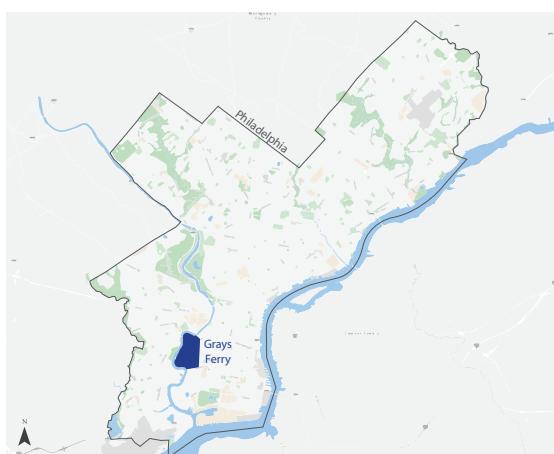


Existing Condition Transportation



This existing condition report was prepared by me for a studio course I am taking this semester focusing on creating a comprehensive planning for a Philadelphia neighborhood.

Grays Ferry



The Grays Ferry neighborhood is located in South Philadelphia. The boundary of this analysis is selected by taking into consideration physical barriers around the community. On the east side of the community, there is an elevated rail viaduct running down along 25th Street. At the south there is Passyunk Avenue, which is a major arterial road. To the west and north the community is the Schuylkill River. The commute and car ownership data displayed in this report comes from census tract 33 and 36, since their boundary largely follows the boundary defined in this study.

Bus Network and Ridership

There are a total of 8 bus routes that operate through and near the neighborhood. Route 49 is the newest addition to the network. It started operating in February of 2019. Prior to the route all the buses that link North Philadelphia with South Philadelphia goes through Center City. It offers a connection to University City on public transit, which does not exist before spring of

2019. The route also presents new connection opportunities within the neighborhood since the route intersects route 12, 64, 29, and 79, often at more than one point. Along the street that bus runs, there are stops at the corner of every block with the exception of route 49. This means most bus stops of the same route are about 500 feet from each other.

Figure 1. Bus routes that runs around and through Grays Ferry



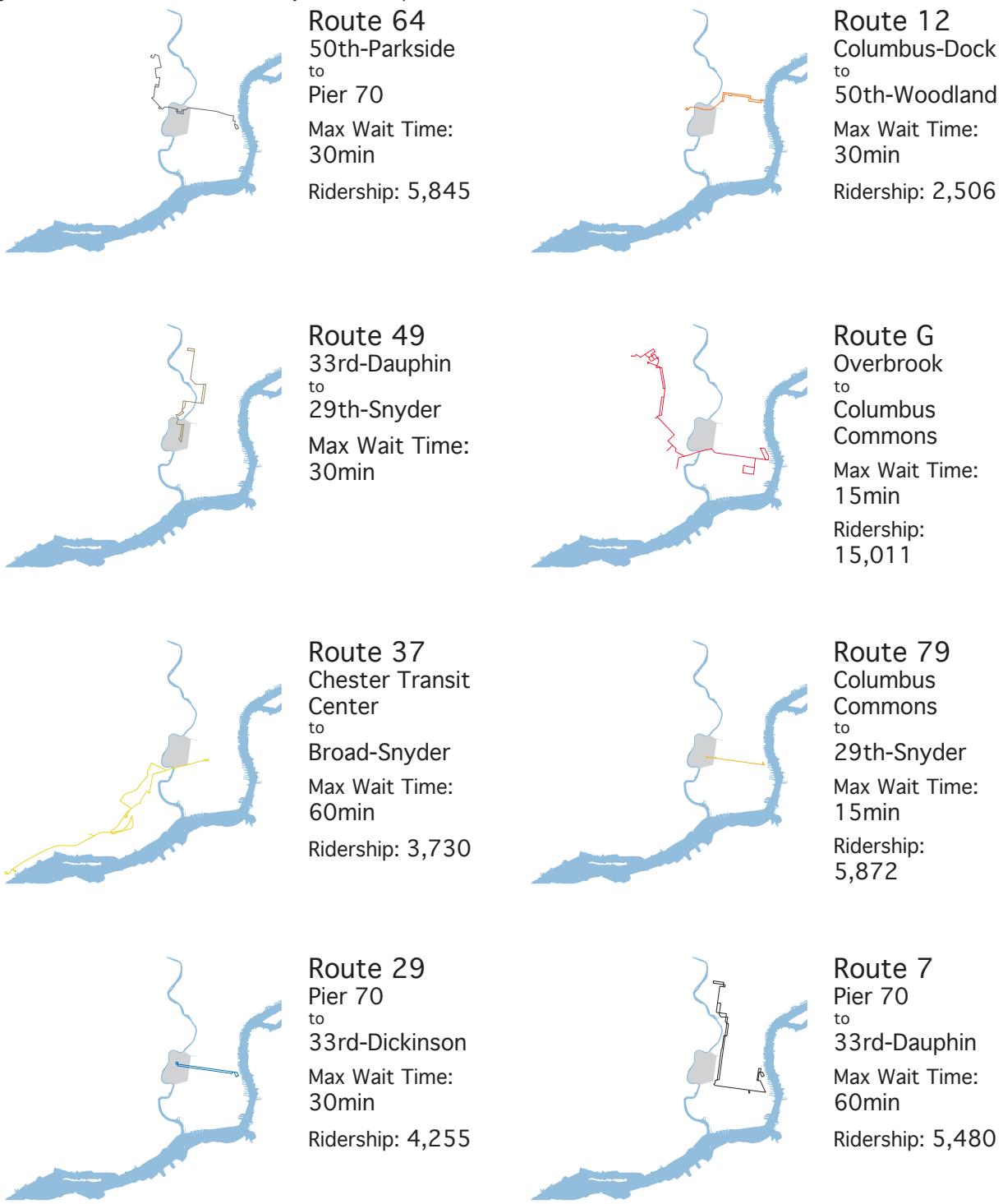
Figure 2. Number of weekday boardings at each stop



