



MY SUMMERASA

MATC INTERN

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MID-AMERICA
TRANSPORTATION CENTER



FELSBURG
HOLT &
ULLEVIG

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When all of the MATC interns gathered at the City of Lincoln for a presentation by their fellow interns and faculty, one thing was clear, and that is how important networking is in the field of transportation. Many of the interns for the City of Lincoln were enthusiastic about their work environment and their fellow co-workers. Most of them said that they were able to walk away from this experience with the mindset that everyone has something to offer in this field. It was great to see that other interns from other transportation organizations shared the same experience as me. This sat well with me because a couple of weeks before, I attended the MOVITE conference in Branson, Missouri. My boss, Mark Meisinger, encouraged me to attend the board meeting to see how it runs and to meet some higher people in the Institute of Transportation Engineers (ITE) organization. One of the things that were mentioned at this board meeting was that registered engineer or not, everyone involved and working in the transportation field needs to realize and feel that they are professionals. I truly believe that working at Felsburg Holt & Ullevig (FHU) through the MATC program over the past two summers, has helped me build the confidence to realize that I am becoming a professional in the transportation field.

Felsburg Holt & Ullevig is a private consulting firm specializing in transportation an environmental planning, traffic engineering, transportation system design, and environmental services. FHU is a successful firm that is nurtured by a team that enjoys their work as well as their workplace. The firm currently has over 100 employees and four offices. The main office is located in Centennial, Colorado, and there are three regional offices that lie in Colorado Springs, Colorado, and Omaha and Lincoln, Nebraska. Over the past year, I have worked in both the Lincoln and Omaha branch which has allowed me to work with senior level engineers and take part in studies, design, and marketing. This opportunity has allowed me to see a private consulting firm from the top to the bottom.



Compared to last summer, where I worked on quite a few projects, this summer I focused on a couple of projects. I still developed peak period turning movement counts for both the A.M. and P.M. peak periods. I performed crash analysis to look at crash patterns at certain intersections. I also developed condition diagrams for intersections, which is when an intersection is drawn out with lane measurements and assignments, road signs, speed limits, and any other important aspects nearby.

Over this summer, I have worked on a couple of major projects. One of these projects was to conduct a major bridge inventory study that evaluates the existing conditions and recommends future improvements for 18 major bridges throughout the state of South Dakota. My tasks consisted of gathering data from the Geographic Information Systems (GIS) site. The GIS website is a software that I have not used, but it is an important tool. The GIS website is a systems integration consulting group that builds web-based collaborative spatio-temporal systems coupled to semantic data models. From the GIS site, I pulled crash data, average daily traffic (ADT), truck percentages, design percentages, and more. Using the GIS site was important because it was an informational site that I have heard of, but one that I had not used in my college career. It was great to see on a larger scale of how government and transportation agencies compile their data on these websites and how useful these websites are in the transportation field. It also shows how important it is to maintain a good relationship with your clients and government agencies in order to obtain their data on these modules. I also had to develop turning volumes for the A.M. and P.M. peak hour for the surrounding intersections. FHU did not have traffic counts for these intersections, so I had to gather average daily traffic (ADT) volumes from multiple sources. With this data, I was able to develop turning volumes. This was a new task that I learned this summer. From this task, I learned how to balance traffic between the A.M. and P.M. hours while maintaining the ADTs. My boss also started having me do more independent work. Some of this work required me to look into the Highway Capacity Manual on certain standards and properly document



what criteria we were using for this study.

Another great opportunity that I was able to participate in was attending the MOVITE conference in Branson, Missouri. This was truly a unique experience because I had the opportunity to network with professionals in the transportation field from all around the Midwest. I also was able to meet with students from other universities. Most of them were from graduate school and presented themselves in a very professional manner. They were very helpful in shedding some light on opportunities available for graduate school. This was instrumental to my own career, because I am now exploring my options of attending graduate school. This is what is so great about the MATC program. What turned out to be my first internship, an opportunity to get some experience and peek into the field of transportation, turned out to be an opportunity that helped me network with professionals in the consulting, public works, and graduate level of transportation. I am truly thankful to be an intern for FHU through the MATC program and start an exciting career as a transportation professional.