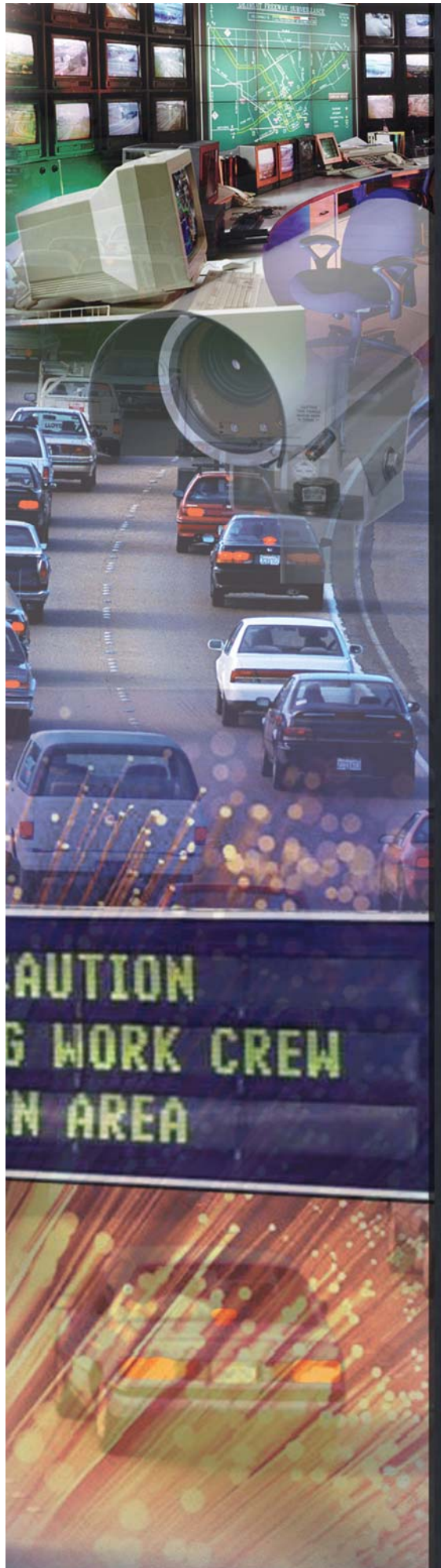


# My Second Year As A MATC Intern



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Although this has been my second summer as a MATC intern with Iteris, my experience this summer was much different than the last. Since I had already been working there since last summer and throughout the school year, I knew what was expected of me and how to perform the main tasks of my job. Even though I had the same internship, I gained some additional responsibilities and got an even more in-depth look into the traffic engineering world. I was put in charge of my first traffic study, got to help write technical memos and reports, and learned to use some new traffic software programs that I had not previously worked with.

Iteris is different than many of the other civil engineering companies in that it is made up of three different business units. The Roadway Sensors business unit concentrates on the design and production of vehicle detection cameras that can take the place of detectors imbedded in the pavement. The Automotive Sensors business unit specializes in developing devices that are used inside vehicles to create a safer driving experience. Their main product is a lane departure warning system that will alert the driver when an unintended lane change is made. The Transportation Systems unit is the one that I am a part of. We focus our engineering efforts on traffic engineering, transportation planning and intelligent transportation systems.

The Lincoln Iteris office was opened on August 1, 2004 with only one staff person. When I started last summer, I had four other co-workers. The office has continued to grow as we have added two additional staff members this summer and became the main regional office in the Midwest. We work closely with the Minneapolis office and just recently opened an office in Kansas City. I am impressed with the rate at which this company has expanded while I have been with them.

Iteris has around 20 office locations throughout the United States. I was fortunate enough to have the opportunity to travel to one of the offices in California to assist them with updating the ITS communication throughout the city of Fountain Valley. While I was there, I got to spend my time doing some field work to determine where the existing fiber optic cable boxes were. It was very difficult for me to spend so much time outside in the perfect California weather, but I managed to survive. After we collected this data, I updated the base map using Microstation.



*Here I am working hard in California.*

Another one of the projects that I worked on was a roundabout analysis and design for the City of Lincoln. For this project, we needed to determine if the use of roundabouts at the intersections of 98<sup>th</sup> Street with Old Cheney and Pine Lake Roads would be effective. I learned to use a computer program called SIDRA to determine the operational capacity of the roundabouts. After we concluded that roundabouts were a good option, we had to design the roundabout. I used MicroStation to design some concept layouts of the roundabouts and also wrote the technical memo for the city. I had

actually first started working on this project the previous summer, so I saw first hand all of the stages and work that goes into completing a project. The roundabouts are scheduled to be constructed this fall, so I am excited to see something that I helped design get put to use.

I was also put in charge of my own project for the first time where I did everything from the data collection to the final report. This project was a traffic impact study for a proposed movie theater complex located in Kearney, NE. I traveled to Kearney to conduct some traffic counts and collect other data. After processing this information, I used the ITE Trip Generation tables to come up with an expected traffic flow produced by the theater and then used Synchro to determine the capacity and level of service of the adjacent intersections. This helped us to make recommendations to the City of Kearney on how to improve traffic operations in that area.

I have enjoyed my second summer as a MATC intern with Iteris and have learned even more about traffic engineering. I was given more responsibilities and opportunities which will help to develop skills for my professional career. This has been a great experience that has helped me in deciding what I want to do in the future.