wherecantigo.com

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LMC 3705

The Assignment

To conclude the semester, we had to create **an inquiry about a social or political issue** and **investigate it using data**. While the first several projects of the semester revolved around learning the basics of visual design and understanding the process of creating informational artifacts, **this project was about performing research given created data about the world**. For this project in particular, there was a heavy emphasis on the usage of technology. As a result, we had to figure out which technologies to use and how to leverage those in representing our findings.

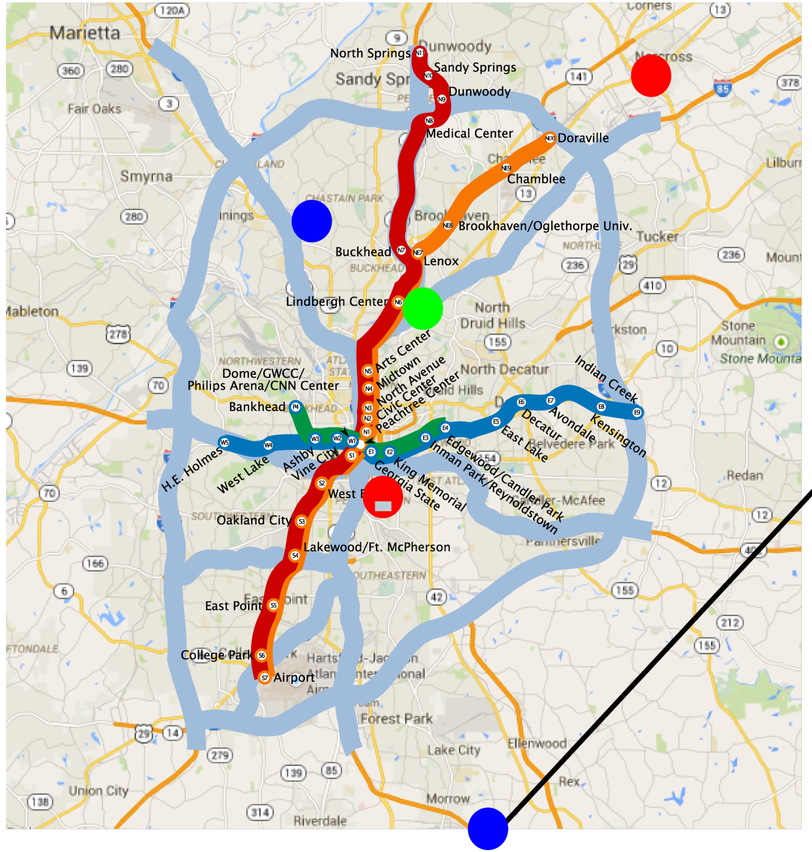
Why MARTA?

Aside from MARTA being local to us as residents of Atlanta, we chose to survey MARTA for a variety of reasons. From a high-level, **Atlanta's transit system is lacking in scale and magnitude** compared to other cities such as New York, London, and Tokyo. Beyond the superficial reasons of MARTA's network coverage, **the entire transit system was affected by racial and socioeconomic divides** that were present in the mid-20th century. Many urban planning and public transit decisions were informed by the prejudices of the time, and much of that same sentiment is still carried by both the population and the government of Atlanta today. **This project quickly became an effort to identify underserved areas in Atlanta and perhaps identify underlying causes to the lack of service provided.**

Initial Thought Process and Designs

One of our first ideas was to create a timeline of how MARTA developed. Various stations could show up on an interactive map as they were built, and various events such as transit legislation and controversial actions performed by MARTA would have been plotted. We also thought to include this with comments about MARTA from customers. However, because data is created rather than found, we would have been heavily dependent on publications and journals which created their own data as well. As a result, it would have been very difficult to remain objective as the entire process of creating the project was created. Another idea was to plot the average incomes of the people who live ½ mile away from a MARTA station, which is information which is publicly provided. This data, however, only shows income information around the MARTA rail stations. This realization caused us to think about the MARTA bus system, which was much more intriguing than MARTA's rail network.

