Regional Traffic Analysis in the D.C. Metro Area

Using the Regional Traffic Data set augmented with additional data from the Regional Transport Data Clearing House, we found areas in the Capital Region with the highest morning traffic volume. We identified routes that have the highest traffic volume and suggested which of these would be the least congested during the morning commute.

By incorporating data about average carbon emissions, and locations and usage data on local public transit, we provide recommendations on potential new transit expansions based on both the environmental and economic sustainability of each location. The environmental factors are determined by examining the emission information and potential reduction due to transport access, and the economic includes analysis based on road deterioration balanced with the increased cost of maintaining a larger transit network on the municipality. Finally we examined the social benefits local communities stand to gain from increased access to jobs and savings from reduced personal transport.