MOUNTAIN-PLAINS CONSORTIUM

North Front Range
Transportation Research Internship Program
(NFR-TRIP)

Dr. Richard Gutkowski
Colorado State University

2005

CONTENTS

1. NORTH FRONT RANGE TRANSPORTATION RESEARCH INTERNSHIP PROGRAM INTRODUCTION

Transportation is vital to the economy of the United States. Providing for the safe transportation of people and goods involves an extensive network of working professionals. Homeland security concerns add a new dimension to the capabilities involved. There is a growing need for transportation professionals, beginning with those at a baccalaureate level.

The North Front Range Transportation Research Internship Program (NFR-TRIP) was created to help address this need and to fill a void for undergraduate students pursuing transportation-related areas of study. In 1997 Richard Gutkowski, civil engineering professor at CSU, worked with local transportation agencies to create the NFR-TRIP. John Daggett, then a senior transportation planner for the city of Fort Collins, was an integral player in the successful startup of NFR-TRIP. He helped mold the concept and introduced Gutkowski to staff in several North Front Range communities.

The first organization to hire an intern from CSU was the North Front Range Transportation and Air Quality Planning Council (NFRT&AQPC), a Metropolitan Planning Organization (MPO). Vicky McLane, the transportation program manager, was instrumental in the inception of NFR-TRIP and continues as the primary partner to promote the program among local agencies and consultants. McLane hired Eric Eddy to build a Web page that would inform the public about a transportation alternatives feasibility study. He worked in conjunction with the firm Kimley-Horn, Inc. a consultant to the MPO.

McLane and Daggett were impressed by Eddy's work and professionalism. Eddy's success led to several more agencies requesting interns the following semester. Three internship positions were offered in fall 1998. Descriptions of the responsibilities and work experiences of these individuals were included in a prior report (MPC 01-124). All three students completed their internships successfully. That led to more agencies and organizations coming to CSU for interns. The third semester of the program, five students were hired to work in local organizations. The current goal is to place about 10 students annually. Now, typically, about five to eight students are placed annually. Since that initial hire, about 50 students have been participants in the NFR-TRIP.

The following chapter describes the implementation and administrative requirements of the internship program.

2. NORTHERN COLORADO TRANSPORTATION INTERNSHIP PROGRAM IMPLEMENTATION

The process for implementing NFR-TIP improves with each semester, although finding students for the positions has never been difficult. Many students at CSU are interested in transportation experiences. In the early years, to inform students of internship opportunities, flyers were distributed at the pertinent engineering classes around the middle of the spring semester, and postings displayed in appropriate locations. Since that time, a web site and electronic-based promotion and application materials have been developed.

Materials used in the process are included in Appendix A. A short questionnaire is included for students to fill out and return to the Mountain Plains Consortium office. Students also submit a resume and class schedule for the current and following semesters. Each respondent fills out an application form (Appendix B). The students also answer several written questions concerning their technical and academic experiences (Appendix C). The materials are requested before a specific date to enable a timely interview schedule to be developed.

All information submitted by the applicant is disseminated to potential employers. After they review the documents, an interview schedule is determined. Each student who returns the materials is invited to the interviews. Each student is scheduled for a half hour. All of the potential employers are present to ask questions as a panel. After the students are interviewed, the employers discuss matches for their needs, with Richard Gutkowski providing input as well.

Once the selection process is complete, each student is contacted either by an interested employer or professor Gutkowski. Employers provide the selected students with an offer and start date. For a period of time following the placements, efforts are made to generate additional internships for unsuccessful students. Often one or more additional placements are made.

Each internship is unique, but a few basic requirements are expected from everyone. Students work 12 hours a week during academic semesters and 20 hours a week during the summer session. A consistent pay rate of $10/hr is used to avoid competition based on compensation differences. Employers have the option to provide more working hours. Finally, each student is required to complete a final report on his/her experience as an intern.