Comments About MARTA Plotted onto a Map of Atlanta



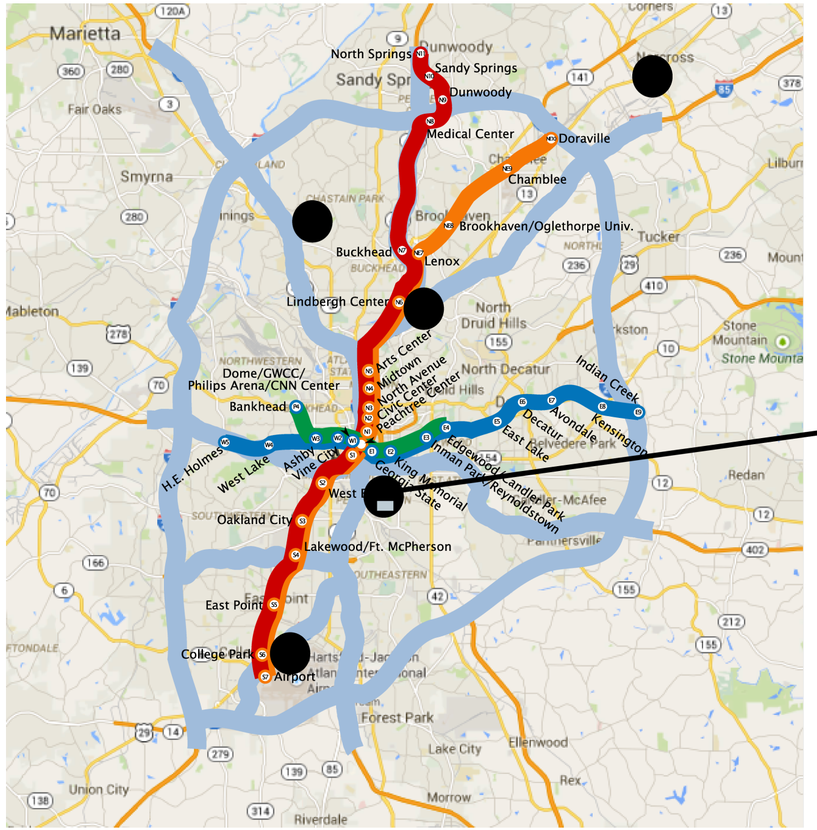
What are people saying?

Clayton County
2014, State Rep. Roberta Abdul Salaam

I have people, students, young men that can't take jobs for the summer because we don't have transportation for them," she said. "And someone said earlier don't make it emotional — well let me just apologize now. I get emotional when I see little old women walking down Tara Boulevard in the ditch in the rain, and there's not even anywhere to pull over and pick her up."

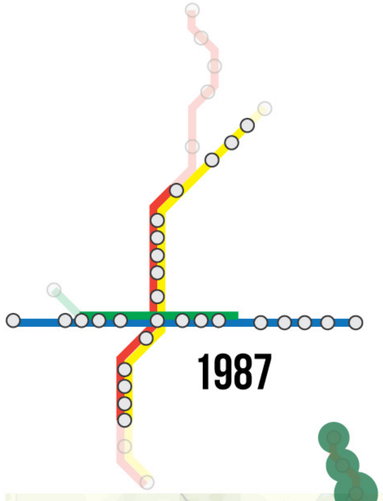
Negative Neutral Positive

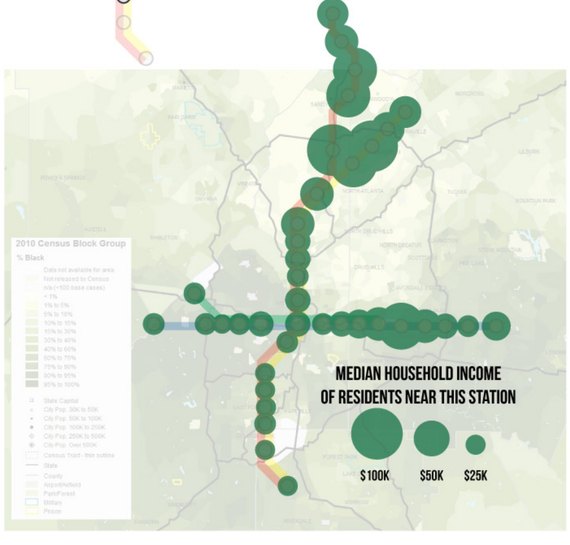
Events Concerning The Development of
MARTA Plotted onto a Map of Atlanta



