Summer 2008 MATC Internship





Shashwat Rijal

As any person moves from one day to the next, one thing is guaranteed. We learn a little more every day. Our activities and actions help us learn and understand things better with each passing experience. This summer was full of days and memories that will last a lifetime. While everything I did and learned this summer can't possibly be described in one page, here are the highlights.

First of all, I learned as much about myself as I did about transportation engineering and technology. I couldn't imagine 8 straight hours of engineering classes for 5 days a week. However, time at work seemed to go by quickly every day, primarily because I enjoyed what I did. I was very satisfied with the variety of tasks assigned, the people I work with, and the technology available. After this summer, I know I will definitely like my future profession.

This job was ideal for me, as it combined some outdoor work with office work. We often had field work, which included reconnaissance missions and well as collection of video data. Office work included compiling and reducing data, reviewing research, and other tasks to assist the faculty and graduate students. It was interesting to collect the data itself, view the videos, and format them into spreadsheets later in the office.

This summer we worked on several projects, none of which have been completed to date. The past few months have greatly expanded my knowledge of planning and carrying out research projects in transportation engineering.

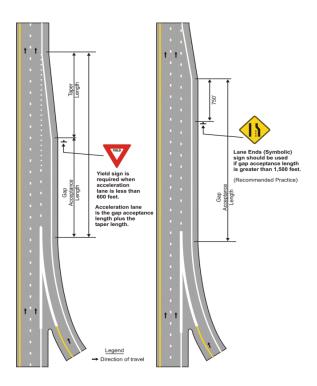
My primary project deals with the design on work zone crossovers. Sometimes the temporary closure of one direction of traffic is needed in order to work on that segment. This requires that the vehicles be guided around that zone. I am currently

assisting with a thesis that analyzes the lateral displacements of vehicles along these work zone crossovers. We also collected some data at a new work site recently and that included the use of the ITS van. It was exciting to use a \$150,000 vehicle loaded with advanced technology and about 200 buttons.



One of the most memorable days was during my first week at the Nebraska Transportation Center. My two co-workers and I had a trip to Omaha to overview the acceleration ramps along the interstate. This particular merging ramp had a full merging lane, rather than the typical tapered merging lane. We needed to film and paint lines forming a rough merging bracket for the traffic. In order to do this, we had to pull our Ford F-250 Superduty 4X4 to the side of the interstate and set up the cameras. Before we realized it, one wheel of the truck was in a clay and muddy surface. Despite the valiant effort of 3 strong men, the Superduty wasn't going anywhere. From this day, I

learned that no matter how big a truck is or how many times the words Superduty appeared on it, trucks can get stuck easily.



Some of my other projects included studying driver behavior and conflicts at dual lane roundabouts. We filmed for several hours in Lincoln and Omaha. Another research topic dealt with offsetting right-turn lanes to improve intersection sight distance. We filmed the 10th & Charleston intersection to find the compliance rate on a stopping point at a staggered stop line. This consisted of hiding a camera in barrels and getting stared at by people driving by.

Overall, it has been an eventful summer and I enjoyed it much more than the last. I can now see the bigger picture in the future of transportation engineering and how technologically advanced we have become. However, I won't forget the everyday little things either. I learned that Josh Redwine knows a lot about cars, and that Dan Carpenter once won a hatchet throwing contest. I will continue to work for the NTC part-time through the fall semester. The summer is over, but I am excited to continue on with this internship.