Mountain-Plains Consortium is less involved during the course of the internships. Professor Gutkowski retains communication with Vicky McLane and a primary contact person at each employing entity. Otherwise, the employers independently supervise the internships until their completion when students are required to complete their final reports. The following chapters include the final reports of Ryan Gray, Ryan Chestnut, Ted Swan, Karol Miodonski, and Nathanael Bokelman describing their internship duties and their observations on NFR-TRIP.

3. Ryan Gray
City of Loveland, May 2004-October 2004

INTRODUCTION

As vegetated land is cleared and developed, the infiltration capacity of the land is significantly lowered. This loss of infiltration causes concentrated flows to form along roadside swells and ditches. If proper Best Management Practices (BMPs) are not implemented, severe erosion may occur. This erosion can undercut roadways and cause them to fail. Under extreme cases the sediment can cover the roadways and cause danger to the public.

In March of 2003 the City of Loveland submitted its stormwater discharge permit to the State of Colorado and the following year the city council passed the stormwater quality ordinance. The City of Loveland has taken a more active stance on stormwater quality and sediment erosion control after the passing of the stormwater quality ordinance in the Spring of 2004. To better inform the public of the new ordinance and to insure the public remains in compliance with the new measures and existing programs by the state of Colorado and EPA, the City of Loveland opened up an intern position to address these issues.

THE INTERNSHIP

Overview of stormwater discharge permits

In 1990 the Environmental Protection Agency (EPA) promulgated Phase I to protect the nation's waterways from polluted waters. Phase I relied on the National Pollutant Discharge Elimination Permit (NPDES) to address stormwater runoff from large municipal separate storm sewer systems (MS4s) generally serving 100,000 or more citizens. It also regulated construction projects that disturbed five acres or more.

On March 10, 2003, Phase II of the storm water discharge program was implemented. Phase II required municipalities of more than 50,000 citizens, and construction sites of more than one acre to be in compliance with the Clean Water Act.

Internship Duties

Inform Public

The City of Loveland (COL) Public Works requires that its inspectors take a class in Denver to be certified with the Colorado Department of Transportation as an erosion control supervisor.

Following this training and after spending a week in the field with the stormwater quality specialist for the City of Loveland, I was allowed to go out on my own. Since the City of Loveland had just passed their Stormwater Quality Ordinance, the local public was not very knowledgable on the subject. My primary duty was to inform local contractors on what

stormwater management is, and how they could improve there current practices to be in compliance with there own stormwater discharge permits, both with the City of Loveland and the State of Colorado.

Enforcement

The EPA performs site visits to construction sites with our notice to ensure that stormwater discharge permits are being followed. After March of 2008, the City of Loveland will become liable for any fines imposed by the EPA on construction sites. Before I started my internship with the City of Loveland, the EPA had visited two subdivisions in the city, one of which did not pass. The EPA generally checks for three things when it visits a site.

1. A stormwater discharge permit with the State of Colorado.
2. A stormwater management plan – A detailed plan that outlines the possible sources of stormwater pollutants and the BMPs that will be used on the site to minimize the sediment erosion on site.
3. An updated BMP maintenance folder – construction sites are required to inspect the BMPs on the site once every 14 days, or after each significant storm event until the site is stabilized.

If a construction site was not up to date on any of these three items I would follow up with a phone call to the project site coordinator, and ask that the items be fixed within a given time period. If at the end of the time period the items were not addressed, I would draft another letter asking that the items be addressed immediately or the City of Loveland would issue a stop work order.

I found enforcement issues to be, by far, the most challenging aspect of this internship. A large portion of the challenge stemmed from the fact that stormwater quality was an issue in the area. Contractors do not like to spend any more money than they are used to spending. Because of this, I was met with a number of confrontational situations. I quickly gained many new communication skills and tactics to deal with these situations. As the summer progressed I gained confidence and contractors began to look at me as a City of Loveland inspector, and not as an ignorant college intern.

Complaints

I also assisted in following up on citizens complaints. This entailed duties such as: going out to the site and taking photos of the incident in question, writing letters to the citizen that filed the complaint, and sending a letter and educational information to the citizen who violated the stormwater ordinance.