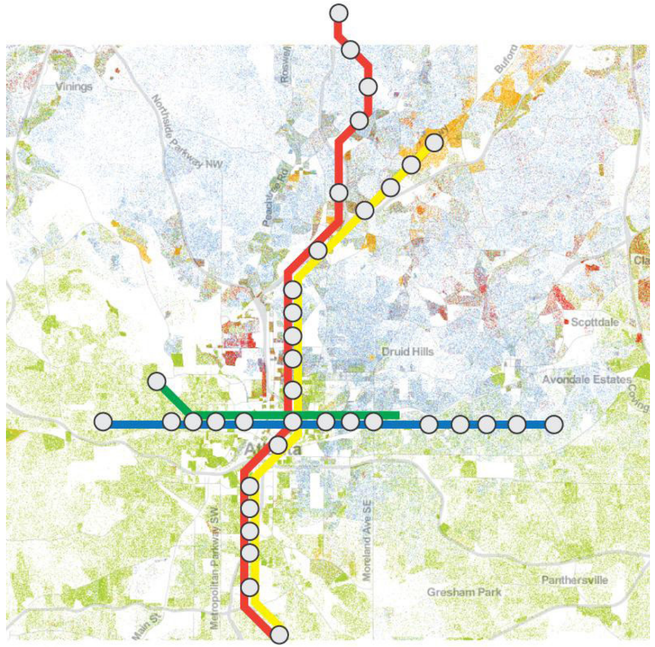
Top
Timeline Scale of The Growth of
MARTA Lines

