

What I Did During My MATC Internship

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August 10, 2007



Having an internship during your collegiate career is both important and valuable. Being able to experience two excellent internships is even better. Thanks to MATC, I was able to intern again this year at HWS Consulting Group, Inc. in Omaha after the summer of 2006 with MAPA. Like MAPA, HWS did not disappoint in giving me an experience that showed me how the real world of transportation engineering works on a day-to-day basis.

At MAPA, I was able to learn about the public side of transportation engineering and planning while working on a travel time study of the metropolitan area. With my time at HWS this summer, I have been able to delve into the private sector and learn more technical aspects about how to design roadways as a transportation engineer. Both experiences have proven priceless and I definitely have a more rounded, well-balanced view of the engineering world.

At HWS, in particular, I have been working on the East Beltway project for the City of Lincoln. It is a 4-lane divided expressway linking Interstate 80 and Highway 2 on the east side of Lincoln. My specific job with the project was to design the service interchange ramps at five locations. These locations included Fletcher Road, Adams Street, 'O' Street, Pioneers Boulevard, and Pine Lake Road. Each location was different in alignment and profile, which created a challenge I needed to resolve each and every day. I now understand how engineers need to solve problems to achieve the best possible solution for their project.

Using Microstation and Geopak, I feel as if I was able to learn the practical way in this day and age to design roadways. Being able to relate what I

was creating with technology back to what I learned in the classroom was probably the most fulfilling aspect of my internship this summer. However, it did not go as smoothly as it might seem. In fact, I redesigned each ramp at least twice and up to six times in some cases. This taught me that change is apart of engineering and the East Beltway was no exception. As engineers, we need to be able to be flexible with our designs to accommodate changes a client or situation may need. Lessons like these are invaluable and can only be truly learned on the job.

Other projects I was able to work on included a collision study in Merriam, Kansas, a railroad project for UP, a roadway project in Niobrara, and a noise study in Sioux Falls among others. All of these gave me a broader knowledge of transportation engineering that can only help my progress as I look to improve my engineering foundation.

Overall, my MATC internship at HWS was a perfect fit. The people, location, and projects I was able to work on showed me how the private side of transportation engineering differs from the public side. I enjoyed being able to learn what I did and appreciate the value in what MATC and HWS have allowed me to accomplish through this program.