Project engineering duties

I also performed tasks for the project engineering division of public works. Some of these tasks included:

1. Initial and final acceptance of streets and sidewalks of subdivisions – I inspected subdivisions to check for sidewalks and roadways that needed to be replaced before

the City of Loveland could accept the work initially, or after the two year warranty period.

2. I performed quantity cost take-off analysis for projects involved in the cost-sharing program with the City of Loveland. I verified the calculated quantities of asphalt and concrete from developers to ensure that the proper amount of money was being allocated to cost-sharing projects.

Internship benefits

This internship taught me the importance of confidence in the workplace. At the beginning of the summer the concept of erosion control was new to me and I had little confidence when I confronted project coordinators. This made me seem weak in the eyes of the developers, and as a result I was not taken seriously. Things I had requested to get done, would take weeks to get accomplished. I soon discovered that if I displayed confidence when discussing concerns I gained more respect from the contractors.

My communication skills greatly improved within the first few weeks on the job. Because I was the first stormwater inspector for the City of Loveland, I had to build new working relationships with all of the developers. Many of the developers were not very open to the idea of a college student informing them that they had to spend more money than they were used to spending.

Suggestions for improvements

I think that the internship program could have been improved by increasing awareness of it. I think a lot more people would have turned in applications if they had heard about it in advance. I only became aware of the program the day the applications were due to be turned in.

4. Ted Swan
10/18/2004, Summer Internship

My overall experience at Weld County Public Works this summer could not have been much better. The people I worked with were awesome, and the program they set up gave me a chance to see the many different aspects of civil engineering. I worked on projects that made me feel like I was actually contributing and helping out with the enormous workload of the county. By the end of the summer, I had completed four major projects as well as gained knowledge of some other important miscellaneous engineering aspects.

My primary job this summer was to map, photograph, analyze, and document all the MS4 stormwater features in Weld County. Matt Dixon was my main supervisor for this project and he taught me how to use GPS and also some of the elementary features of GIS. I used a handheld GPS receiver to trace (or map) and a digital camera to photograph features such as canals, culverts and storage basins that fell into MS4 urban areas of Weld County. I also inputted information about the features into the receiver. This information included size, condition, and type and was linked to the mapped feature. After Matt downloaded the GPS information into a GIS data base, we would link the features to the photographs. I would then check for errors in any of the information about the features. At the end of the summer we had a full GIS database that contained all the stormwater features in Weld County as well as photo links and information about each feature. Matt and I presented the project to the Public Works office at the end of the summer.

Another major project that I worked on over the course of the summer was the compilation of accident statistics for Weld County. I used Visual Basic to create macros that organized and compiled data to create overarching statistics that ranged from percentage of accidents caused by different factors to the number of deaths caused by truck accidents. I then wrote up summaries of these statistics, and created pie charts and graphs to give to insurance companies as well as the police station.

I got some more AutoCAD experience working for Weld County when they asked me to draft up possible layouts for new parking lots that were to be placed in the near future. I imported GPS maps of parking lot areas that I traced previously and then used specs on the size of individual parking spaces, and needed number and size of handicapped spaces to create a plausible layout for the parking lot. My drawings were then used to estimate the total cost of paving, and striping for the parking lot.

Finally, I worked on entering monument corners into a GIS database. I copied monument records into a spreadsheet and used macros to order them. I then would create a data point on a map of Weld County for each documented monument corner. The goal for this project was to create a map that would show all the areas where monument corners had been located so that surveyors could use them while they were surveying land.

5. Karol Miodonski
City of Fort Collins Transportation Planning

INTRODUCTION

The Mountain Plains Consortium offered an internship opportunity with the City of Fort Collins Transportation Planning Department in the fall of 2004. Through an interview process, I was selected to hold a part-time position for the fall of 2004 and continue working until the end of the spring semester in 2005. The part-time work would consist of assisting the transportation planners at the City.

