## Dear MetroViz team:

## MetroViz: Visual Analysis of Public Transportation Data

## **Overall Comments:**

The paper and the demo did a great job of explaining what MetroViz can do. I really liked the visualizations, especially the three year data represented in a heat map style. I feel that can be very useful for people at the transportation department to improve their services. Few things that I would like to highlight are:

- 1. **Related work was in depth** and the **Data Processing section was very helpful** in understanding what type of data MetroViz can take.
- 2. The paper was **well laid out** with the problem described right at the beginning along with how you plan to address it. (Though I felt some parts were repeating a lot in the paper)
- 3. Good use of 'overview, zoom and filter and details on demand' concept along with the three views and three models adhering to this concept.
- 4. There is a small part which talks about how MetroViz was made more **accessible** by taking into account **color blind people** which I thought was neat!

## Suggestions for Improvements:

- 1. I'm sure a lot of effort was gone in designing the tool but little was described in the paper. It would be useful in understanding the **design decisions** behind the current interface and whether any of the users were involved in the process. (Users from CATT Lab?)
- 2. The paper does not talk anything about **the user demographics** and the **exact number of participants** in the two rounds of testing.
- 3. Also, it was a little unclear if initial usability testing was separate from the two rounds of testing.
- 4. I was curious in **understanding how the glyphs for fare types was decided**? And how important were they for these two different categories of users? Was this a need expressed by the users in the formative studies?
- 5. The results were reported as 'most people had this problem ...' or 'some people said this..' I feel it would **sound more convincing** if some statistics were provided for example: **x** % **of people reported** ...
- 6. The description of the '**Trip Component**' in the paper sounded confusing and difficult to follow but after watching the video, it was clear what that does and how each cell was divided into grids and what they meant.
- 7. Lastly, in method section, parts about **what a usability study is could be replaced by what metrics are you looking into** while collecting data from the usability study and how would you use it so it becomes more specific to the project.

On a side note, it would be interesting to compare how CATT Lab users used MetroViz versus the student population and also trying MetroViz for a different transport system.

Hope my suggestions were useful. If you have any questions, please feel free to contact me. Good Luck with the final report.

Meethu Malu