Figure 2. depicts the average weekday boarding at each stop within the neighborhood. Weekday boarding within the community ranges from 3 to 214. Majority of the boardings occurred along Grays Ferry Ave, Morris Street, and Snyder Avenue. These streets carries bus routes that runs east-west across Philadelphia. The boarding pattern within the community are affected by both the routing of the bus routes and points of interest within the community. For example along Grays Ferry Avenue, there are some commercial uses which is generating a relatively larger ridership

at 28th, 29th, and 30th street. Another factor influencing boardings at a stop appears to be the routing pattern. For example, the lines marked in Figure 2. shows the path of Route 29. It travels west on Tasker Street, turns around, and head east on Morris Street. As a result , rather than taking the bus on Tasker Street, people who wish to travel east simply walk an extra block south to take the bus. Overall the stops are close to each other and the bus routes that runs through and near the neighborhood connects it with many parts of the city. However there may be long wait times for several routes.

Figure 3. Bus routes, maximum headway, and ridership



Footnote:

Route 49 is a new route that began operating in the spring of 2019. Currently, there are no publicly available ridership data for the route.

Ridership presented here are average weekday passenger.

Max wait time represents the maximum amount of time a person must wait for a bus to come on Monday to Friday, 6AM to 9PM.

Data Source:

SEPTA GIS Portal

Grays Ferry Avenue

Figure 4. Current Configuration of Grays Ferry Avenue

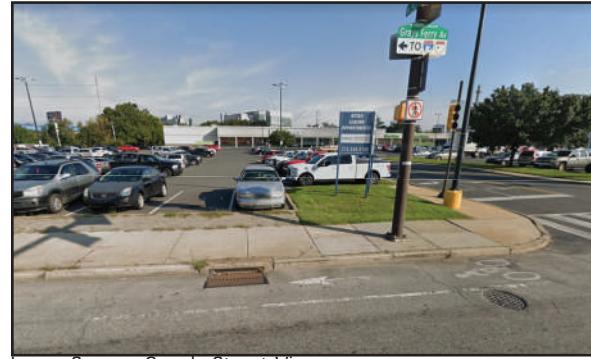
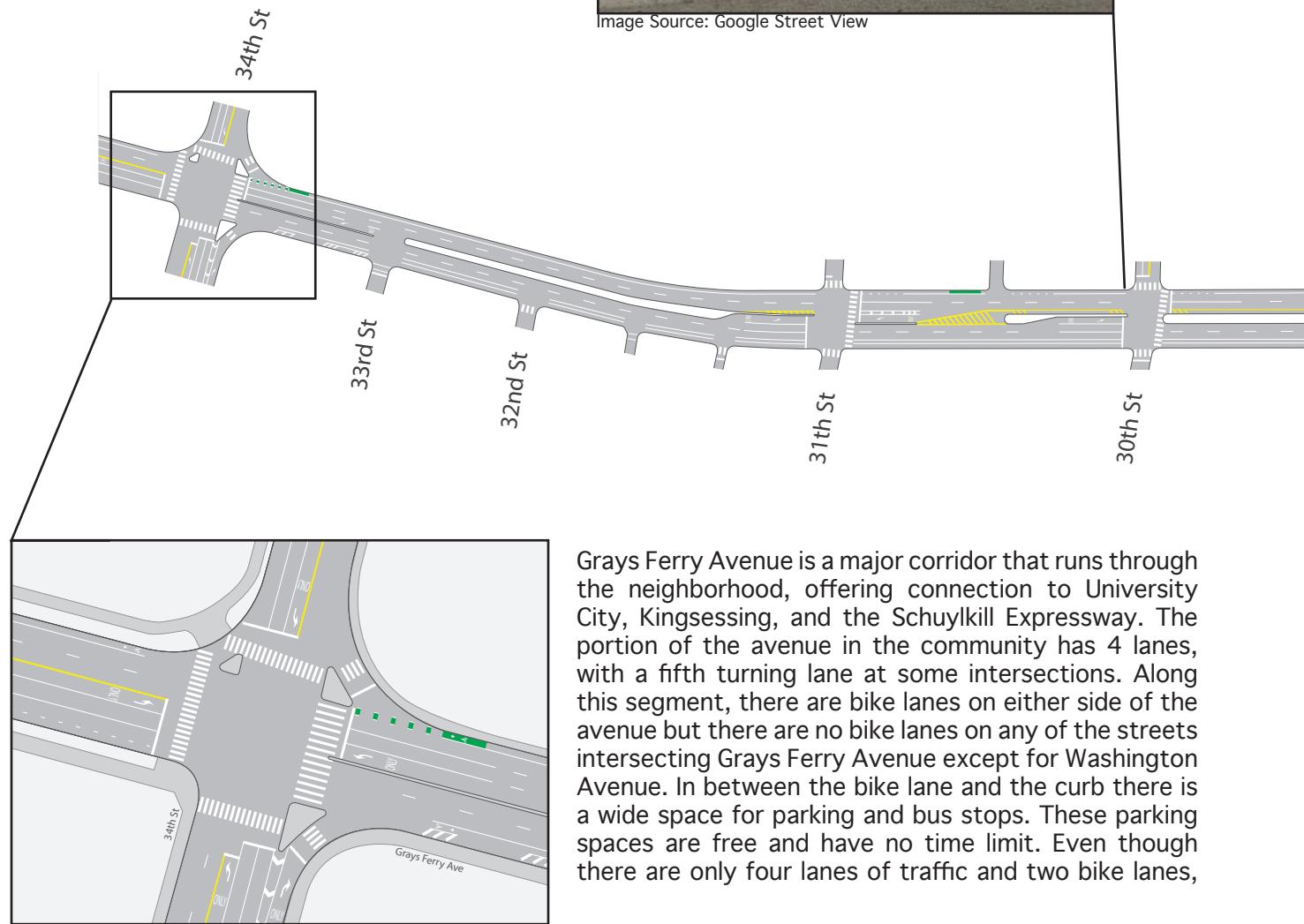
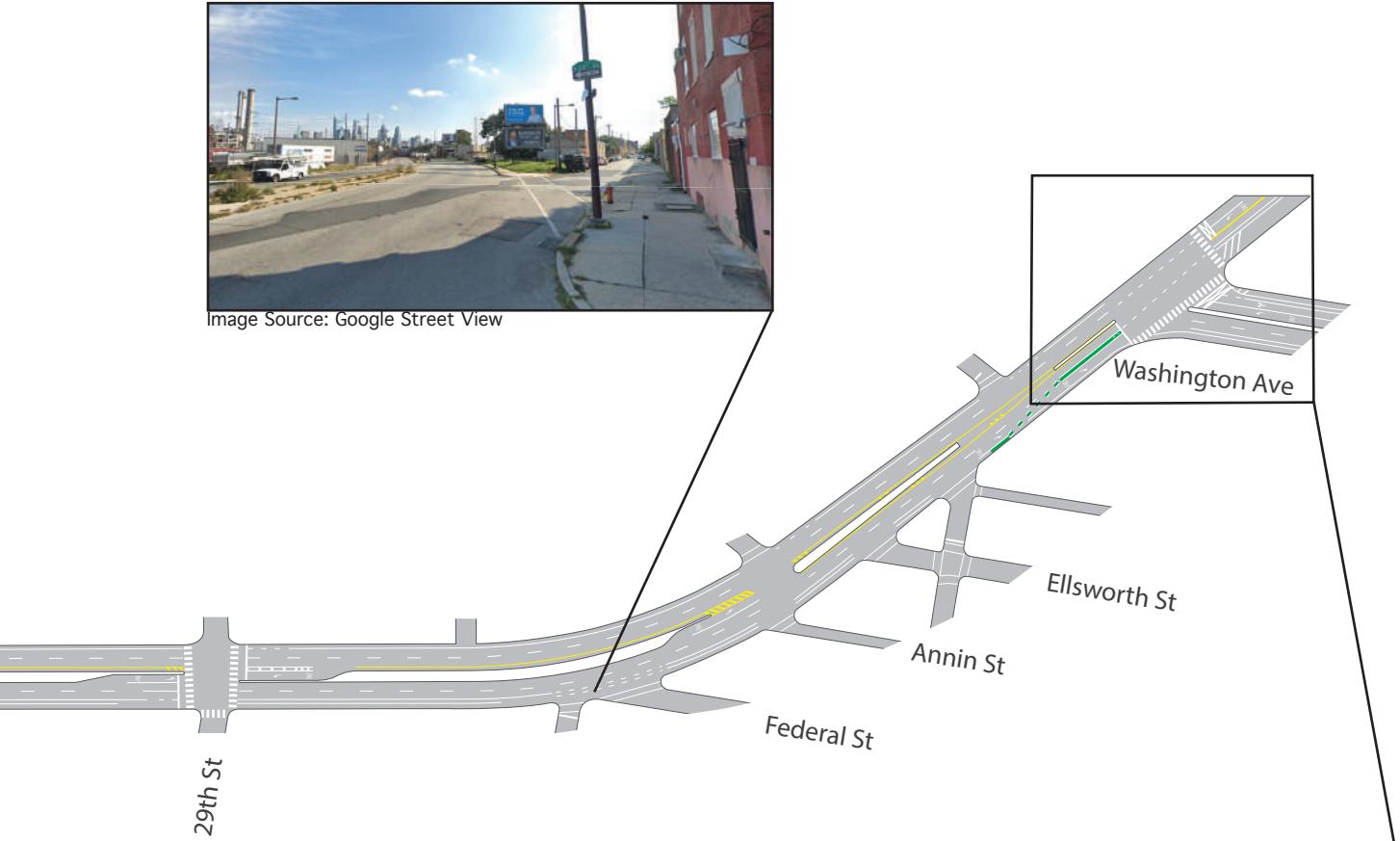