Bottom
Household Income of MARTA Stops Plotted
onto a Map of MARTA

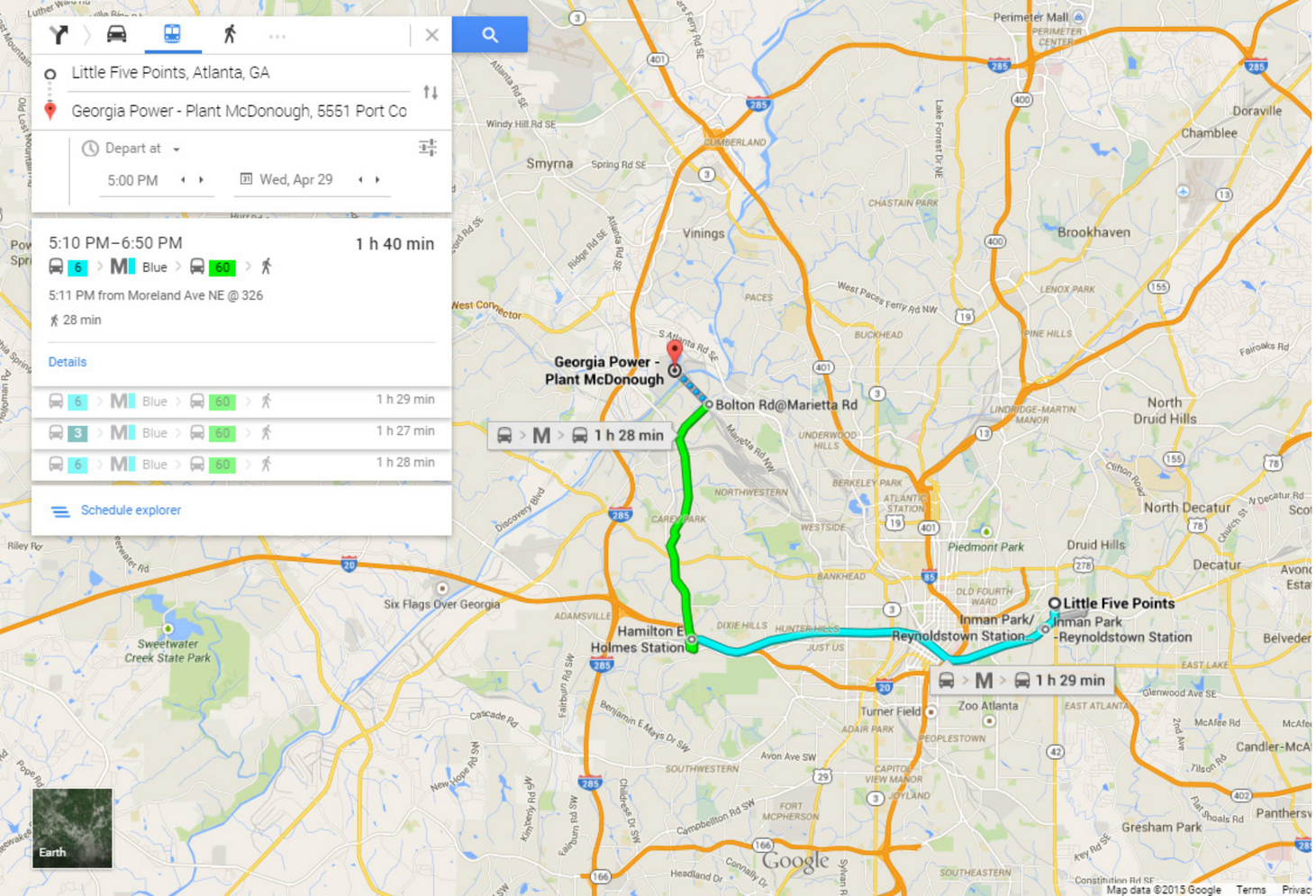




Timeline of the Development of MARTA
on a Demogrphic Map of Atlanta



1979 **WHO LIVES ALONG MARTA LINES?** 2015



The Research

To conduct the collection of data, we set up a protocol of measuring times it would take to travel to Little Five Points by transit. Our settings included leaving at 5:00 PM on a weekday using transit, with the “least walking” setting checked. Because the busses only run so often in certain areas, we measured the time it takes from 5:00 PM to get to a location.

The “least walking” provided some intriguing results as we plotted points within Google Maps. By moving a point even a few meters away from its original location, the route taken could drastically change because the “least walking” setting was checked. However, we decided to use that metric because many people who are dependent on public transit do not have the means of owning their own vehicles or having insurance to pay for medical costs. Coupled with Atlanta’s difficult weather, there are various metrics which cause the “least walking” method of measuring distances to work out.

```
2132          time: 80
2133        },
2134        {
2135          coords: [33.718964, -84.426205],
2136          neighborhood: 'Adair Park',
2137          time: 42
2138        },
2139        {
2140          coords: [33.721963, -84.412902],
2141          neighborhood: 'Adair Park',
2142          time: 85
2143        },
2144        {
2145          coords: [33.713396, -84.422686],
2146          neighborhood: 'East Point',
2147          time: 83
2148        },
2149        {
2150          coords: [33.708969, -84.413588],
2151          neighborhood: 'East Point',
2152          time: 70
```

The End Result

The main part of our project was a Google Map that featured data points within Atlanta's inner perimeter. By placing semi-opaque color-coded circles throughout the city, we were able to create a heatmap that plotted travel times with locations. There are almost **500 points inside of our JavaScript file**, and each of those points were hand-calculated through Google Map's wayfinding features.

We also created the narrative to go with our visualization. By placing one's self in the shoes of a transit-captive person who relies on MARTA to get to and from work, people can perhaps better understand what the entire process is like. We created designs for stickers that could be displayed throughout Atlanta. After we realized that our target demographic may not own computers or have internet access, we put some of the information from the website into print form. For instance, there are stickers that display how long it would take to travel to a certain point using public transit. By bringing that information into print form, our intended audience could quickly see the point we were making.

wherecantigo.com

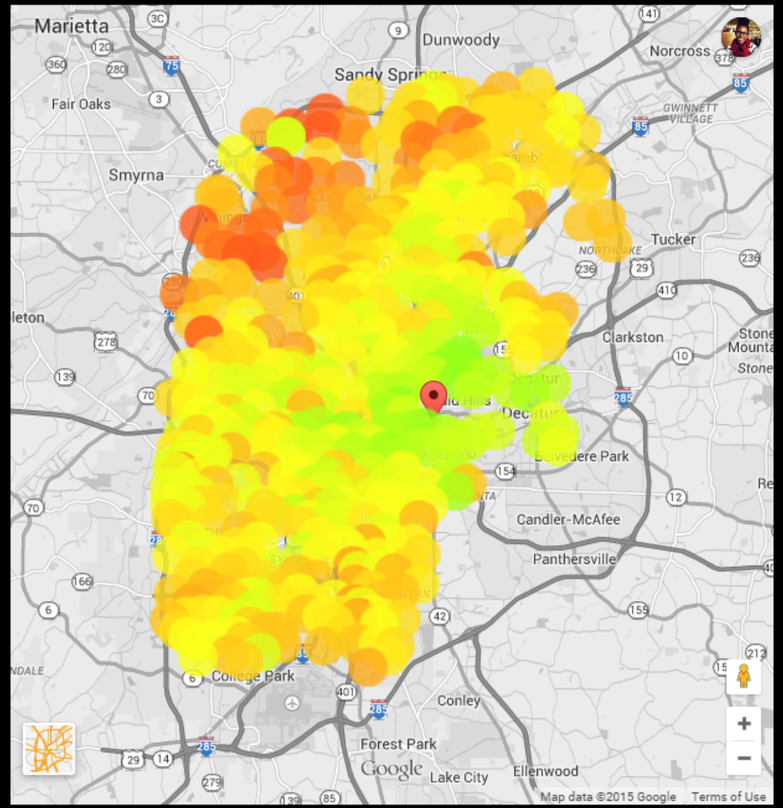
Friday. 5 PM.

