didn't think we would see a huge increase in demand as customers started to return downtown and other parts of the county. We monitored the ridership during this phase, and noted this was the case, that ridership continued to decline a little bit during the first week of the yellow phase. We also considered what was going

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to happen in Oakland. The universities did not come back to in person classes. Students have already gone home and we continued to have limited service going through the Oakland corridor which enabled us to meet our daily ridership demands as well as the cleaning demands for the fleet.

As I said, we were at 71 routes reduced service in the red level and went down to 32 routes with reduced service during the yellow level. That represents about a 12 percent reduction in hours and miles. Just about half of the service that we had cut back was returned.

We noted no increase in ridership on our commuter route and in fact that still has been quite slow to recover. Light Rail Ridership was down about 90% at the start of the pandemic and has continued to lag. Quite quickly after two weeks we moved into the Green phase and again the telework is still encouraged and companies are asked to continue to encourage employees to stay home if possible. We started looking at what we could do for green service and had meant that were starting to monitor what was happening with downtown and talking to some of our partners at Pittsburgh Downtown Partnership and The Allegheny Conference to determine what they are hearing about employers Downtown and if workers were going to be coming back. We expected that the demand at least Downtown has been very slow to ramp back up.

We have maintained the same level of service in Yellow that we did in Green, but we do monitor the ridership and have been trying to look at the data. If need be, we will add service back. We are planning on a return to a full level of service on August 23<sup>rd</sup>, which would be our next pick, that is somewhat dependent on the manpower being available, we still have a number of employees who are out for precautionary reasons and getting those employees back to work will be important.

We continue to step up our protocol and got more streamlines with the cleaning service. We feel comfortable that we will have a clean product out. We also during the green face returned to front door boarding, after the first week we allowed customers to board through the front door but did not require exchange of fares, the second week starting June 8<sup>th</sup> we started having customers paying their fares using the ConnectCard or paying cash through the front. Ridership has maintained steady through the Green phase we have not seen a large influx of riders.

Looking at ridership charts: the stats for last year during this time currently we would see ridership on bus was 190,000/day people on a typical weekday. In early March just as the pandemic was starting to hit, we were close to those levels of this year both voluntary shutdown and the red phase, the ridership in the red dropped

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significantly we were down 85% at first on the bus side. We did see some recovery we were at 70% of normal ridership now, ridership has gradually increased as weeks go by. We are still down about 70% from normal the good news if you want to play with statistics, we are up 60% from our lows during the pandemic but that still represents a huge drop. The LRV ridership has dropped and stayed down 90% from our normal levels and we are still down 80% from normal. As we go into the green phase there was a small recovery, but it hasn't been as pronounced as the bus side. We continue to talk to Downtown employers get a sense of what is happening there and see what is happening there, as the riders start coming back, we will look at the need of going back to normal service on the LRV.

Access was also of course significantly impacted by the pandemic, while the ridership is still lower than other modes still increasingly important during this time. We saw about 75% decline in ridership during the pandemic however there was still several of riders that who had to continue to ride for medical reasons, possible dialysis or some other medical treatment that they needed. Access stepped up and continue to provide that service for customers. They also implemented masks and daily vehicle disinfection and they also implemented some physical distancing rules that required more space on the vehicles themselves. They also came up with a couple creative solutions to use some of their resources in an efficient way and effective way during the pandemic, they got a grant through the Pittsburgh Foundation and through United Way to sponsor food deliveries throughout the region. Some areas of the county where access provided essential service to customers who could not get out to a grocery store to get groceries. PennDOT also allowed Access to go to same day service, typically you must call ahead and make a reservation for Access service. On a space available basis, customers were able to request service on the day of. Just like other modes Access ridership dropped significantly a normal month would see just over 4,000 riders during the red phase we were down to 1,000 riders a day, we are starting to creep up to 1600 a day and were up 60% from where we were. What are we doing now with the recovery, we worked frequently with our partners downtown and throughout the County.

City of Pittsburgh DOMI has an initiative called REOPEN PGH, that brought leaders from various disciplines to talk about how best to restart the economy and how do you get workers and customers feeling safe about coming downtown and about being able to dine downtown or workout deliveries and pickup of their goods they want to buy. Mr. Huffaker participated on this panel looked at and you will start seeing over the summer some creative initiatives to enable more outdoor dining to enable those businesses to get back on their feet, which is critical for Allegheny County.

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We are also working with Pittsburgh Downtown Partnership on some of our downtown bus stops, we are coordinating signage and coordinating activities to ensure that we can provide to the extent of possible social distancing opportunities for customers and give them a consistent look and feel when they are moving through downtown and moving through other parts of the community, do they know what to expect. For those of you that have been downtown you will see the arrows on the sidewalks and arrows in buildings, it has the similar look and feel, and this will be provided for some of our downtown bus-stops as well. We are also working with the Oakland TMA dining opportunities in the Oakland area as well.

We are in a new world we are talking to businesses, talking to PDP and DOMI and other groups to understand how the ridership is changing and how will telecommuting impact the demand for transit. We're talking to those businesses and this is part of the NEXT Transit Long-Range Plan to identify what does the new rule for transit play and how will transit serve the community in the future. We are also seeing some national lessons, just this weekend the Atlantic had an article about how transit was unfairly maligned as a super cedar of COVID 19 cases and the article faulted some of the research that was done by a major University in the Northeast. Riders have quite a bit of safety that is provided by transit, for some cases it is the only way some people can get to work and it certainly is the most efficient way for people to get to work.

NEXTransit: Our Long-Range Planning process, earlier this month we started a website ([nextransit.network](https://nextransit.network)), this will be hub for people to provide public comments and to activate some of their thought process so we can incorporate that into our transit planning for the future. We also have a valued survey and a gap analysis that will begin next month. We are doing some engagements internally with PAAC Stakeholders and our Steering Committee but that will be going broader next month. We also have some station and Park N Ride improvement planning that will kick off over the next few months particularly at Wilkinsburg Station and at Carnegie Station, we had some opportunities there to coordinate with some local development and rethink how those park n rides interact with their surrounding communities and both supportive of the community as well as increase ridership. Planning Department recently received an FDA grant of nearly \$700,000 that will help support our TOD community staff. As we look at some of the transit access improvements focused on the East Busway particularly as it overlaps on our BRT corridor between Oakland and Wilkinsburg but will give us an opportunity to work with the communities and identify where TOD maybe supportive of both community development and transit. This happened a day before the board meeting last month but just to give you an update, we did receive a tweet from the

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President of United States talking about our small starts grant for the BRT project. That Announced that \$99.95MM has been allocated from the federal budget, what that means is the grant has not been awarded but once the project does meet all the project readiness requirements, we will be first in line an essentially guaranteed of that funding. Requirements readiness review the FDA hires in their standard process an project management oversight consultant. PMOC will come in evaluate the project plan, evaluate the resourcing, evaluate the communications plan and right away plan to ensure the project is ready to receive the funding and meet the local match will be obtained and obtained efficiently. We will continue to work on the readiness on our current plan and hopefully we will receive the grant next year.

Mr. St. Pierre gave a brief update on two major service development projects and talk about potential changes for next year service. The first project the Bus Stop Consolidation project this project has been placed on hold due to the COVID 19 situation. Prior to the COVID 19 situation we have been working on incorporating more public outreach efforts that would require us to get out into the community and more face to face discussions with the communities, more pop up events at bus stops to talk to passengers, due to social distancing guidelines we put this placed this project on hold. We have not stopped working on improving our bus stop infrastructure and signage out into the communities. Our focus has mainly been the COVID 19 situation we have transitioned our service development associate staff to accomplish route reviews, they have been out there evaluating every single route in the system, looking at signage and looking at shelters and seeing things that need to be taking care of. To date over 480 work orders have been developed and currently in the process of being worked on. Those work orders include bus stop signs that are missing, they maybe faded or leaning or an obstructive view such as tree branches. This will be very helpful to our customers and our operators that rely on these signs to make sure they pull up to the stop and this should prevent pass ups.

Second project is the Shelter replacement project: This project has been impacted due to the COVID 19 situation. Our vendor is in Michigan and they had a more aggressive shutdown plan in that state and had to shut down their operations for some time. That impacted our timeline, but they did resume operations and we are looking at completing the next phase, the third phase of shelter replacement program in late September or late October. We are in track to replace approximately 30 to 35 shelters during that timeframe.

In addition to those major projects we are also looking at what service additions that we can we do for next Fiscal year. Earlier last year we brought to the board an updated FY19 update to Transit Service Standards. We are still

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progressing on that timeline of those new Transit Service Standards and so all those service requests that have been collected in FY20 and before are currently in the evaluation phase. For the Annual Service Report is planned to be updated this upcoming November for public release and those will have all the rankings of all the projects and those projects are slated to be implemented in FY22. While that is a longer timeline of getting new projects implemented in FY22, we want to look at what projects that could implement in FY21. So, we evaluated what could we do and a lot of the projects that we implemented even this year was weekend service. We want to put an emphasis on getting seven-day network comprised of Local, Coverage and Rapid routes and that is what we requested in our budget for next Fiscal year. On the list of all the routes, these are routes that are operating maybe five to six days of the week, we would like to get those routes up to seven days daily service for those routes. This was an emphasis prior to COVID 19 situation, but the COVID 19 situation also emphasized the need for community to have daily service. Note to crowding during the weekdays and the peaks, folks and communities can't get around on a Saturday or Sunday rather than Monday – Friday it could help elevate some of those crowding concerns in the future. This is what we plan to achieve in FY21 and will require a minor update to the Transit Service Standards. The only route not on this list that we are going to place on hold currently is Route 71, we are delaying that initiative right now due to the Kenmawr Bridge project. After the completion of that project we will be looking to add weekend service for that route.

One of the next steps to implementing that seven-day service, we are looking to bring to the board, we are going to develop board adopted updated Transit Service Standards in July. Basically, we are going to update the language to say we are going to put up an emphasis and priority on Local and Coverage routes to operate with daily service. Right now, Rapid routes are operating on a daily service, but they are as on that previous slide there are Local and Coverage routes that do not operate on a Saturday or Sunday schedule or both. Upon the budget and Transit Service Standards adoption we will be able to implement these proposed FY21 additions next year. Tentatively we are planning to implement that in November 2020.

Next steps to Title VI, we will formally present to ACTC and Port Authority Planning and Stakeholder Relations Committee and the board in July a brief update on the Title VI because they are all service additions just like last year service additions that we implemented in FY20. We do not anticipate that there is going to be any adverse impact expected on minority or low-income persons because these are all service additions.

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**Questions from Board Members and Others**

1. Ms. Ogoreuc asked what other routes that were reinstated in the yellow phase.
  - a. Mr. St. Pierre answered the other routes returned service on in pre-yellow phase the Route 16, Route 51, Route P1 and additional various trips on the red line during that phase. At the Yellow phase we brought back all the local and coverage routes to normal schedule.
2. Ms. Wiens (Stakeholder PDP) as PDP we are very excited that the report that Mr. Phillip just gave on weekend service, we are grateful and think that it is very important for local routes to have access to service on weekends and we celebrate that decision.
3. Ms. Wiens asked Mr. Huffaker what indications you have that makes sense to return to normal service levels rather than enhancing service on routes that seem to be regularly experiencing overcrowding. Is there any consideration given to increasing frequency higher than pre-COVID 19 levels because of the diminished capacity on buses?
  - a. Mr. Huffaker answered we are somewhat limited in what we could do so far as adding frequencies on some of these routes. I think we are monitoring and trying to react as quickly as possible on balancing between what is happening on commuter routes and what is happening with some of the other local service. I think that is one we are continuing to study and we must be careful because once we put into a pick than it is ratified for the next several months. We need to make sure that we got added capacity knowing what we know about people coming back to Downtown and what we know about our ability to staying in the Green level or move beyond post green, whatever color that might look like. We may still need to have capacity available for commuters to come back Downtown, it is a big unknown right now. Were also looking at what other agencies are doing as well. I think what I am seeing primarily is people are maintaining that capacity for commuters, but it is an outstanding question, I do not have the answer.



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4. Ms. Wiens asked will the Port Authority start releasing data, a report on crowding by route and can we see whether the trajectory around crowding has changed or improved on pass ups? Because antidotally we are talking to riders at bus-stops very regularly and hearing that people are regularly being passed up, particularly in communities that are further along in the service. Routes will get crowded towards the origin of the service and by the time it gets to their community people are regularly getting passed up. Will we see that data so we can see that were moving in a trajectory were that want to be as consistently happening?
  - a. Mr. Huffaker stated we do have True Time which shows the real time capacity and demand on that route. I do recognize that does not allow for a lot of planning that just tells you right in that moment. We are working on a tool that will allow customers to see typical crowding on trips so that we can provide some better information for trip planning. I think you will hear about that within the next week or so. We hope that will provide some benefit, we do monitor Mr. St. Pierre's team the complaints and notifications about pass-ups, so that is something that is being considered. This will be one of those driving forces that will help us evaluate where we have the service properly placed.
5. Ms. Wiens asked about fare impacts – have you seen any data around reinstating the fares on ridership by route as well as impact on cash usage on buses.
  - a. Ms. Kellerman answered we have about a week of data on that, but we don't have enough data to be able to say anything well informed at this point. We will keep the board posted and come back to our Committee meetings next month and we will have included this information on what we are seeing on the impacts of ridership on our next committee meeting.

