# 2011 MATC Summer Internship Program


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The average college kid's summer will consist of sleeping in, lying around, and going to work a couple hours a day. However strange it may seem, I was fortunate enough to not have to do the average college kid routine this summer. I woke up at 6:45 every morning and worked 8 hours a day. And I wouldn't have wanted it any other way. Through my internship at the Mid-America Transportation Center I learned more than I could have ever imagined about the field of transportation engineering.

I had never worked the typical 9 to 5 job so my first day I had no idea what to expect and no idea what sort of things I would be asked to do. However, I think that this is one of the best ways to go into a situation. I believe that having no expectations keeps me open and able to experience and learn more. Most of my time during the internship was spent helping Dr. Aemal Khattak with research on pedestrian and bicyclist safety at railway grade crossings. This consisted of a lot of traffic counts. I would watch videos of different railroad crossings in Lincoln, Fremont, and Waverly and keep track of all the cars and trucks that passed. I also had to count how many trains passed each hour, how long the gate was down, and how many cars had to stop for the train. It may seem like a very tedious and mundane task but once I had done it for a couple of days I got into a rhythm and it became much easier. This showed me that engineering is not as "pretty" as it seems from the outside. A lot of it is watching hours and hours of video so that you can put the collected data into a form that can be better analyzed.

I also counted violations committed by cars, pedestrians, and bicyclists in Fremont. This included (1) anyone going under the crossbar when it was opening or closing when the lights were flashing or (2) going around the crossbar when both arms

were already down. While I didn't get to work on this part of the project very long, it was interesting to see what people would do when a train stopped in front of the crossing. Many cars just backed up and went the other way, but I did see a pedestrian climb through the train. Once again, this showed me the importance of video watching, even though the task consumes many monotonous hours. Without the information obtained from video watching, there is no data that can be used for studies and research.

There were a few days when I was lucky enough to go out into the field. We set up a camera on 44th & Cornhusker to collect data for that train crossing. MATC recently purchased a new trailer which allows us to set up the camera in places where we previously would not have been able. Dr. Khattak and Dr. Sharma, another professor working on the project, both think the camera is very beneficial as the amount of data that can be collected is tenfold of what it was.

Another outside work opportunity was to set up an educational booth at the 44th & Cornhusker crossing. We handed out Operation Lifesaver pamphlets and other goods such duffel bags, flashlights, and water bottles. All of this was done in an effort to educate pedestrians and bicyclists about train crossing safety. I only talked to three people in my five hours at the booth, but it was an enjoyable experience nonetheless. One valuable lesson I learned from this experience was to ensure that everything is working correctly the night before. We brought a portable battery so that we could play an informational video on a laptop; however, the battery wasn't charged enough so we were unable to play the DVD. It turned out not to be a big deal, but it is good to learn from circumstances like that.

Overall, this has been one of my best and most memorable summers. I gained invaluable experience in the field of transportation engineering that I will be able to take with me through the rest of my career. I built lasting relationships with my coworkers and was able to apply many things I had learned in class to real life situations. This has been such a great learning experience and I would like to thank MATC for giving me this opportunity.