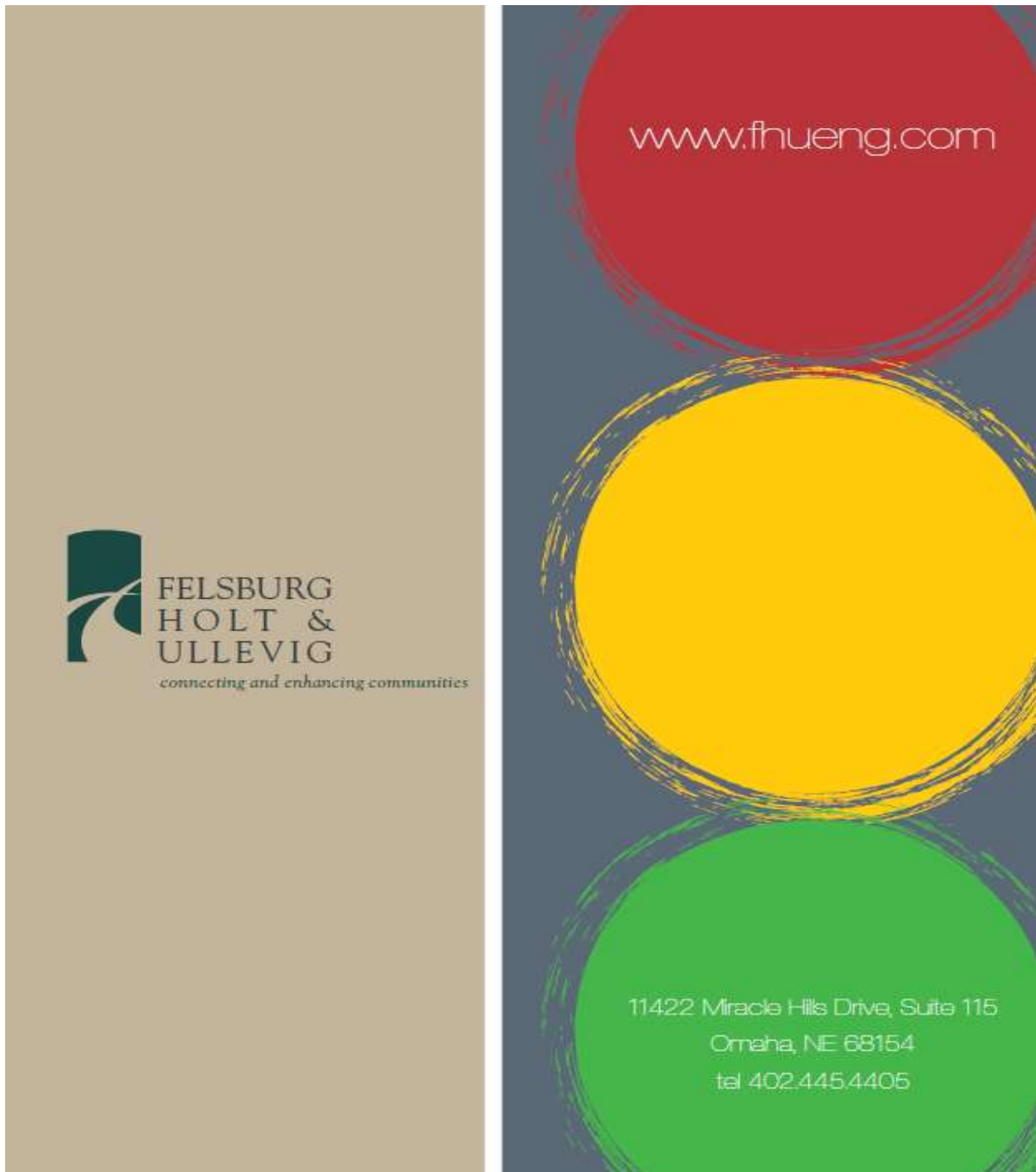


MATC Intern Report

# A Summer of FHUn

By Kyle McLaughlin

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Throughout my collegiate career I've held a slew of jobs, but never have I had such a productive three months for career advancement as I had this summer. Whether looking at skills gained and improved, seeing the facets of the consulting side of engineering, or simply networking with potential future colleagues, the internship with Felsburg Holt & Ullevig (FHU) has been one of my best professional experiences thus far in life. During my stint at FHU thus far I have been able to work on everything from MicroStation files associated with a giant roundabout, to traffic counting, to helping assemble and polish Request for Proposals (RFPs) with our marketing staff.

A big chunk of my summer has been spent on the design and refinement of concept for an elevated roundabout at the intersection of 14th Street and Old Cheney Road/Warlick Boulevard in Lincoln, NE. This has provided me with some of the most useful, interesting, and historically rare opportunities to work on one of the first elevated roundabouts in the United States. I was already a big fan of roundabouts, and getting to work on it has been a joy. Just within this single project I have completed Intersection Sight Distance (ISD) triangles, baseline alternatives quantity comparisons, roundabout fastest path calculations, traffic forecasting, and even bore witness to what happens internally when there is a decision to make some (major) alignment adjustments. The project has required me to do research into NCHRP reports, create excel calculation spreadsheets, and review design documentation and standards which really helps connect schooling familiarity with real world application and experience.

The experience I've received dealing with roundabouts has really vaulted me forward into understanding when and where to implement one, how to analyze their effectiveness and

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perhaps most importantly, how to go about constructing it. I had the pleasure of working on over ten unique roundabouts, capped by the elevated giant on 14th.

Traffic engineering has been another large portion of my workload throughout the summer. I've been able to complete traffic counts for corridor studies, forecast volumes and delay, did a number of condition diagrams, as well as get hands on with the MUTCD for everything from signage and taper to signal warrants. Although I've solidly decided that design and roadway are my interests, I have a stronger grasp on the traffic side and its inner workings.

Outside of actual engineering work I have been able to partake in many different activities. I have been helped put together our response to competitive RFPs with our marketing wiz Stephanie. These proposals help us win new projects and clients. FHU has even had me take a day to scout out a county in South Dakota that had issued an RFP for a Transportation Master Plan. I took pictures to highlight and explain key issues and transportation problems that were in the RFP. This showed the extent that FHU was willing to go in order to provide a quality product to just a potential client. I have attended training for software to be used in a major project with NDOR, participated in committee meetings pertaining to the City of Lincoln Long Range Transportation Plan (LRTP), and been able to step in on golf teams for a few guys in the office.

I've done such a variety of things, that I have yet to speak on how positive and enjoyable the office environment is. I know all too well from previous jobs how hard it is to want to go to work when you don't enjoy being there, but that was not the case this summer. Yeah, sure, I was late a few times (anyone who knows me knows that I am not an early riser), however, every day I was excited to get to work and see what I was going to get to dig my hands into for the day. The co-workers at FHU made my experience even better. Everyone has a great outlook and

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personality, monthly meetings are far from some drag-out-put-me-down to be dreaded, and half the time asking someone for advice is as easy as talking in an outside voice to the person in the next cube.

I decided to go the internship route very late in the process this year because I was unsure what I wanted to do as far as graduating or continuing school. I was beyond thrilled to be able to work for FHU because of my interest in roundabouts, and obviously 14th & Old Cheney had my attention as soon as I learned about the project from the papers. I can say with full certainty that my choice was a good one. I'd like to thank FHU as well as MATC for providing me opportunities and experiences, with plans to continue to work with FHU in the future this summer has kept giving returns on my decision.

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