## SUMMARY OF RESOLUTION

### Authorization to Amend Port Authority of Allegheny County's Transit Service Standards

In order to further enhance transparency and provide clarity to the criteria considered in Port Authority of Allegheny County's (Authority) service planning and route evaluations, the Authority's Board passed a resolution on October 25, 2019 that adopted Transit Service Standards.

Based upon an assessment conducted by staff of the Authority, it is recommended to amend the document at this time to include language that defines minimum service days for the route types identified as Local – daily service; Coverage – daily service; Commuter – weekday service; and Rapid – daily service.

The proposed amended Transit Service Standards (Amended Standards) are attached as Exhibit A to the resolution and recommended by staff for Board approval.

This resolution authorizes the Authority's adoption of Amended Standards, subject to further future amendments deemed necessary by the Board.

7/24/20  
J. Tague

## **RESOLUTION**

**WHEREAS**, Port Authority of Allegheny County's (Authority) Board passed a resolution on October 25, 2019 that adopted Transit Service Standards (Standards); and

**WHEREAS**, Standards provide that they will be reviewed and adjusted or reapproved and reissued by the Authority at a minimum of every other fiscal year; and

**WHEREAS**, based upon an assessment conducted by staff of the Authority, certain amendments to Standards are recommended at this time to include language that defines minimum service days for various route types; and

**WHEREAS**, the proposed amended Standards (Amended Standards) are attached as Exhibit A to this resolution and recommended for Board approval.

**NOW, THEREFORE BE IT RESOLVED**, that the Board hereby adopts Amended Standards attached hereto as Exhibit A, effective August 1, 2020.

**FURTHER RESOLVED**, that the chief executive officer, chief development officer and/or chief operating officer transportation be, and hereby are, directed to take any and all such other actions as may be necessary and proper to implement Amended Standards.

**FURTHER RESOLVED**, that the Board reserves to itself the power to, at any time, make revisions or amendments to, revoke or otherwise replace Amended Standards for any purpose or reason whatsoever.



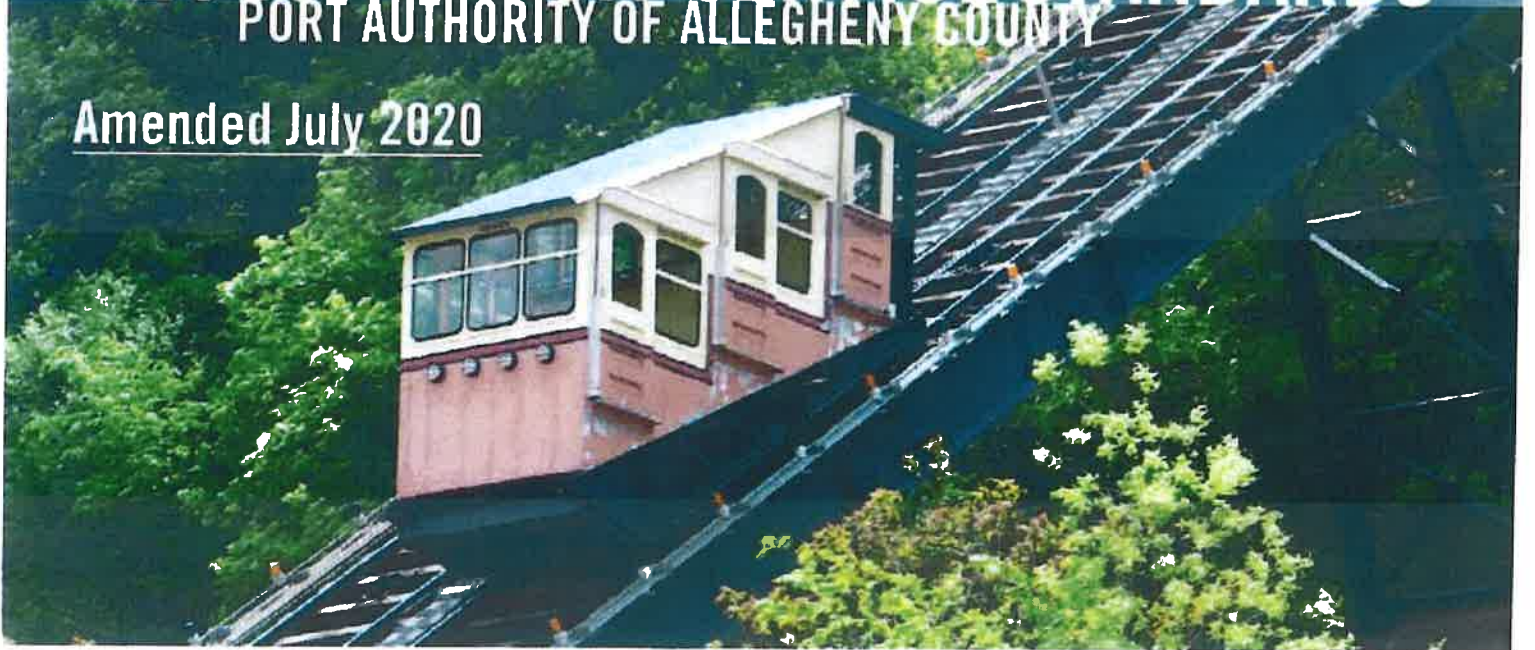
**EXHIBIT A**



# 2019 TRANSIT SERVICE STANDARDS

PORT AUTHORITY OF ALLEGHENY COUNTY

Amended July 2020





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## Executive Summary

Port Authority of Allegheny County exists to provide public transportation options within Allegheny County, Pennsylvania. This document serves as a framework for focusing the Authority's actions to ensure that it is constantly striving to achieve its mission and continually improve its operations.

Port Authority of Allegheny County (the Authority) serves the 775 square mile area within and immediately adjacent to Allegheny County. As of the writing of this document, the Authority provides public transit services via 97 fixed bus routes, 2 light rail lines (with 3 total routings), 2 inclined planes, and demand-response paratransit. Though the Authority oversees them, one of the inclined planes as well as the paratransit services are operated by other providers. Altogether, these services provide over sixty-one million rides annually in and around Allegheny County in southwestern Pennsylvania.

Port Authority of Allegheny County strives to provide quality transit service in a manner that is efficient, effective and equitable. To do so, Port Authority must make a number of decisions based on competing priorities about where demand is greatest, which types of service would work best and be most appropriate, and where limited resources can and should be used. These decisions should aim to be as fair, consistent, and transparent as possible, as the Authority is a public agency charged with using public dollars to serve a critical community need.

To do this, Port Authority has developed this set of service standards that will be used to:

- Set service goals.
- Design service and determine appropriate service levels.
- Establish minimum service performance.
- Evaluate service performance.
- Prioritize future service changes and plans.

These service standards apply to all general public transit services provided by Port Authority, with the exception of inclined plane service. These service standards will be applied in accordance with all applicable laws and regulations. They will be used to develop service change recommendations and will be used on an ongoing basis to evaluate, adjust, and improve services as demand and conditions change.

In most cases, the service standards define *minimum thresholds* that should be met, with most services exceeding these thresholds. However, the standards are also designed to - within limits - provide flexibility to respond to varied customer needs, a changing economy, and Allegheny County's often challenging geography. As such, these standards should not be considered binding rules, but rather general guides of the base level of service the Authority strives to provide to aid in the decision-making process around changes to service.

These standards may change over time, as planning is, by nature, fluid. As such, these standards will be adjusted or reapproved and reissued by the Authority at a minimum of every other fiscal year.

*\*Unless labeled 'Demand Response Paratransit', the following standards refer to fixed route transit services.*

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## **Service Goals**

### **Provide Efficient Transit Service**

Port Authority should strive to provide the highest amount of value to customers by using resources optimally to meet other goals. Through increased efficiencies, services should strive to maximize passenger trips per hour of service provided.

### **Provide Effective Transit Service**

Port Authority should strive to maximize the population's access to transit in order to grow ridership and promote long term sustainability for the organization. To promote access to transit, the Authority must endeavor to provide direct and varied pathways between origins and destinations within the service area. These pathways must be able to be accessed via stops and stations, be traversed in a timely and safe manner, and be easy to understand and navigate.

### **Provide Equitable Transit Service**

In order to foster widespread mobility, the Authority shall strive to provide targeted and representative service to populations within Allegheny County with a greater need for transit so as not to allow a disproportionate burden to fall upon these populations. Operations targeting these groups should at minimum provide a proportion of services equal or greater to that which the sub-population represents as a portion of the total population. Groups which are targeted for special attention include minority populations protected under Title VI, low income populations, senior citizens, persons without access to a vehicle, and persons with disabilities.

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## Service Overview

Port Authority of Allegheny County provides a family of services that are designed to provide options to address a wide array of needs. These services include light rail and busway services, Commuter bus services to downtown Pittsburgh and Oakland, and local buses. The provision of these different types of services is tailored toward serving different types of trips and needs. A list of current routes designated by type as of the writing of this document can be found in Appendix A.

### Types of Services

#### *Rapid Network*

With less frequent stops and higher capacity vehicles, rapid (or “limited”) service can provide a trunk line transit service for longer trips and busy lines, or can run along the same route as a local service. Most bus rapid transit, light rail transit, rapid streetcars, and limited-stop bus lines run on this service pattern.

Rapid Routes form the “backbone” of Port Authority's overall system. Rapid services include all modes of transit which have at least 75% of route miles along a fixed guideway, and consist of:

- **Light Rail Transit (LRT, the “T”)** that operates around Downtown Pittsburgh and extends south
- **Bus Rapid Transit (BRT)** routes that provide service on the East, West and South Busways
- Any future service to be implemented considered as **LRT or BRT**

#### *Commuter Network*

Commuter routes are designed primarily to serve commute trips to and from downtown Pittsburgh and Oakland, and reverse commute trips to suburban destinations such as shopping centers and Pittsburgh International Airport. These routes should be designed to provide faster service than a local service route, either by way of only serving certain bus stops or by using a fixed guideway or highway for part of its journey. Some Commuter routes may operate similarly to a local route for peak service due to lack of ridership demands outside of typically commuter hours. Most Commuter routes only operate during commute hours, but others that serve unique commute patterns, such as hospitals or the airport, may run all day.

#### *Local Network*

Local routes, whether served by bus or rail, are the basic building blocks of urban transit. Local service must balance access—usually considered in terms of stop frequency—with speed. For passengers and operators alike, reliability is often more important than running time. To be effective, local service must be as direct as possible. Deviating from a direct route to serve areas of relatively low ridership will degrade the quality of service.

Local routes are defined as non-fixed guideway routes or commuter routes, that serve on an average weekday 1,000 or more riders.

#### *Coverage Network*

In low-density areas, or where street networks are poorly connected, basic transit accommodation often results in indirect or infrequent service. In these areas, routes have to be circuitous to serve small pockets of ridership. This is best done by

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using a coverage route rather than adding a deviation to a local route. Keeping coverage routes as direct as is reasonable can be a prelude to a more productive service as density and demand increases.

Coverage routes are defined as non-fixed guideway routes or commuter routes, that serve on an average weekday less than 1,000 riders.

### ***Paratransit Network***

ACCESS is a coordinated, shared-ride paratransit system that has been providing door-to-door advanced reservation transportation to the general public but primarily for people with disabilities, seniors and clients of human service agencies in Allegheny County since February 1979.

ACCESS is open to the general public. Port Authority sponsors special discounts for the following groups of persons:

1. Persons with disabilities who are certified as ADA paratransit eligible. This service is sponsored by Port Authority of Allegheny County
2. Persons age 65 or over who have registered for the ACCESS 65+ (PA Shared Ride) Program receive an 85% discount on fares. This subsidy is provided through the Pennsylvania Department of Transportation from State Lottery funds.
3. For non-ADA eligible persons or trips, the Connection Program provides ACCESS service at an 85% discount on fares if there is no bus option available, or provides feeder service to and from the bus if fixed route service is available on at least one end of the trip. The Pennsylvania Department of Transportation assists with subsidies for these trips from Persons with Disabilities (PwD) and Section 5310 operating funds.

Over 140 additional agencies also sponsor ACCESS service for their clients. Each agency determines which people and trips they will sponsor. Major sponsors include: Allegheny County Department of Human Services through the Medical Assistance Transportation Program, the Area Agency on Aging and the Office of Intellectual Disability; and Pennsylvania's Home and Community Based Waiver Programs.

### ***Service Garages***

Port Authority's services are directly operated out of four bus garages and one light rail center. Each location serves a general section of Port Authority's overall service.

- North - Ross bus garage
- South – West Mifflin bus garage (Southeast), South Hills Village Rail Center (LRT)
- East – East Liberty bus garage
- West – Collier bus garage

### ***Fixed Route Service Area***

It is important not only to define the types of services that the Authority provides, but also to define who is served by these various types of transit. For the purposes of this document, the Authority assumes anyone living within the following "catchment areas" has access to transit:

#### ***Bus Stops***

- Within ¼ mile (on road network) of residence via walking

#### ***Transit Stations (Rapid transit services)***

- Within ½ mile (on road network) of residence via walking
-

While biking and driving catchment areas are important considerations for network planning, the walkable catchment area will be used as the basic "service area", since not all passengers have access to a bicycle or automobile.