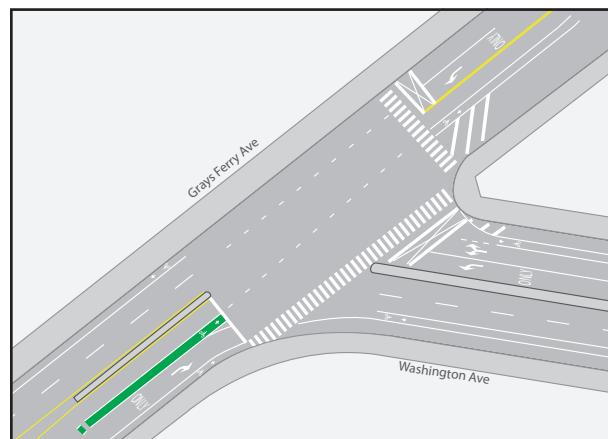
Image Source: Google Street View



Grays Ferry Avenue is a major corridor that runs through the neighborhood, offering connection to University City, Kingsessing, and the Schuylkill Expressway. The portion of the avenue in the community has 4 lanes, with a fifth turning lane at some intersections. Along this segment, there are bike lanes on either side of the avenue but there are no bike lanes on any of the streets intersecting Grays Ferry Avenue except for Washington Avenue. In between the bike lane and the curb there is a wide space for parking and bus stops. These parking spaces are free and have no time limit. Even though there are only four lanes of traffic and two bike lanes,



