



MID-AMERICA TRANSPORTATION CENTER

REFLECTION REPORT

2021 MATC SUMMER INTERNSHIP PROGRAM

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INTRODUCTION

This report echoes the experience I had during the summer internship at City of Omaha organized by Mid-America Transportation Center. The Public Works Department-Traffic Engineering Division- where I had the opportunity to work- provides various services that directly affects the life of people in Omaha. The primary purpose of Traffic Engineering Division is to provide safe, sustainable and easier movement of Human and Vehicular traffic by designing, constructing, operating and maintaining the traffic control systems.



The Traffic Engineering staff is responsible for maintaining more than 1000 traffic signals, lane lights, and flashers. I was able to experience both the construction and the design aspect of the work that gets done by this department. Almost Every day, I learned something new. Someday about spot speed studies, signal timings and various other traffic engineering problems and their solutions, other days I would learn about the software and hardware that controls the traffic signals and keep it running, cross-walk maintenance, notice board signs etc.

What I Learned from the Internship?

After working for the city, I came to realize that work is not just about completing

Projects and meeting deadlines (although, these are very important), but It's more
important that you connect with your co-workers, share ideas, stories and culture. After
making connection with the co-workers, you are more comfortable working which will
result in completing task very easy. Some of the Lesson I learned:

College does not teach you everything and at Job you learn almost everything...

Yes, you learn to solve complex math and engineering problems at Engineering School and you apply that knowledge at work as well, however, learning on the job was one of Best experience I had. One of my favorite part was going out in the field to conduct spot studies to figure out if a certain place would qualify for a speed bump or not and sometimes that can be a social issue rather than just an engineering problem. It is necessary to communicate and be able to answer the questions of the public and explain them what is being done and why. Since, the locals know more about their

situation more than the engineers, most of our design is driven by what we learn from them. Also, attending the public meetings and listening to people from different background debate and come to conclusion is quite a sight to see and I learned various leadership and public speaking skills from it.

Engineering is a team sport attached to diverse group of individuals and resources...

When you solve a design problem at school you just find an answer and you are done. However, What I learned from this job was that you need to work with various organizations and departments to be able to solve that problem in reality. There is a hierarchy of people that the design is need to go through before it is executed. Also, teamwork is different than the group project you do at the school. Learning how to communicate was one of the skill I learned from my co-workers, supervisors and managers who are excellent speakers by the way and I aspire to be more like them every day.

Making connection and asking questions is the key to becoming a better Engineer...

Not everyone remembers what you learned in that one class in sophomore year and it is completely fine not to, but it is very important to ask for the things you do not know and regularly verify your work with your peers. One thing I liked after working for the city and this department was that you could ask questions while completing the task assigned and you know you will be helped .The team I worked with were very passionate about the work that they do every day to help run the city better. Everyone is learning from each other and sharing their knowledge to solve the problems efficiently.

Conclusion

After spending time with the Engineers and workers at the maintenance shop, I am very grateful for the guidance and support that I received. All the knowledge and experience I have acquired from this internship will stay with me forever and most importantly the friends I made.

Thank you MATC and the Omaha Traffic Engineering department for this memorable summer!!