**Demand Response Paratransit Service Area**

- ACCESS provides service between any origin and destination within Allegheny County, as well as any destination up to 1.5 miles outside Allegheny County.
- ADA eligible paratransit service is available anywhere within the defined ADA service area of 3/4 of an airline mile from Port Authority's non-commuter, fixed bus route or from any rail station operating on that day and at that time.

## Service Design Standards

Port Authority strives to serve as many of Allegheny County's residents, workers, and visitors as it can with the resources that it has available. At the same time, it needs to serve a wide variety of riders, trip types, and demands, many of which conflict with each other. For example, most riders want fast service, but many also want many bus stops in order to minimize the distances that they have to walk, which actually reduces vehicle speeds. Thus, service elements that will attract one type of rider to transit can drive other riders away, and Port Authority must balance these competing desires.

To serve as many riders as possible, and as described in the previous section, Port Authority provides different types of service. These services are intended to meet the basic needs of residents in developed areas who cannot drive and to provide a compelling alternative for those who can drive. For both types of riders—and those in between—there are certain service design principles that will improve service for nearly all riders.

Each of the following factors for service design shall be reviewed annually or as major system changes occur to ensure that all service adheres to the standards to the best of the Authority's ability.

### Services Should Maximize Efficiency of Resources

#### *Fixed Route Transit*

Transit services should be designed and held to alignments which serve the greatest density of origins and destinations to as to maximize the number of potential riders while using the least amount of resources while still providing safe, effective and equitable service. Therefore, the ultimate goal with designing a transit route is to choose an alignment which serves the greatest number of people in the most efficient way possible. Maximizing the number of passengers requires finding key areas in which those passengers originate and bring those passengers to their desired destinations. Origins include where passengers live, but also of key importance are origins where passengers can access transit via other transportation modes, such as through pedestrian and bike pathways, park and ride facilities, connections with regional public transit carriers, paratransit services, train stations, and airports. Destinations largely include access to the greatest number and density of jobs, as well as other types of destinations such as schools, universities, libraries, parks, art and cultural institutions, retail locations, health care facilities, entertainment and recreational areas, and community services.

Routes should operate along pathways that connect the greatest number of people to the greatest number of destinations, so as to carry out the mission of the Authority with the greatest effect.

#### *Demand Response Paratransit*

ACCESS is designed to be a highly coordinated system. Coordination creates economies of scale in the shared ride system and helps maintain an expansive level of service which is far greater than any single sponsor could afford.

Shifting riders from ACCESS to fixed route service whenever possible has been a major goal since the passage of the ADA as fixed route service has a lower cost and provides riders with more flexibility and freedom. Trip by trip eligibility, personalized service planning including mapping accessible paths of travel and paratransit feeder to fixed route service, have been effective tools and have helped to manage ADA paratransit demand.

### Service Should Be Straightforward

Transit services must be intuitive, logical, and easy to understand to ensure riders can use them effectively. Therefore, service should be designed so that it is easy to understand. This makes it easier for potential riders to learn about options that are available, and helps ensure that riders get where they want to go when they want to without experiencing confusion or substantial delay.

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Routes should operate along as direct path as is feasible given Allegheny County's topography. The fewer directional changes a route makes, the easier it is to understand. Conversely, circuitous alignments are disorienting and difficult to remember. Routes should not deviate from the most direct alignment unless there is a compelling reason.

### **Route Deviations & Variants Should Be Minimized**

As described above, service should be relatively direct, and to make service direct, the use of route deviations—the deviation of service off of the most direct route—should be minimized.

However, there are many instances when the deviation of service off of the most direct route is appropriate, for example to provide service to major shopping centers, employment sites, schools, etc. In these cases, the benefits of operating the route off of the main route must be weighed against the inconvenience caused to passengers already on board.

1. Overall route productivity (in terms of passengers per revenue vehicle hour) would be equal to or better than without the deviation.
2. The deviation would not interfere with the provision of regular service frequencies and/or the provision of coordinated service with other routes operating in the same corridor.

In most cases where route deviations are provided, they should be provided on an all-day basis to keep the route simple for riders to use. Exceptions are during times when the sites that the route deviations serve have no activity—for example route deviations to shopping centers do not need to serve those locations early in the morning before employees start commuting to work.

### **Routes Should Be Symmetrical**

Routes should operate along the same alignment in both directions to make it easy for riders to know how to get back to where they came from. All routes should operate along the same alignment in both directions except in cases where such operation is not possible due to one-way streets or turn restrictions, or near route termini where vehicles need to turn around. In those cases, routes should be designed so that the opposite directions parallel each other as closely as possible.

### **Routes Should Be Designed to Maximize the Transit Service Area**

To make service easy to understand and to eliminate service duplication, service should be developed to serve clearly defined markets. Ideally, major corridors should not be served by more than one route of each route type—for example, one local route and one Commuter route, and not by multiple local routes and multiple Commuter routes. By spreading out transit services, the Authority can maximize the area in which riders can access transit stops and stations. Exceptions include pathways into and out of Downtown, Oakland, and other major employment centers. Exceptions should also be made when multiple routes should logically operate through the same corridor because they serve unique destinations.

### **Service Should Be Consistent**

Routes should have optimal headways (times between trips) within key time periods (morning and evening rush hour, midday, early morning and evening) so as to maximize use of the Authority's resources while providing easy to understand services to its passengers. For example, if a bus route takes thirty minutes to complete an inbound and outbound trip, and then requires a five-minute layover at the end of its trip, then a thirty-five minute or sixty-five-minute headway would be optimal.

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### **Services Should Be Well Coordinated**

In many areas, multiple routes operate through the same corridors but to different destinations (for example, between downtown Pittsburgh and Oakland). To avoid bunching of buses and to balance loads, major routes of the same route type (for example local or Commuter) that serve the same corridor should be scheduled to operate at the same service frequencies and should alternate trips at even intervals.

Also, most routes intersect with other routes at transfer centers, stations, and street intersections. At major transfer locations, schedules should be coordinated to the greatest extent possible to minimize connection times for the predominant transfer flows. This includes having the same time point locations (in written schedules) on routes that overlap or intersect to make it easier for riders to understand frequencies and transfers to routes within their area.

### **Services Should be Designed with Adequate Running Time**

#### ***Fixed Route Transit***

Routes are broken into segments, and schedules are designed to give each route segment a specified running time within which the segment should be able to be traversed. Scheduled running times should be set so as to maximize the percentage of time a given route segment can be run in the allotted time while minimizing the need for additional resources. On Time Performance will be calculated based on departing the first and intermediate timepoints between one minute early and five minutes late and arriving to the last timepoint at end of one directions of a route between one minute early and five minutes late.

Port Authority aims for a system level on-time performance of 73%. This may be increased over time as the Authority continues to adopt technologies and software that better allow for adjustments based on field observations. This is further broken down by route type:

- Rapid:
  - BRT: 85%
  - LRT: 90%
- Local and Coverage: 75%
- Commuter: 80%

#### ***Demand Response Paratransit***

ACCESS sets its goal for on time performance at 100%. Minimum standards are:

- 94% on-time pick ups
  - Pick ups are defined as on time between ten minutes prior to and twenty minutes past the scheduled pickup time
- 95% on-time arrivals for appointments
  - Appointment drop offs are defined as on time between 30 minutes early and zero minutes late
- ACCESS maintains a 100% guaranteed ride home policy for its customers.

Additionally, paratransit must meet requirements for appropriate travel time between points:

- For ADA eligible trips, travel time must not exceed the time it would take to make the same trip on the fixed route system, including walking to and from the stop, transferring and waiting
- For non-ADA eligible trips, the maximum travel time will be 30 minutes or up to twice the direct drive time at that time of day
- Maximum travel time must not exceed two hours



- A minimum of 95% of trips must have ride times within these standards

Finally, trips must be provided within a reasonable amount of time from when requests are made:

- 100% of ADA eligible trips must be provided within a useful hour of the request, with no trips denials
- Average telephone hold time cannot exceed 60 seconds

### Rapid and Commuter Routes Should Be Expeditious

Routes designed to move people quickly through the service area, either by operating along a fixed guideway or by providing limited stop service, should be at least 25% faster (with a minimum of 5 minutes faster per trip) than their local bus route counterparts.

### Stop and Station Placement

#### Fixed Route Transit

Transit stops are the access and egress points for transit services and should be conveniently located. However, too many transit stops make travel slow, which not only has an effect on ridership, but also affects the operating costs of transit and the ability to maximize services within the system. Most riders want service that balances convenience and speed and the number and location of stops is a key component of achieving that balance. Services that emphasize speed (for example, Rapid and Commuter routes) should have fewer stops, while local services that emphasize access should have more frequent stops. Geographical barriers, such as steep grades, sidewalk widths, intersections, rail lines, and highways shall be taken into consideration when determining stop placement.

The following table exhibits the Authority's determination of appropriate standards for the average spacing between transit stops. Spacing standards are differentiated for the different types of service the Authority provides and at different levels of population density. Areas of higher population density (defined as greater than 5,000 persons and jobs per square mile) should generally have more frequent stops, whereas areas with lower population density (defined as less than 5,000 persons and jobs per square mile) should have fewer stops. Exceptions to these standards should only be made in cases where accessibility is particularly problematic or dangerous, or where there are significant topographical challenges.

**Table 1: Stop Spacing (in feet)**

	High Population Density		Low Population Density
	Minimum Spacing	Spacing Guideline	Spacing Guideline
<b>Rapid Routes</b>	1,000	2,600   ½ mile	2,600   ½ mile
<b>Commuter Routes</b>	650	1,300   ¼ mile	1,300   ¼ mile
<b>Local and Coverage Routes</b>	650	900   1/6 mile	1,300   ¼ mile

*Note: For purposes of these standards, high density is considered greater than or equal to 5,000 persons (jobs + residents) per square mile, and low density is considered less than 5,000 persons per square mile.*

#### Demand Response Paratransit

All ACCESS customers receive door to door assistance from drivers, including assistance up or down as many as four steps and into the lobby of public buildings, as long as the vehicle can access the curb in proximity to the location. This policy meets the origin to destination requirements of the Americans with Disabilities Act.

For individuals whose disability requires that they not be left alone, ACCESS offers hand to hand service. Drivers ensure that customers designated with this service level are handed off to responsible staff or family members at both the origin

and destination, and ACCESS maintains an individual “safety-net” plan for each eligible customer in the event there is no one available to receive the individual. Service Design Should Maximize In-Service Time

### ***In-Service Time***

Service design can significantly impact schedule efficiency. Service should be designed to maximize in-service time and minimize out-of-service time. As such, the following standards will be used to ensure that schedules are efficiently designed based on route length, trip characteristics, and layover locations.

**Table 2: Revenue Vehicle Hours as Percentage of Total Vehicle Hours**

Service Type	Percentage In-Service Time
<b>Rapid Routes</b>	
LRT	80%
BRT	80%
<b>Commuter Routes</b>	50%
<b>Local and Coverage Routes</b>	70%

*Note: Commuter routes use peak direction in service time only.*

### **Service Levels Should Be Set Based on Service Standards**

Service standards help ensure that the appropriate amount of service is provide on each route. For example, service standards should be set to determine minimum levels of service in terms of the number of trips, service frequencies, and/or passenger loadings. Service level standards are presented in the next section.



## Service Level Standards

Service level standards define when service should be provided and how often it should be provided, subject to budgetary constraints. Four standards are used:

1. Minimum Span of Service
2. Minimum Service Frequencies
3. Minimum Service Days
4. Maximum Loading
5. Minimum Productivity

These standards are used together to determine appropriate service levels for each route. At a minimum, service should be provided based on the minimum span of service and minimum service frequency standards. Beyond that, additional service should be added to meet passenger loading standards and in the morning and at night when minimum productivity standards can be met.

On an ongoing basis, service should be added when ridership increases to levels that exceed maximum loading standards. Conversely, service should also be reduced when loads fall below the passenger loading standards for a period of time. The process for ensuring this occurs will be outlined in the following section.

### Minimum Span of Service

#### Fixed Route Service

The minimum span of service standards defines the minimum period of time that different types of service should operate, in terms of the latest that service should begin and the earliest that it should end. The “end” time for services in the following table indicates the time of the beginning of the final trip (as opposed to the end of the last trip). Based on demand, service may start earlier and end later; it is subject to the minimum performance standards presented in the next section. Higher ridership services will have long spans of service, while lower ridership services will have shorter spans of service. Minimum span of service standards are presented in Table 3.

**Table 3: Minimum Span of Service Standards**

	Rapid Routes Routes	Commuter		Local and Coverage Routes
		AM Peak	PM Peak	
<b>Weekdays</b>				
Begin	6:00am	6:30am	4:15pm	6:00am
End	11:30pm	7:30am	5:15pm	6:00pm
<b>Saturdays</b>				
Begin	6:30am	None	None	9:00am*
End	11:00pm			8:00pm*
<b>Sundays</b>				
Begin	7:00am	None	None	10:00am*
End	11:00pm			6:00pm*

*Note: The beginning span of service refers to the beginning of the first inbound trip, and the ending span of service refers to the end of the last outbound trip.*

*\*If the route has service on this day.*

Based on demand, service can start earlier and end later than these standards stipulate. However, service that starts earlier or ends later is subject to minimum performance levels.