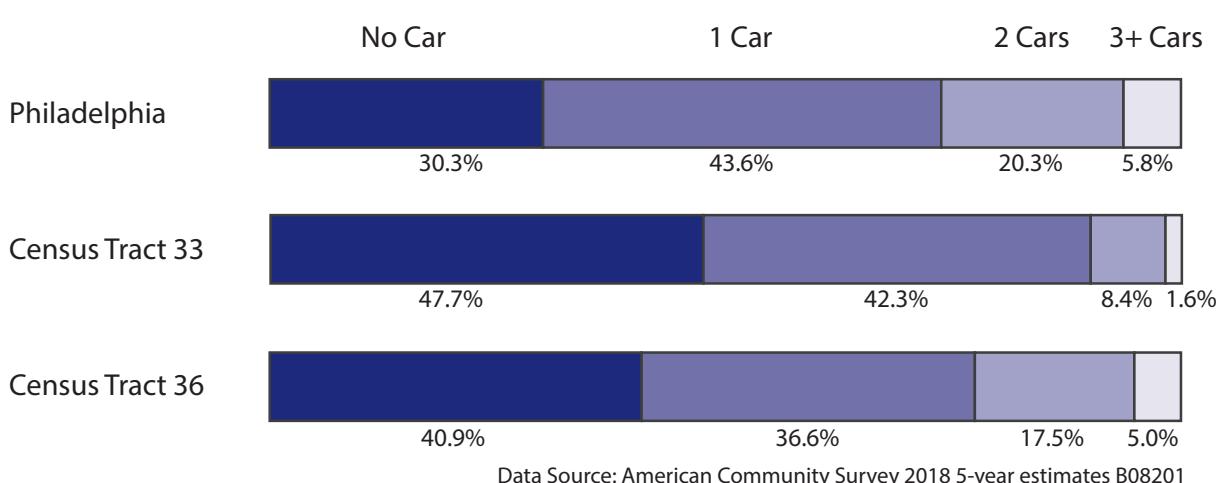
the street is roughly 80 feet wide. There are also three intersections where crosswalk is not available on one side. Additionally, the angle at which streets intersect at Federal Street, Annin Street, and Washington Avenue allow cars to turn at a higher speed. These factors all makes it more challenging for pedestrians to cross the streets. Overall, the road pavement is not in a great condition and markings have been worn off to the point that it is difficult to see the edge of the lane.



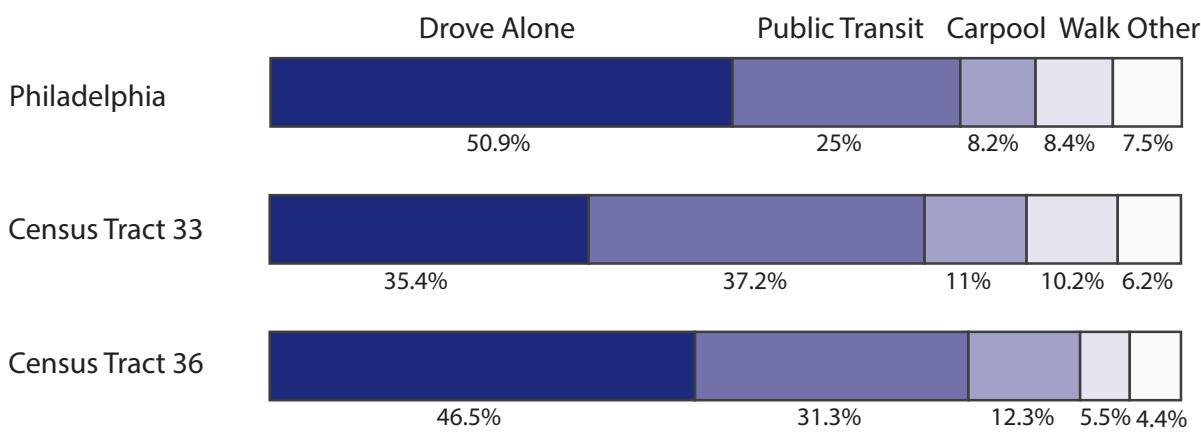
Car Ownership and Commute Mode Choice

8

Number of Cars in a Household



Commute Mode



The neighborhood boundary defined in this plan roughly follows the boundary of census tract 33 and 36 combined. Overall, the percentage of car ownership is lower in Grays Ferry than the percentage in Philadelphia. More than 40 percent of households in Grays Ferry does not own a car, whereas in Philadelphia the rate is 30 percent. This low car ownership rate is also reflected in the commute mode choice of Grays Ferry residents. In the neighborhood, majority of the people commute by modes other than the single occupancy car. This is

in contrast with the commute mode choice of the entire Philadelphia, where there is an even split between driving alone and using other modes for commute. The people of Grays Ferry also uses public transit for commute at a higher rate than the people in Philadelphia. Greater than 30 percent of the commuters in the neighborhood uses public transit, while 25 percent uses transit in the entirety of Philadelphia. This highlights the importance of public transit service in the neighborhood.