You are leaving work in McDonough and trying to return home. You rely solely on the MARTA system to get to work from your home in Little Five Points. Luck would have it that it is pouring down rain today, so you try to avoid walking as much as possible.

It takes 85 minutes for you to get home. 28 of those minutes are spent walking to the nearest MARTA bus stop.

There are as many as 352, 000 people who have to rely on MARTA every weekday, making them "transit-captive". Since MARTA does not equally service areas throughout the Perimeter, there are areas that transit-captive people cannot reach in a timely manner. This is the idea behind wherecantigo.

wherecantigo focuses on showing the areas within the Perimeter that MARTA services the least. Each point's color on the map shows the duration that it takes someone to get from that point to Little Five Points using MARTA. The duration reflects our story above, so the duration calculation looks for routes at 5pm on a weekday with the least amount of walking.



wherecantigo.com

Display of Trip Duration on wherecantigo.com

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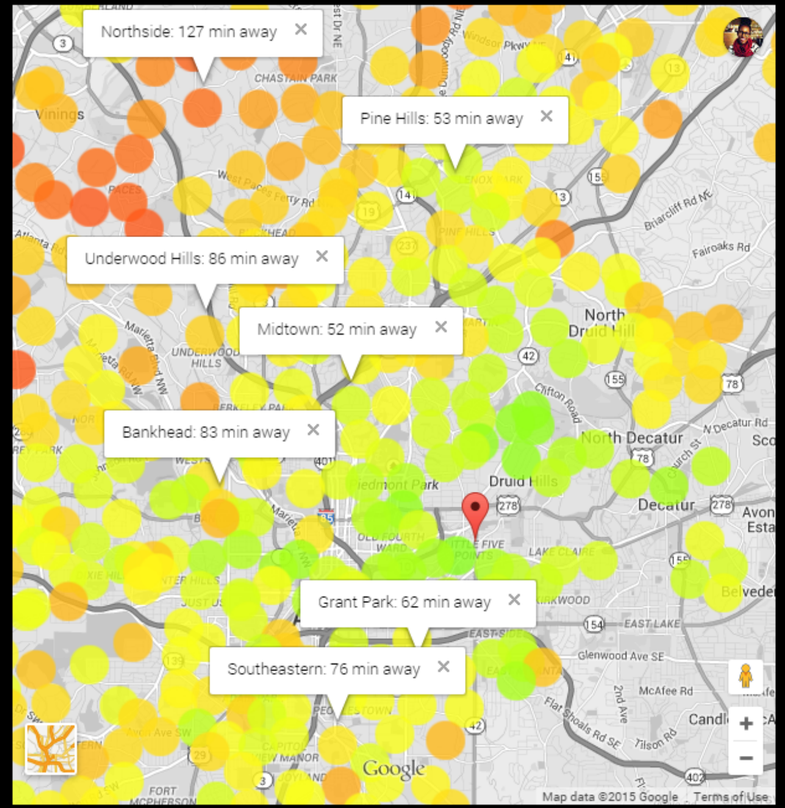

First Set of Printed Stickers

Second Set of Printed Stickers

Third Set of Printed Stickers

Distribution of Printed Stickers
at MARTA bus stops

Further Steps

This project is the kind of work that can be brought beyond the classroom and into the world. For one, we had designed various assets that can be deployed throughout the city. We could print out stickers to plot near transit stops. We can also set up installations throughout the city displaying our maps. Because MARTA offers a real-time RESTful API of its bus and rail service, we could potentially create real time travel estimates to get to certain places by transit and get the message out.