### ***Demand Response Paratransit***

ACCESS provides service from 6:00a.m. - 12:00a.m.

ADA eligible paratransit service is additionally available prior to 6:00a.m. and after 12:00a.m. if both the trip origin and destination are within the ADA service area and the fixed transit route offers service before 6:00a.m. or after 12:00a.m.

### **Minimum Service Frequencies**

The minimum service frequency standards define the minimum service frequencies at which each type of service should operate. Based on demand, many services would operate more frequently, and in these cases, the service frequencies would be based on ridership and loading levels (as described in the next section). Minimum service frequency standards are presented in Table 4. Note also that many corridors would be served by multiple routes, and in these cases, effective service frequencies would be more frequent than for individual routes. There are many cases where service frequencies may differ slightly from these standards due to total trip times and maintaining optimal spacing between trips. For example, it may be optimal for vehicle and operator resources to have 32 minutes between trips than 30 minutes due to the route's characteristics. Situations like this where service frequencies are not exactly met for optimal scheduling purposes will be noted in the Annual Service Report.

**Table 4: Minimum Service Frequency Standards (Minutes)**

	<b>Rapid Routes</b>	<b>Commuter Routes</b>	<b>Local Routes</b>	<b>Coverage Routes</b>
<b>Weekdays</b>				
Early Morning	30	--	60	75
AM Peak	10	3 trips	30	60
Midday	20	--	60	75
PM Peak	10	3 trips	30	60
Evening/Night	30	--	60	75
Saturdays	30	--	60*	90*
Sundays	30	--	60*	90*

*\*If the route has service at this time of day/day of week.*

### **Minimum Service Days**

Port Authority recognizes the importance and benefits of communities to have daily access to transit service to connect people to life. The following minimums will be used to prioritize the service days by route types:

- Local – daily service
- Coverage- daily service
- Commuter- weekday service
- Rapid- daily service

Route design, designations and variants for weekend service may differ from weekday service due to community needs and ridership demand in an efficient, effective, and equitable manner.

### **Maximum Loading (Overcrowding)**

Port Authority will strive to provide sufficient levels of service to accommodate all passengers on a given route. During peak periods, some passengers are expected to stand, but the number of standing passengers should be kept to reasonable levels whenever possible. Also, services will be designed so that when passengers do have to stand, they will not have to stand for long periods of time. On routes that operate for long distances on highways, and on all off-peak services, service will be scheduled to accommodate most passengers with a seat.

Two different techniques are used to keep passenger loads within acceptable levels. The first is to match vehicle types with ridership levels, and to use sixty foot articulated vehicles on higher ridership routes. The second method is to provide more frequent service, with service frequencies set to keep passenger loads within the limits presented in Table 5. These standards are presented in terms of maximum passenger loads as a percentage of seated capacity of the vehicle used to provide service (see Table 6). Where average maximum passenger loads on a given trip exceed these levels over a period of time, Port Authority will deploy larger vehicles and/or increase service frequencies whenever possible within available budget.

Data will be analyzed to determine specific trips where average maximum loads exceed capacity. If multiple trips are often overcrowded for significant distances on a given route, resources shall be used if available to place additional trips on a route during periods of overcrowding.

**Table 5: Maximum Passenger Loading (as a Percentage of Seating Capacity)**

	Rapid Routes		Commuter Routes	Local and Coverage Routes
	LRT	BRT		
<b>Weekdays</b>				
Peak Hour	250%	140%	120%	120%
Off-Peak	140%	120%	100%	100%
<b>Saturdays</b>			-	
All Day	140%	120%		100%
<b>Sundays</b>				
All Day	140%	120%		100%

**Table 6: Maximum Passenger Loads by Vehicle Type**

Maximum Loads by Vehicle Type	Seats (Typical)	100% Capacity	120% Capacity	140% Capacity	250% Capacity
Light Rail Car	62	-	-	87	155
60' Articulated Transit Bus	60	60	72	84	-
40' Transit Bus	40	40	48	56	-
35' Transit Bus	35	35	42	49	-

## Minimum Productivity

### Fixed Route Transit

In order for Port Authority to use its resources effectively, all routes should achieve a minimum level of productivity. These standards use "Passengers per Revenue Vehicle Hour" which is a measure of the average number of passengers each bus deployed on a given route carries for each hour that it is in-service, to measure productivity.

With limited exceptions, all routes should attract a minimum number of passengers for each hour that buses are in-service (revenue vehicle hours). These minimum productivity levels are presented in Table 7.

**Table 7: Minimum Productivity Levels (Passengers per Revenue Vehicle Hour)**

	Rapid Routes		Commute	Local	Coverage
	r		Routes	Routes	Routes
	LRT	BRT			
Weekdays	80	50	25	30	20
Saturdays	50	40	-	20	15
Sundays	45	30	-	20	15

**Notes:**

- Productivity levels apply only to days of week which routes operate.
- LRT routes are at this point to be considered as one route with one overall performance of passengers per revenue vehicle hour calculated (due to limits on passenger counting by station, separating routes is infeasible as of the writing of this document). All other modes can easily be separated by route.

### ***Demand Response Paratransit***

ACCESS productivity is defined as the number of revenue passenger trips provided in a billable hour. ACCESS service providers are paid by the hour. To ensure the efficient use of resources, minimum productivity requirements are established. Port Authority sets productivity standards annually for the system, and the broker, in turn, sets minimum productivity standards for each of its service providers based on performance standards and trip characteristics including average trip length, percentage of trips taken by people who use wheelchairs, percentage of no shows and cancellations, and percentage of pre-grouped service.

## Monitoring and Evaluating Service

### Annual Service Report

All monitoring and evaluation of service will be summarized in an Annual Service Report, to be developed by the Planning and Development Division at the end of each fiscal year to summarize the prior years' service. The report shall include the following sections outlined below.

### Overall Service Performance and System Equity

Service design and service level metrics will be quantified to give an understanding of how well the Authority is doing with adhering to its goals of efficiency, effectiveness, and equity. Key Performance Indicators will be compared against peer transit agencies where possible to determine priority areas for improvements in the upcoming service year. An overview of system service performance will include the following metrics:

Category	Attribute
General	Ridership
	Service Hours
Efficiency	Passengers per revenue vehicle hour
	Cost per passenger served
	Percent of time spent in revenue service
Effective	Walkable service area
	On-time performance
	Overcrowding
	Stop spacing
Equity	Persons with disabilities
	Senior citizens / persons over age 65
	Low income persons and low wage jobs
	Persons of color / persons of a minority race or ethnicity
	Persons without access to a vehicle
	Persons with limited English proficiency
	Persons under age 18
	Single mothers

Routes will be categorized as 'high' or 'low' equity routes, and average service design and level metrics above will be aggregated for these two groups to ensure significant disparities do not exist. Equity is determined by creating an index of the five above indicators by Census block. All indices from each Census block a route passes through are then averaged to determine an overall equity score for each route.

### Route Service Performance

Routes not meeting any of the standards will be identified in the Annual Service Report, with explanation regarding future changes to improve adherence or justification for not meeting service levels given if such changes would be in some manner prohibitive.

In cases where routes do not meet minimum productivity standards, changes should be made to improve route productivity. These changes could include any of a variety of measures;

- Reconfiguring the route alignment to attract more passengers
- Eliminating particularly unproductive segments

- Reducing or increasing service frequency
- Reducing or increasing span of service
- Changing the route from an all-day route to one which only runs during peak hours
- Targeted marketing to attract new riders
- Public outreach
- Conducting a ridership survey to better understand the needs of the community around the route
- Working with community groups to better understand how the route can meet the community's needs

If no changes can be identified that can improve productivity without undue burden to the Authority, then the route could be a candidate for elimination. If the situation leading to reduced productivity is assumed to be changing in the near future, written documentation detailing why the route should not yet be adjusted will be provided in the Annual Service Report. After 2 fiscal years of not meeting productivity standards of a route, action is required to alter service on that particular route to ensure that the Authority uses its resources efficiently. Under no circumstances is a route to continue unaltered after 24 months of failing to meet minimum productivity standards.

### ***Implementation Updates***

All major service changes that have been implemented will receive an implementation update in the two subsequent Annual Service Reports after the changes are made. Implementation updates will summarize how the change has affected route performance (efficiency), as well as how many riders have been gained/lost (effectiveness) and how these changes are effecting subpopulations (equity) if data is available.

### ***Major Service Changes for Upcoming Service Year***

Based on evaluation of services from the previous sections, a list of priorities for service changes for the following year will be developed. These priorities will be outlined in the Annual Service Report as suggestions for the following year; analysis of these priorities will not appear in the Annual Service Report, but rather will follow the standards as set forth in the Service Change Process section.

### ***Budget for the following Fiscal Year***

The Annual Service Report shall also include a projection of changes to the operating budget for the year following the upcoming service year, so that the Authority and the public have an indication of future adjustments to service (for example, whether additional funding is available for increasing service, budget is remaining stable for no major changes to service, or whether budget is expected to decrease and reductions in service may be necessary).



## Service Change Process for Fixed Route Service

### Overview

The Authority has a structured process for evaluating proposed changes to its existing system, both from within the Authority and from the Public.

Small changes are made throughout the year as issues arise such as traffic detours, but larger, service-enhancing or efficiency-seeking changes are done annually. As of this current document, major service changes are made in the fall (September or November) schedule changes. This process is comprised of the following key stages:

1. Development of the annual service budget
2. Collection of proposed service changes (both internal and external)
3. Evaluation of proposals for effectiveness, equity, and efficiency measures
4. Ranking of proposals given budgetary constraints
5. Presentation of major service changes to Senior Staff and the Board

Additions to service through major service changes are to be considered only when existing services are adequately meeting the aforementioned service standards. For example, a new route should not be added to a garage's work during peak hours if an existing route from that garage is experiencing significant overcrowding during those same hours; resources would first need to be used to address overcrowding to bring vehicle loadings into an acceptable range.

### Annual Service Budget

The annual service budget shall be determined by the Finance Department annually and released internally as a proposed budget in the spring of each year so that major service changes can be appropriately ranked and prioritized given resource constraints in the coming year.

### Categorization of Service Changes

Service changes shall be categorized so as to better understand which types of changes need to be evaluated internally. Changes are either considered to be minor or major, and are defined as:

#### Minor Service Changes

##### Running Time Adjustments

- Route segments which are consistently early or late
- Route segments which are consistently taking more or less running time than is scheduled

##### Out of Service Time

- Appropriate layover length given reliability of travel time on a given route
- Appropriate running time to and from the bus garage from the start or end of a route
- Appropriate cross country travel times between two route end points

##### Bus Stop Placement

- Using appropriate spacing standards as outlined in this framework

##### Detours

- Minor changes to bus routes due to street closures (less than 6 months)

##### Holiday or Special Event Service Adjustments

- Added service frequencies on holidays or special events days (such as sporting events)

##### Trips

- Adding or removing trips to maximize efficiency and minimize overcrowding

**Major Service Changes**

- Addition or removal of a route
- Addition or removal of a service day for a route
- Permanent changes that constitute an addition or reduction of more than 30% of the weekly trips, service hours, or service miles on a given route
  - Or adding or removing more than 2,500 annual hours of service on longer/more frequent routes

**Process Timeline**

This timeline is based on the current quarterly service change schedule occurring in March, June, September, and November. The "Service Year" aligns with the fiscal year between the months of July to June.







## **Collection of Proposed Service Changes**

### ***Internal Proposals for Major Service Changes***

#### **Amalgamated Transit Union Requests**

The Amalgamated Transit Union (ATU) shall gather and prioritize major service change requests throughout the year and provide these requests to the Service Development Department by the November schedule changes (usually the Sunday before Thanksgiving) of each year. Requests **MUST** be prioritized so as to aid Service Development in the evaluation of said requests. All minor service change requests shall continue to be made through quarterly Schedule Committee meetings.

#### **Other Internal Requests**

Through the process of developing the Annual Service Report, the Service Development Department will develop its own requests for major service changes in order to ensure adherence to Service Standards. Many changes that should occur will be minor in nature and therefore can occur during any schedule change; however, any major service changes needed, such as addition or elimination of a route, will need to be developed as a proposal for service change similar to any other proposal. These proposals must be developed by June of each year after year-end route data is made available.

### ***External Proposals for Moderate and Major Service Changes***

#### **Customer Service**

The Customer Service department receives requests regarding various types of service changes on an ongoing basis. Upon receipt, such requests are recorded in a database shared among several departments. Requests are categorized as they are entered into the database, which ensures that they are channeled to the appropriate staff member. Planning and Service Development staff will be responsible for collecting requests submitted by Customer Service via the database and for determining whether they are minor or major.

#### **Website**

Port Authority's website will maintain an open survey for members of the public who wish to put forth a request for a major service change at any time throughout the year.

#### **Public Relations**

For the purpose of this document, "Public Relations" refers to the rider, stakeholder, and government/business relations functions of the agency located within the Communications Division of the Authority. Staff within communications responsible for these functions have occasion, through the normal course of their job responsibilities to receive requests for service changes. These requests will be accompanied by as much information as possible, which will often be gathered in meetings with the parties submitting the requests.

