THE FAIRMOUNT LINE
A STEP FORWARD?

While the Environmental Justice movement began as opposition to the disproportionate distribution of polluting facilities, highways and other "bads," it is also concerned with the distribution of "goods" such as public transportation. But 45 years after Dr. King’s death and 30 years after the generally accepted beginning of the "Environmental Justice" movement, the situation remains the same: transit systems are often well-planned for white riders, even those who use the same mode. Instead of new light rail or subway systems, or even well-planned Bus Rapid Transit (BRT), these environmental justice communities are more likely to have residents who can’t afford or are unable to drive (those known as “captive riders”) and the very people who would benefit from improved service. Instead of new light rail or subway systems, or even well-planned BRT systems, these communities often have to make do with slow, uncomfortable bus lines to get to work, school, and other destinations. The history of transit in Boston is no exception. In the late 19th century, the Orange Line, which had traveled through the largely black South End to Dudley Square in Roxbury, was torn down to make way for new buildings. Meanwhile, Mattapan, the western area of Dorchester and east Roxbury (the area between the Red and Orange lines) have a great lack of transit access. These neighborhoods, poor and largely minority since the 60s, have recently become the home of thousands of immigrants, many from Cape Verde and Haiti. Currently there is a commuter rail line, the Fairmount Line, that passes through the area, but there are just three stops in the three neighborhoods. “Captive riders” in these neighborhoods must often take multiple buses or walk over a mile to get to a rapid transit stop. A study by the Dukakis Center at Northeastern University recently found that average commute times for passengers of the Fairmount Line are much longer than those of passengers on the Green and Silver Lines, but not compared to areas on the current MBTA network for the many reasons discussed in this paper. Meanwhile, Mattapan, which recently found that average commute times for riders of the Fairmount Line are much longer than those of passengers on the Green and Silver Lines, has some of the highest concentrations of minorities in the Boston area. Most of the blockgroups in the area are less than 20% white. There are also large concentrations of residents identifying as Hispanic, though not as high a concentration as Chelsea or East Boston. The area has high concentrations of households with the very low income compared to the suburbs, but not compared to riders on the current rapid transit line. However, when one considers the current lack of public transit service, questions of equal access remain. Currently, the Fairmount Line makes just 16 trips per weekday, including only those between 9:30 AM and 4:30 PM, and doesn’t operate on the weekends. Many of the riders of the Fairmount Line are in jobs with irregular schedules. While the MBTA would like to increase service with the opening of the new station, they may not have the funding to do so under the current budget structure. If new stations are built, but only provide service for 9-5 commuters, are they much of an improvement? Will the Fairmount Line really take area residents from where they live to where they “work and play”?

This project analyzes the demographics and issues surrounding the Fairmount Line and tries to its role in transit justice throughout the city of Boston.

**METHODOLOGY**

I created multiple maps using different techniques to begin to analyze the demographics of the Fairmount Line area and the impact of transit expansion on residents of the area. Census data and American Community Survey estimates were used to make data on racial demographics and to map the percentage of households who reported they didn’t have a vehicle (“captive” riders).

To show the value per square of homes in the largely-residential corridor, I used Boston Assessor’s data from 2009 to create an interpolation using Inverse Distance Weighting (IDW). First, each parcel was turned into a point rather than a shape. Then I selected out just those parcels designated as residential, and those who had information on the square footage of their living area. This left me with 78,506 points; I then divided the assessed value of the parcel by the living area to get a value per square foot for each parcel. This was then plotted into a raster with Current RBC, RBC, and potential Fairmount Line stops added in.

Finally, I used Network Analyst and the MassDOT routes layer to make two walk distance (or “ped-shed”) maps: one with the current rapid transit line (including the Red, Orange, Blue, Green and Silver Lines, but not the regular bus lines) and one with the current and potential Fairmount Line stops added in.

**RESULTS**

The maps using Census 2010 data shows that the Fairmount Line area has some of the highest concentrations of minorities in the Boston area. Most of the blockgroups in the area are less than 20% white. There are also large concentrations of residents identifying as Hispanic, though not as high a concentration as Chelsea or East Boston. The area has high concentrations of households with the very low income compared to the suburbs, but not compared to riders on the current rapid transit line. However, when one considers the current lack of public transit service, questions of equal access remain. Currently, the Fairmount Line makes just 16 trips per weekday, including only those between 9:30 AM and 4:30 PM, and doesn’t operate on the weekends. Many of the riders of the Fairmount Line are in jobs with irregular schedules. While the MBTA would like to increase service with the opening of the new station, they may not have the funding to do so under the current budget structure. If new stations are built, but only provide service for 9-5 commuters, are they much of an improvement? Will the Fairmount Line really take area residents from where they live to where they “work and play”?

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