### **Evaluation of Proposals for Major Service Changes**

After proposals are collected semiannually, they will then be evaluated on several factors to determine feasibility of implementation by the Authority. **The Authority shall reserve the right to immediately dismiss any proposal it deems completely infeasible at any point in the near future in order to use staff time and resources efficiently to evaluate realistic and potentially feasible service proposals.**

Proposals will be evaluated in the three main categories with which the Authority uses as its goals for service; the efficiency of a proposal based on resources needed to carry it out, its effectiveness at increasing access to transit or transit use within the service area, and whether it changes the equity with which services are provided to those who have higher need.

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In order for a proposal to be considered for the evaluation process, it must meet a base efficiency level based on ridership projections of  $\frac{1}{2}$  the service guideline for that service type and day.

For example, a request to add weekend service to a local route that does not currently have weekend service would need to show a ridership projection of at least 7.5 riders per hour of proposed added service ( $\frac{1}{2}$  of the service guideline of 15 passengers/hour for a local route on a weekend day).

Other constraints on service may also be in place in any given year which might render certain proposals infeasible.

One example of this is the availability of vehicles during peak hours – certain bus garages may not have additional capacity to add peak service, and therefore requests that would need to operate out of these garages during peak times may not be evaluated due to this constraint.

Once proposals have been filtered to those with an acceptable base level of efficiency per the above guideline and any other constraints which may exist in a given year, they will be evaluated and ranked based on the following criteria:

**Efficiency** of a service proposal will be evaluated using assumed costs/savings of the proposal against projected ridership growth/reduction and assumed fare revenue changes. The overall measure of efficiency will be the projected net cost / savings per passenger gained / lost.

**Effectiveness** of a service proposal will be evaluated quantitatively using a range of factors, including changes to straightforwardness, symmetry, coordination, walkable service area, span of service, frequency of service, travel time, or on time performance of a route.

**Equity** of a service proposal will be evaluated based on the demographics of the population which the service serves (as defined by the watershed surrounding stops / stations). Services are categorized as more equitable if they provide access to a population which has a higher percentage of a targeted subpopulation than the proportion of the total population that that subpopulation comprises within the overall service area. Targeted subpopulations include low income and minority populations protected under Title VI of the Civil Rights Act of 1964, senior citizens, persons without access to a vehicle, and riders with disabilities.

**Table 8: Metrics for Evaluating Major Service Improvements and Reductions**

MEASURE	METRICS	EVALUATION SCORE
<b>Efficiency</b>	- Expected passengers per service hour	<i>Improvements: Projected net cost per new passenger</i>
		<i>Reductions: Project net savings per passenger lost</i>
<b>Effectiveness</b>	- Walkable service area	<i>Vastly more effective</i>
	- Jobs in service area	<i>Moderately more effective</i>
	- Residents in service area	<i>No change in effectiveness</i>
	- Change in weekly trips	<i>Moderately less effective</i>
	- Travel time	<i>Vastly less effective</i>
<b>Equity</b>	- In service percentage	
	- Low income households and low wage jobs	
	- Persons of a minority race or ethnicity	<i>Vastly more equitable</i>
	- Persons over age 65	<i>Moderately more equitable</i>
	- Persons with disabilities	<i>No change in equity</i>
	- Persons without access to a vehicle	<i>Moderately less equitable</i>
	- Single mothers	<i>Vastly less equitable</i>
	- Persons with limited English proficiency	
	- Persons under age 18	

Service *improvements* at no cost and at no detriment to operations should be implemented, even if scored as “No change” for effectiveness and equity, due simply to being able to more service at no cost to the Authority.

### Ranking of Proposals given Budgetary Constraints

Proposals will be given an overall score for each of the three above categories. Those three scores will then be averaged into an overall score for the proposal, and proposals will be ranked in order of highest to lowest overall score. Each of the three category scores (efficiency, effectiveness, equity) will be given equal weight in the overall score.

### Release of Prioritized List of Major Service Changes for Upcoming Service Year

After all viable proposals have been evaluated, ranked, and approved by Senior Staff; a list of major service changes may be released along with the Annual Service Report in November of each year for changes in the following fiscal year.

### Ongoing Evaluation of Implemented Service Changes

After a major service change is implemented as part of the Service Request Evaluation process, changes should be monitored annually to ensure the changes are successful.

If changes were to an entire route, that route is expected to be operating within the efficiency standards set forth in this document within 24 months or the release of the third Annual Service Report after the change is made. If at this time the route is not meeting efficiency levels for that route type and day of week, changes should be made in accordance with these standards to better utilize resources effectively.

If changes were made to part of a route (for example, a route is extended to a new area), that route segment should be operating at half of the efficiency standards set forth in this document within 24 months or the release of the third



Annual Service Report after the change is made. Once 24 months has passed (or the third Annual Service Report is released), the route shall be evaluated in accordance with the route standards set forth in this document.

An exception to this would be if the extension creates a situation whereby the route as a whole is no longer meeting efficiency standards, in which case it should follow strategies set forth in this document to better utilize resources effectively.

### **Evaluation of Proposals to Alter Paratransit Service**

As part of its ADA Paratransit Plan, Port Authority worked closely with the community to identify areas in which its ADA eligible complementary paratransit ACCESS service exceeded the minimum requirements of the ADA. Should the cost of ACCESS service which exceeds the ADA minimums become greater than the available financial resources, the plan calls for implementation of the Contingency Plan developed by the community. The Contingency Plan calls for service reductions and fare increases to be implemented in the following order:

- Increase ACCESS fares
  - Proportional increases in mid-range fares
  - Increase the minimum ACCESS fare to two times the base fixed route fare
  - Premium fares outside the service area
- Eliminate the convenience fare and mandate use of fixed route when available and conditions permit
- Variations of reduced service area should be implemented in the following order:
  - Weekdays after 8 PM
  - Saturdays all day
  - Sundays and holidays all day

As each action is taken, the cost savings will be evaluated prior to implementing the next scheduled service reduction. Likewise, requests for service enhancements will be evaluated for feasibility of implementation.

With the change in funding and the implementation of the ADA minimum service area in 2012, there are new considerations for service reductions. In addition to using the three main categories for evaluation, Port Authority will use the ADA Contingency plan as its starting point in evaluating ACCESS service reductions or enhancements.

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## Appendix A: Route Designations, Fiscal Year 2020

Route Type	Routes
<b>Rapid</b>	G2, P1, P2, RED, BLLB, BLSV
<b>Commuter</b>	7, 18, 65, 19L, 28X, 51L, 52L, G3, G31, 01, 05, 012, P3, P10, P12, P13, P16, P17, P67, , P69, P7, P76, P78, Y1, Y45
<b>Coverage</b>	4, 11, 20, 22, 26, 29, 36, 40, 43, 60, 74, 79, 89
<b>Local</b>	1, 2, 6, 8, 12, 13, 14, 15, 16, 17, 21, 24, 27, 31, 38, 39, 41, 44, 48, 51, 53/53L*, 54, 55, 56, 57, 58, 59, 61A, 61B, 61C, 61D, 64, 67, 68/P68, 69, 71/P71, 71A, 71B, 71C, 71D, 75, 77, 81, 82, 83, 86, 87, 88, 91, 93, Y46, Y47, Y49

\*As of the writing of this document, these routes are to be considered together as one local route.

## Appendix B: Data Sources and Explanations

### Automatic Passenger Counters

In order to analyze adherence to service levels and service design, the Authority has several sets of data that it uses. The most intricate of these data sources are automatic passenger counters (APCs) that the Authority has installed on the doors of all of its buses. These APCs count the number of passengers boarding (getting on) and alighting (getting off) each bus at every stop along the route, and then use that data to calculate the load (number of people) on the bus at any given time. These counts are time stamped, so data can be viewed by day of week, trip time, and direction of the vehicle. The Authority has measured the effectiveness of these passenger counters to be around 98.5% accurate when compared with actual observations.

Rail vehicles do not yet have the ability to count passenger loads and stop/station boardings and alightings, and as such, farebox payment data is used as a substitute for overall route ridership. Farebox data is not as accurate as APCs, and is only able to be viewed by trip (not by stop), so it is somewhat limited.

### Modeling and Projecting Ridership Changes

#### Service Improvements

When possible, previous similar situations will be used as base cases to look at percentage of population using transit as compared to percentage of population working in the destination area from Longitudinal Employer-Household Dynamics Origin-Destination Employment Statistics (LODES) data from the U.S. Census Bureau. This data provides representative samples of origins and destinations of the residents and workforce within a given geographic area. While this does not account for non-work trips, it gives a good baseline to extract data out from to project ridership changes in the near future.

#### Service Reductions

Service reduction effects will be determined by aggregating the stop boardings at stops which are to be eliminated *and* fall outside of the walkshed of ¼ mile along a street network from another stop. If several stops being considered for elimination are within ¼ mile of another route/group of stops (or ½ mile of a rapid route station/stop), then reasonable assumptions about which of these passengers will now have to walk farther than the walkshed are to be made, and these passengers should be considered to be outside of the remaining walkshed and will be assumed to no longer use the transit service.

## SUMMARY OF RESOLUTION

### Authorization to Approve Title VI Analysis for Planned November 2020 Major Service Changes

Port Authority of Allegheny County (Authority) was organized and exists pursuant to the Second Class County Port Authority Act, as amended, to provide public transit services within and for Allegheny County. In accordance with Title VI of the Civil Rights Act of 1964, and related regulations adopted by the Federal Transit Administration (FTA), the Authority maintains a Title VI Program (Program) to ensure that individuals are protected from discrimination based upon race, color and national origin in the provision of the Authority's public transit services.

Pursuant to applicable FTA regulations, Program includes a policy that requires the Authority to conduct an analysis prior to implementing any major service changes to determine whether any such major service changes would have a disparate impact on its ridership based on race, color or national origin, and if so, means by which to mitigate such impact. Program also includes a policy that requires the Authority to conduct an analysis prior to implementing any major service changes to determine whether any such major service changes would disproportionately burden low-income populations, and if so, means by which to mitigate such impact. Program and the Authority's Transit Service Standards define a major service change to include a proposed change to existing transit service that would affect more than 30 percent of a route's weekly trips, directional miles or service hours or addition of a service day.

As part of the Authority's yearly evaluation of transit service under its Transit Service Standards, the Authority has identified 10 routes that it plans to extend weekend service routing for, or add weekend service to, in November 2020 that would fit the definition of a major service change (November 2020 Major Service Changes). In compliance with Program, the Authority has completed a Title VI analysis (Title VI Analysis) of November 2020 Major Service Changes.

A copy of the Title VI Analysis is attached as Exhibit A to the resolution. As more fully detailed in the Title VI Analysis, November 2020 Major Service Changes will not have a disparate impact on minority populations or put a disproportionate burden on low-income populations because all November 2020 Major Service Changes are positive changes extending weekend service routing or adding weekend service to routes that do not currently provide such service.

This resolution approves and adopts the Authority's Title VI Analysis for November 2020 Major Service Changes.



7/24/20  
J. Tague

## **RESOLUTION**

**WHEREAS**, Port Authority of Allegheny County (Authority) was organized and exists pursuant to the Second Class County Port Authority Act, as amended, to provide public transit services within and for Allegheny County; and

**WHEREAS**, the Authority maintains a Title VI Program (Program) to ensure that individuals are protected from discrimination based upon race, color and national origin in the provision of the Authority's public transit services in accordance with Title VI of the Civil Rights Act of 1964 and related regulations adopted by the Federal Transit Administration (FTA); and

**WHEREAS**, pursuant to applicable FTA regulations, Program includes a policy requiring Port Authority to conduct both disparate impact and disproportionate burden analysis prior to implementing any major service changes. Program and the Authority's Transit Service Standards define a major service change to include a proposed change to existing transit service that would affect more than 30 percent of a route's weekly trips, directional miles or service hours or addition of a service day; and

**WHEREAS**, as part of the Authority's yearly evaluation of transit service under its Transit Service Standards, the Authority has identified 10 routes that it plans to extend weekend service routing for, or add weekend service to, in November 2020 that would fit the definition of a major service change (November 2020 Major Service Changes); and

**WHEREAS**, in compliance with Program, the Authority has completed a Title VI analysis (Title VI Analysis) of November 2020 Major Service Changes, which is attached to this resolution as Exhibit A. As more fully detailed in the Title VI Analysis, November 2020 Major Service Changes will not have a disparate impact on minority populations or put a disproportionate burden on low-income populations because November 2020 Major Service Changes are positive changes extending weekend service routing or adding weekend service to routes that do not currently provide such service.

**NOW, THEREFORE BE IT RESOLVED**, that the Board hereby approves and adopts for the Authority the Title VI Analysis for November 2020 Major Service Changes attached to this resolution as Exhibit A.

**FURTHER RESOLVED**, that the chief executive officer and chief development officer be, and hereby are, directed to implement November 2020 Major Service Changes and to take any and all actions necessary and proper to carry out the purpose and intent of this resolution.

## EXHIBIT A

### FY2021 Major Service Changes Title VI Analysis

Planning Department

Port Authority of Allegheny County

July 2020

#### 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, 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

##### Disparate Impact Analyses for Major Service Changes FY2021

In November 2020, Port Authority of Allegheny County plans to implement ten major service changes as defined by the Authority as affecting more than 30% of a route's weekly trips, directional miles or service hours, or addition of a service day. They are listed in the following table.

Route	Type of Major Service Change	Change Category	Type of Change
Route 2	Extension of weekend routes	Extension of weekend routes	Major
Route 4	Addition of Sunday Service	Addition of service day	Major
Route 20	Addition of weekend Service	Addition of two service days	Major
Route 22	Addition of Sunday Service	Addition of service day	Major

Route 29	Addition of weekend Service	Addition of two service days	Major
Route 36	Addition of weekend Service	Addition of two service days	Major
Route 39	Addition of Sunday Service	Addition of service day	Major
Route 60	Addition of Sunday Service	Addition of service day	Major
Route 74	Addition of Sunday Service	Addition of service day	Major
Route 93	Addition of weekend Service	Addition of two service days	Major

## Route 2 Weekend Service Extension

### *Description*

Port Authority plans to provide Route 2 Mount Royal with a weekend service extension. Currently, the weekend service on this route ends at Millvale Loop. New service added will extend this route to North Hills Village following the current weekday routing across the 40th St Bridge. This is a 50-minute extension on a current 30-minute route in one direction. This is more than 30% change of the current weekend service hours, which qualifies as a major service change for the Authority.

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

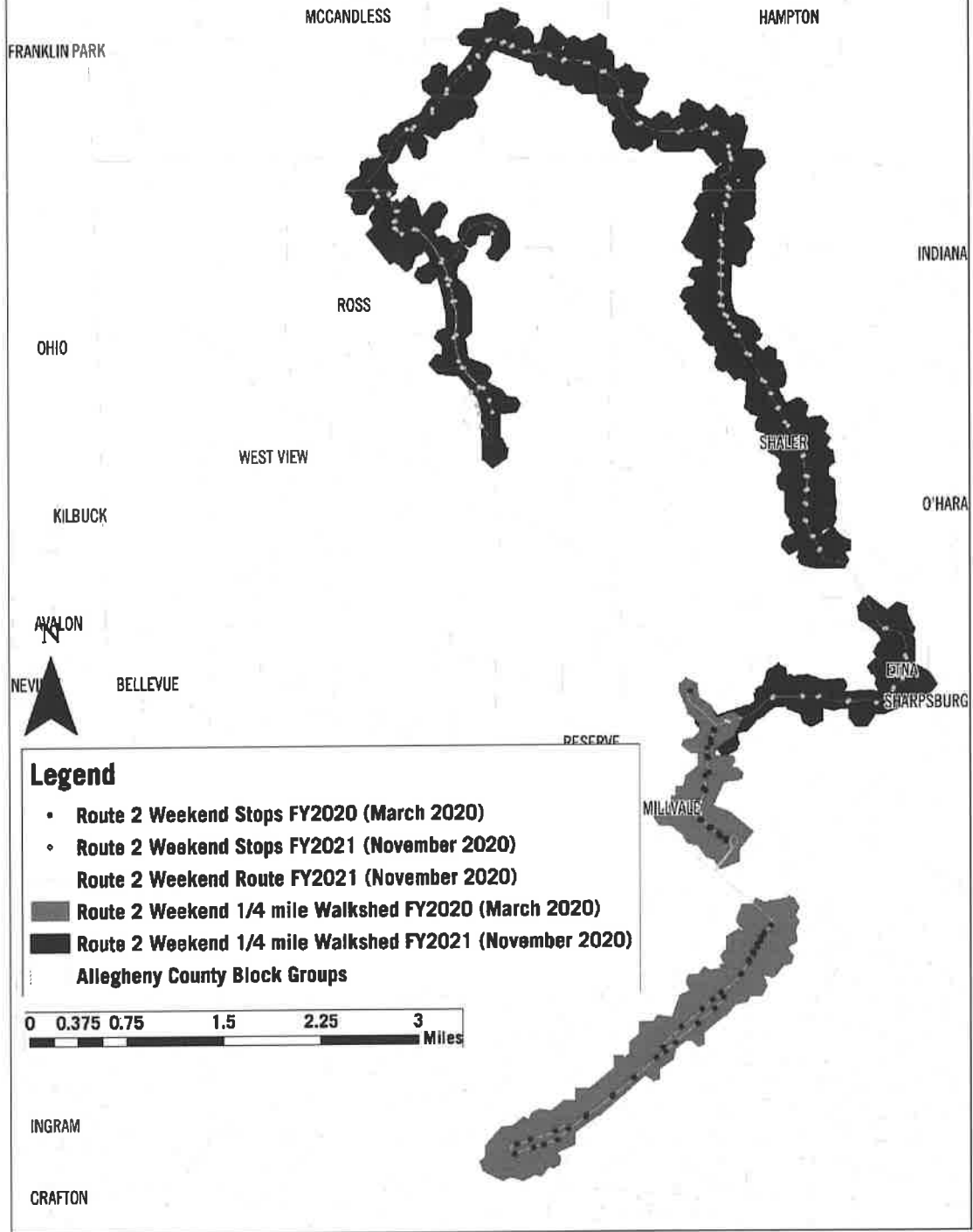
Walksheds were developed to geographically constrain the service area before and after the change. The walkshed is defined as ¼ mile on street areas around each bus stop serving the route after the new service provision.

The map on page 4 shows the service area for the Route 2 weekend extension. 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. The intersect method is used because of the extremely suburban nature of this area where walksheds are rather limited in geography due to the limited street grid.

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%
2 Weekend	955/3,348 = 28.52%	21.20%	35%	Yes – No adverse effects; positive change	979/5,400 = 18.13%	12.10%	50%	Yes – No adverse effects; positive change

As seen in the chart, the block groups served by Route 2 weekend extension 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.

## Route 2 Weekend Extension November 2020



## Route 4 Sunday Service Added

### *Description*

Port Authority plans to provide Route 4 Troy Hill with Sunday service, which will follow the same route as the weekday and Saturday service. Addition of a service day qualifies as a major service change for the Authority.

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

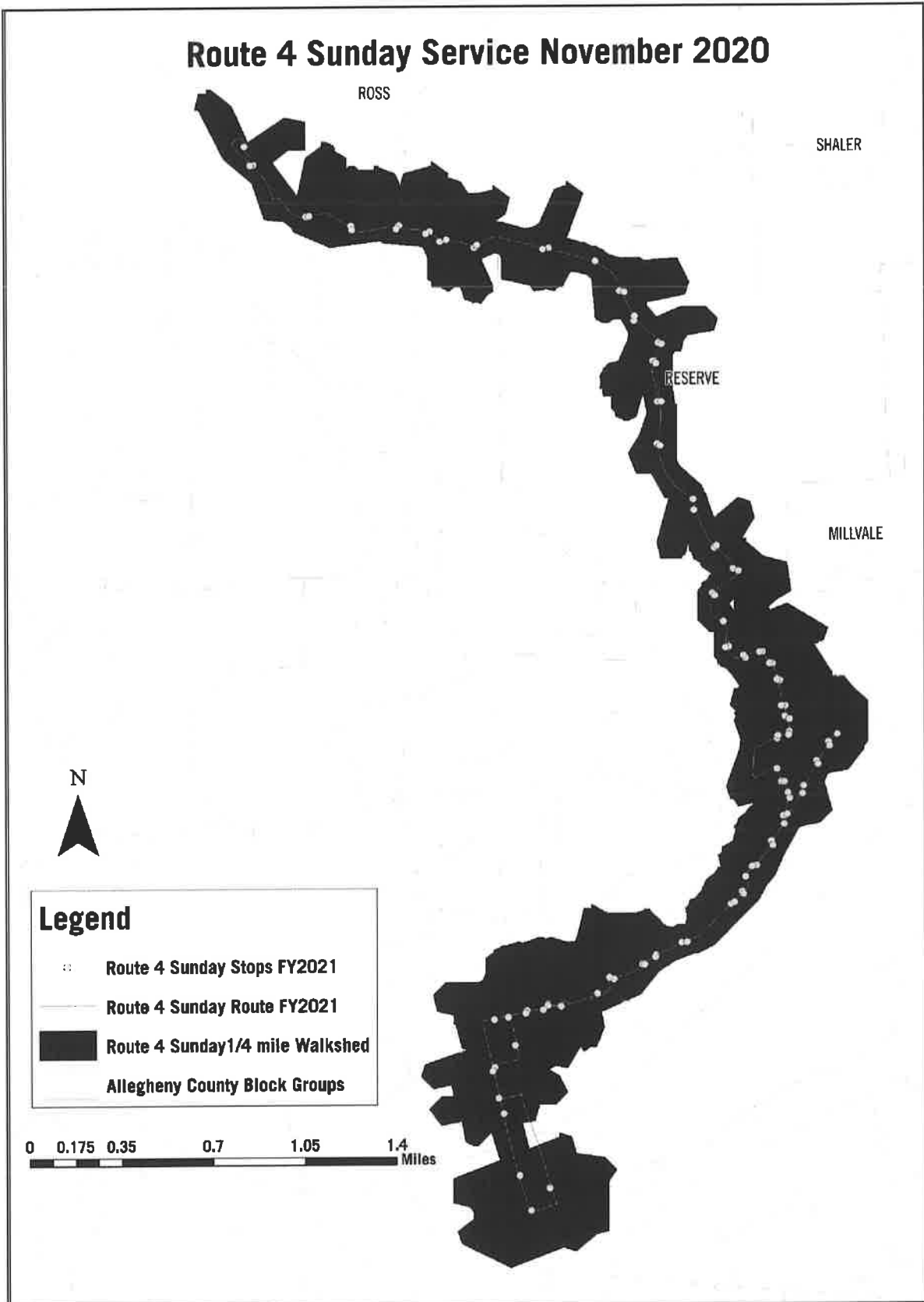
Walksheds were developed to geographically constrain the service area before and after the change. The walkshed is defined as ¼ mile on street areas around each bus stop serving the route after the new service provision.

The map on page 5 shows the service area for Route 4 Sunday service. The demographic analysis selects Census blocks of centroids within the walkshed and finds the percent of minority race and low-income populations within the new service area.

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%
4 Sunday	865/2,876 = 30.08%	21.20%	42%	Yes – No adverse effects; positive change	1,025/3,903 = 26.26%	12.10%	117%	Yes – No adverse effects; positive change

As seen in the chart, the block groups served by Route 4 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.

## Route 4 Sunday Service November 2020





## Route 20 Weekend Service Added

### *Description*

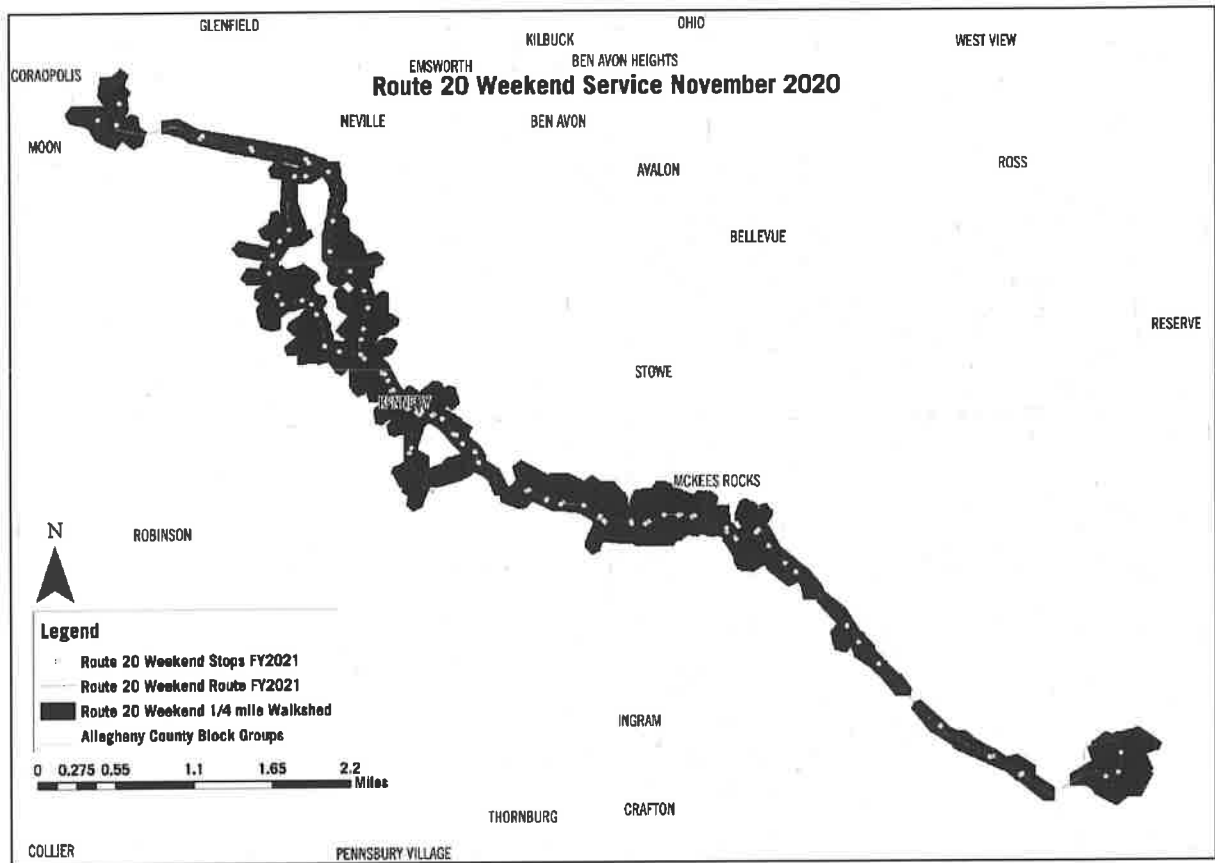
Port Authority plans to provide Route 20 Kennedy with weekend service, which will follow the same route as the weekday service. Addition of weekend service qualifies as a major service change for the Authority.

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

Walksheds and selection of Census data were developed in the same manner as the Route 4 service change. The map on page 7 shows the service area for Route 20 weekend service.

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%
20 Weekend	2,434/7,216 = 33.73%	21.20%	59%	Yes – No adverse effects; positive change	1,217/4,146 = 29.35%	12.10%	143%	Yes – No adverse effects; positive change

As seen in the chart, the block groups served by Route 20 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.



## Route 22 Sunday Service Added

### *Description*

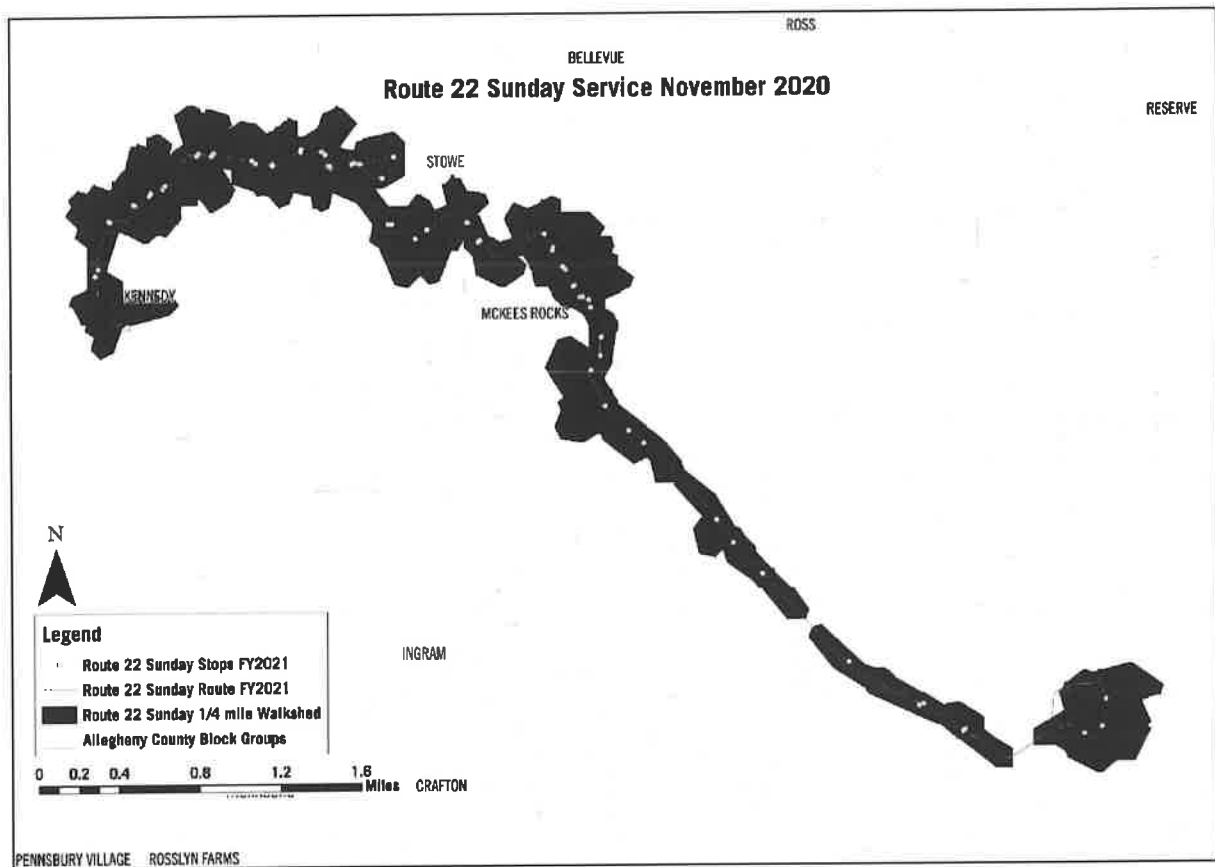
Port Authority plans to provide Route 22 McCoy with Sunday service, which will follow the same route as the weekday and Saturday service. Addition of a service day qualifies as a major service change for the Authority.

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

Walksheds and selection of Census data were developed in the same manner as the Route 4 service change. The map on page 9 shows the service area for Route 22 Sunday service.

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%
22 Sunday	1,993/6,082 = 32.77%	21.20%	55%	Yes – No adverse effects; positive change	1,215/4,569 = 26.59%	12.10%	120%	Yes – No adverse effects; positive change

As seen in the chart, the block groups served by Route 22 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.



## Route 29 Weekend Service Added

### *Description*

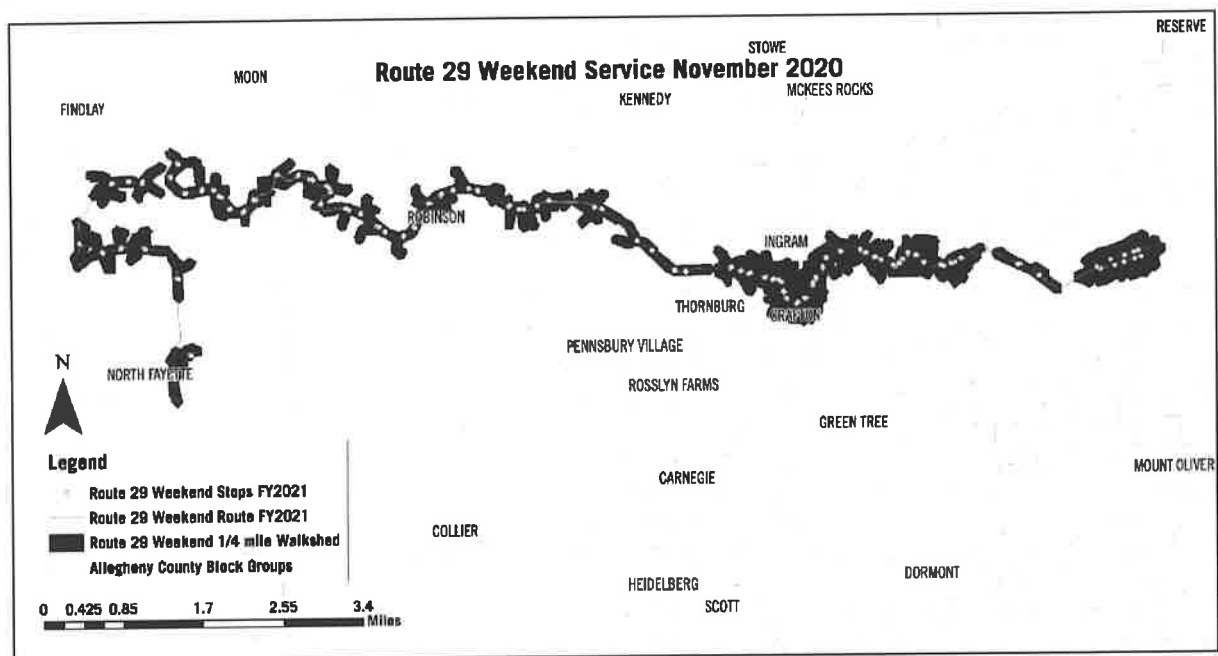
Port Authority plans to provide Route 29 Robinson with weekend service, which will follow the same route as the weekday service. Addition of weekend service qualifies as a major service change for the Authority.

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

Walksheds and selection of Census data were developed in the same manner as the Route 4 service change. The map below shows the service area for Route 29 weekend service.

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%
29 Weekend	1,231/5,071 = 24.28%	21.20%	15%	Yes – No adverse effects; positive change	823/3,995 = 20.60%	12.10%	70%	Yes – No adverse effects; positive change

As seen in the chart, the block groups served by Route 29 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.



### Route 36 Weekend Service Added

#### Description

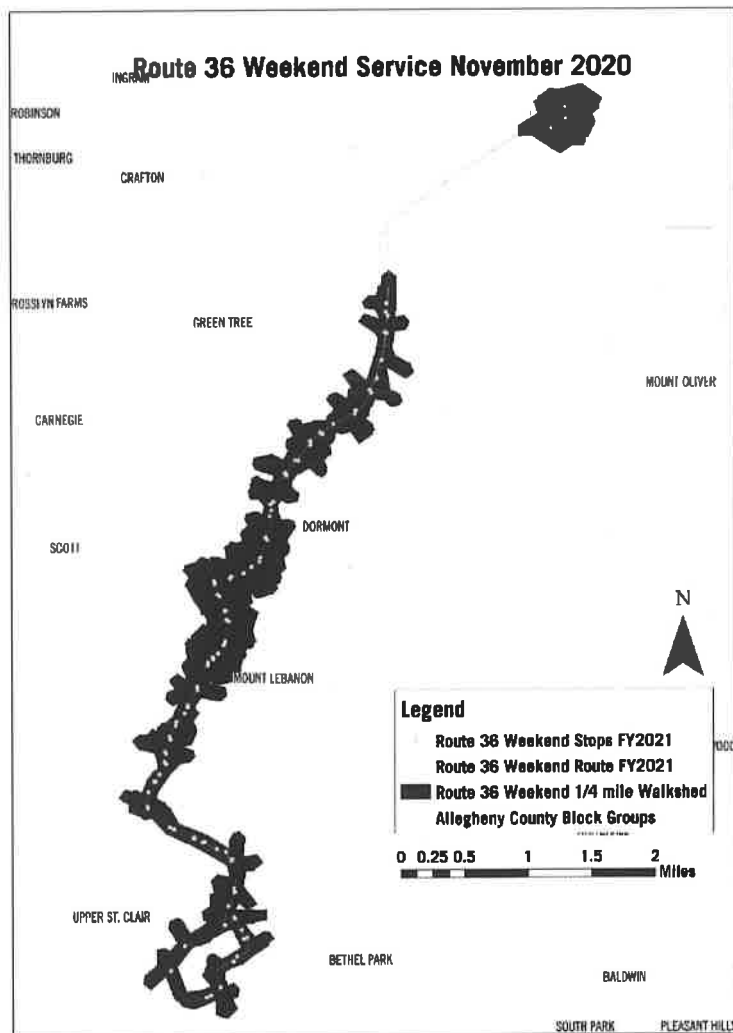
Port Authority plans to provide Route 36 Banksville with weekend service, which will follow the same route as the weekday service. Addition of weekend service qualifies as a major service change for the Authority.

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

Walksheds and selection of Census data were developed in the same manner as the Route 4 service change. The map on page 12 shows the service area for Route 36 weekend service.

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%
36 weekend	1,600/5,960 = 26.85%	21.20%	27%	Yes – No adverse effects; positive change	433/2,314 = 18.71%	12.10%	55%	Yes – No adverse effects; positive change

As seen in the chart, the block groups served by Route 36 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.



## Route 39 Sunday Service Added

### Description

Port Authority plans to provide Route 39 Brookline with Sunday service, which will follow the same route as the weekday and Saturday service. Addition of a service day qualifies as a major service change for the Authority.

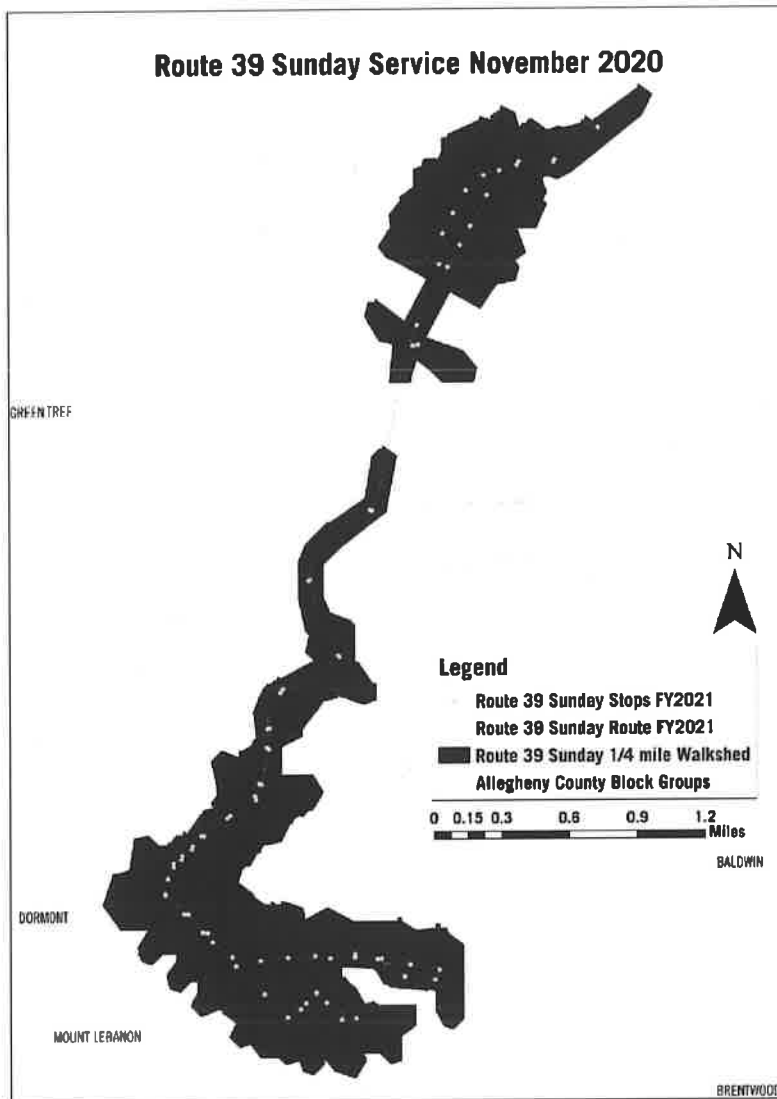
### Demographics of Population within Major Service Change Area

Walksheds and selection of Census data were developed in the same manner as the Route 4 service change. The map on page 14 shows the service area for Route 39 Sunday service.

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%
39 Sunday	$861/3,010 = 28.60\%$	21.20%	35%	Yes – No adverse effects; positive change	$424/2,294 = 18.48\%$	12.10%	53%	Yes – No adverse effects; positive change

As seen in the chart, the block groups served by Route 39 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.





## Route 60 Sunday Service Added

### *Description*

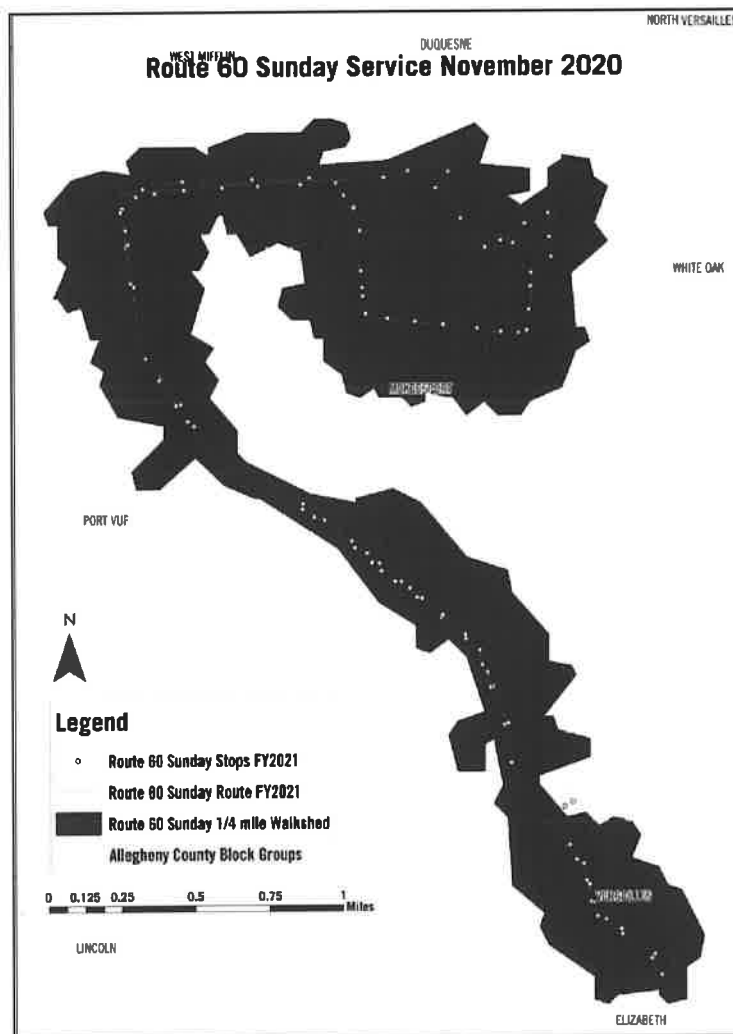
Port Authority plans to provide Route 60 Walnut-Crawford Village with Sunday service, which will follow the same route as the weekday and Saturday service. Addition of a service day qualifies as a major service change for the Authority.

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

Walksheds and selection of Census data were developed in the same manner as the Route 4 service change. The map on page 16 shows the service area for Route 60 Sunday service.

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%
60 Sunday	4,551/10,195 = 44.64%	21.20%	111%	Yes – No adverse effects; positive change	3,618/9,673 = 37.40%	12.10%	209%	Yes – No adverse effects; positive change

As seen in the chart, the block groups served by Route 60 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.



## Route 74 Sunday Service Added

### *Description*

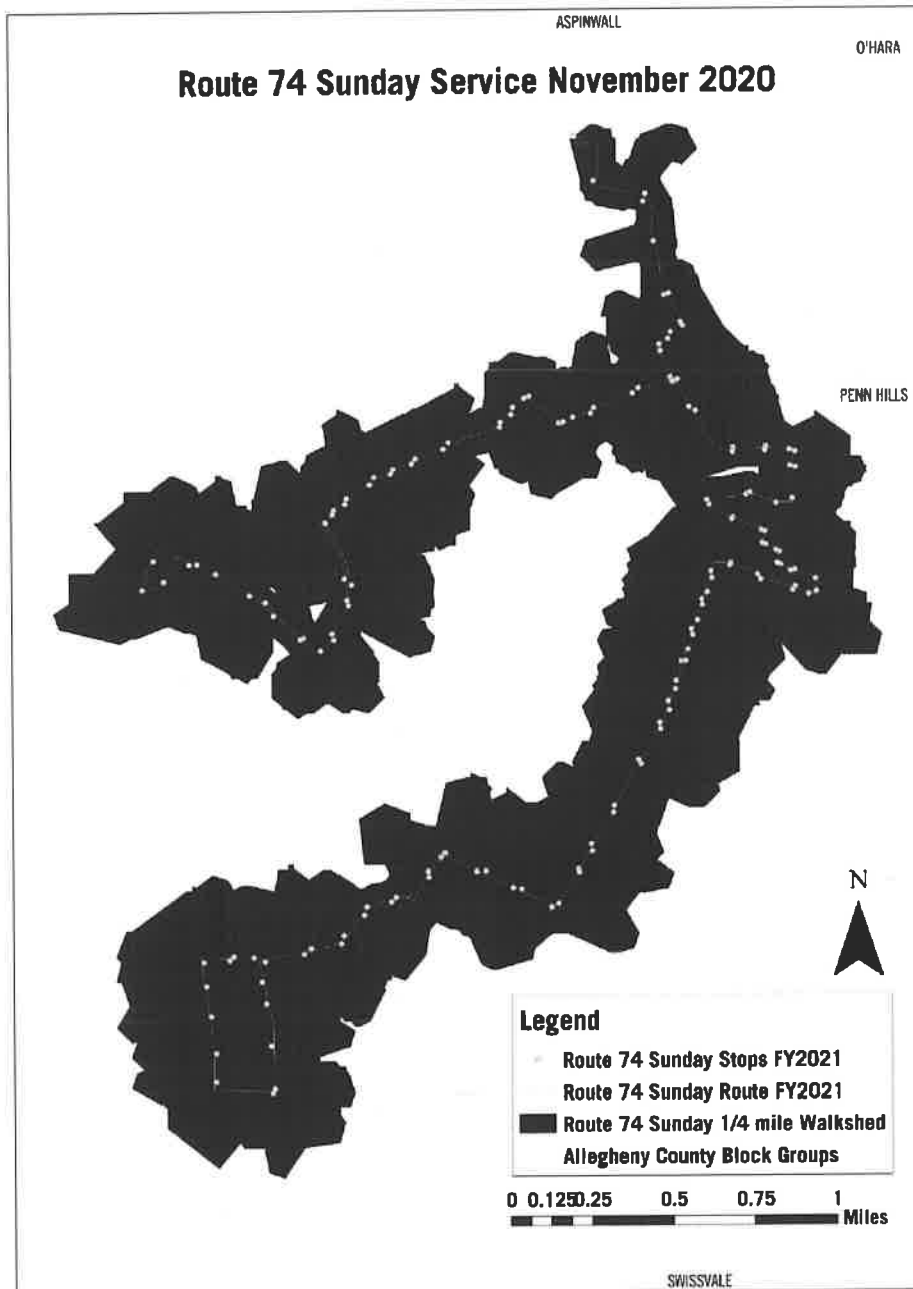
Port Authority plans to provide route 74 Homewood - Squirrel Hill with Sunday service, which will follow the same route as the weekday and Saturday service. Addition of a service day qualifies as a major service change for the Authority.

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

Walksheds and selection of Census data were developed in the same manner as the Route 4 service change. The map on page 18 shows the service area for Route 74 Sunday service.

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%
74 Sunday	9,139/14,117 = 64.74%	21.20%	205%	Yes – No adverse effects; positive change	3,929/12,736 = 30.85%	12.10%	155%	Yes – No adverse effects; positive change

As seen in the chart, the block groups served by Route 74 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.



### Route 93 Weekend Service Added

#### *Description*

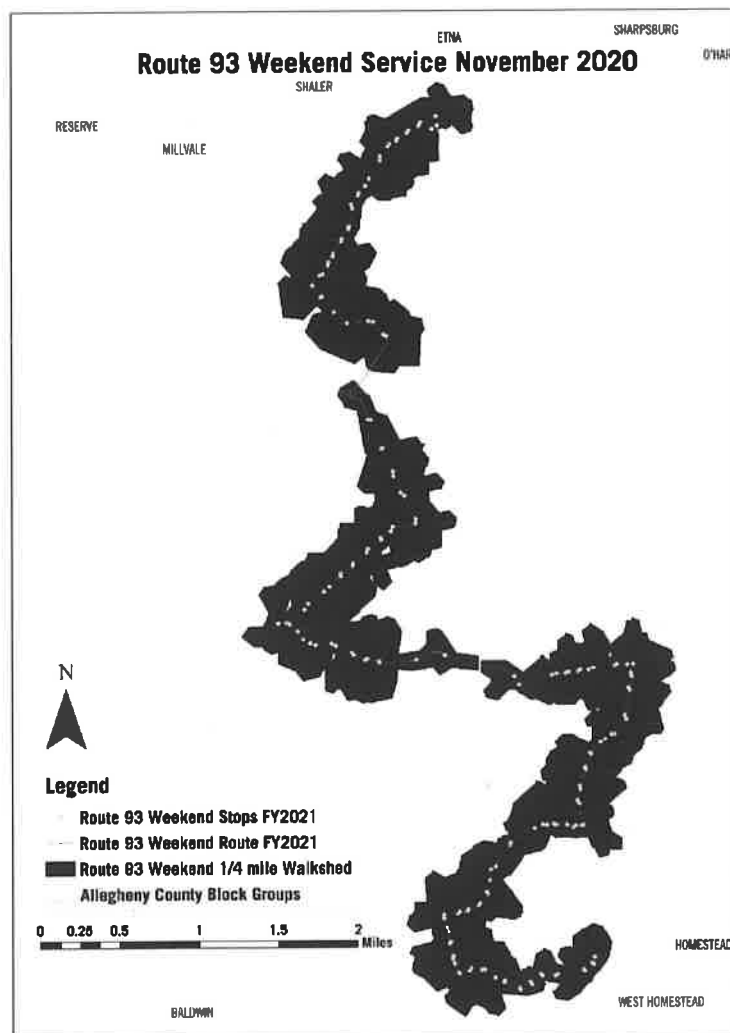
Port Authority plans to provide Route 93 Lawrenceville - Oakland - Hazelwood with weekend service, which will follow the same route as the weekday service. Addition of weekend service qualifies as a major service change for the Authority.

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

Walksheds and selection of Census data were developed in the same manner as the Route 4 service change. The map on page 19 shows the service area for Route 93 weekend service.

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%
93 Weekend	7,882/20,152 = 39.11%	21.20%	84%	Yes – No adverse effects; positive change	10,508/27,779 = 37.83%	12.10%	213%	Yes – No adverse effects; positive change

As seen in the chart, the block groups served by Route 93 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.



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

The demographic impact of changes for routes 4, 20, 22, 29, 36, 39, 60, 74, and 93 is summarized in the table below (Route 2 is not included as the analysis did not use Centroids method and will not be an equivalent comparison to the others). From the analysis below, it can be seen that collectively, these route extensions and service additions serve higher proportions of low income and minority race populations than the overall service area of Allegheny County. Therefore, the addition of this service will provide an added benefit to these communities and shows the Authority's stress on equity in the development of its data-driven model for prioritizing new service in Allegheny County.

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

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 4, 20, 22, 29, 36, 39, 60, 74, 93	30,556/74,679 = 40.92%	21.20%	93%	Yes – No adverse effects; positive change	23,192/71,409 = 32.48%	12.10%	168%	Yes – No adverse effects; positive change