US 287 / South College bicycle lane project
Harmony Road to Carpenter Road (LCR32)

This project kicked off at the end of the summer in 2004, and so I was able to jump in and start assisting the transportation planner that had decided to take this project on. The first task I was assigned to included using ArcGIS software to obtain the names and addresses of business and property owners along the stretch of US287/South College between Harmony and Carpenter Roads, and creating a flyer that would be mailed to them. I created a database of all the selected names and addresses from the layer file in ArcGIS, and organized them all in Microsoft Excel. I also had to edit this database a few times after the flyers were sent out, because some of them came back with "Return To Sender" labels, and needed to be removed from the database to keep a current log of all the people that could receive mailings for this project. I also had to communicate with some of the other people getting involved in the project to make sure that all the work would be completed on time. This included getting in touch with people from other departments and communicating with the local newspaper to run advertisements for open house meetings regarding the project.

NFRTA survey project

This project was based on a survey that was taken in 2001. The purpose of the NFRTA survey was to obtain public opinion on issues and problems facing Northern Colorado, including specific questions concerning the traffic and road problems, establishing a transportation authority, and developing regional mass transit. Furthermore, the data obtained from the survey was filtered to contain only data from Larimer County, and the statistics from this data were compared to the statistics from the general data. Five hundred registered voters from Northern Colorado were surveyed. The responses obtained were summarized in tables giving the statistics of the general data. The statistics from the general data were given in spreadsheet format, with answers to all the questions from all the respondents. The spreadsheets also included information about the respondents, including their zip codes. Using these zip codes, the general data was filtered to contain only the participants from Larimer County. There were 328 participants from Larimer County and statistics were calculated for this population. The statistics could then be compared by including both numbers next to each question in a report. The original report was provided, but edited to include the Larimer County statistics. The data from Larimer County was compared to the original data to see where there were any deviations. Some issues were found to

be much less significant to people living in Larimer County. For example, making improvements to Crossroads Boulevard from I-25 into Greeley would affect people in Weld County far more than people in Larimer County. On the other hand, some issues were of much more interest to people living in Larimer County; for example funding the development of a commuter rail service.

INTERNSHIP DUTIES

The required duties of this internship were straightforward. When arriving at the office, if I wasn't already working on a project, I would talk to the transportation planning manager and the two transportation planners to see what their priorities for the day were, and see what I could possibly do to help them. Duties ranged from printing maps and cover sheets, and putting them together for meetings, filing development reviews that had been revised by the transportation planners, and making copies of documents, to using ArcGIS and using technical skills to complete assigned tasks.

INTERNSHIP BENEFITS

Technical Skills

One of the reasons I was selected for this job position was because of my knowledge of the ArcGIS software. It was very nice to be able to start working on a task using ArcGIS software within my first week of starting the internship, know what the transportation planners needed me to do, and know what they wanted their final product to look like.

Networking

I learned many important networking skills at the City of Fort Collins because the transportation planning department is a fairly small department. As a small department, there are constant interactions with other departments and businesses. I worked with the transportation planning manager who actually hired me, two transportation planners, and occasionally assisted the transportation services director. By working in this small environment, I was able to get to know the people I worked with well, and was able to create a connection which could potentially lead to a future career either at the City of Fort Collins or somewhere in Northern Colorado.

INTERNSHIP SUGGESTIONS

Although I liked the fact that there were very few people who knew about the potential internships, I think it would be fair for all students to know about these positions. It was mentioned to me in one of my classes, but not very many students seemed interested. I decided to try for one of the internships, and there were around four or five internship positions available, and a similar number of students trying to get a position. So the result was that almost all the students got a position, but the fact of the matter is, that the students don't have to try as hard and compete with other candidates, which could take away from a real-life interview experience.

Also, getting more technical, engineering positions would be advantageous to the internship program. Although it is important to have a connection with the transportation planning department (especially when students are interested in transportation engineering), it would be nice to get actual engineering experience related to transportation and traffic. This would help students get the experience they need before graduating and getting full-time jobs.

6. NATHANAEL BOKELMAN
WELD COUNTY PUBLIC WORKS

INTRODUCTION

This past summer, Weld County Public Works as well as a few other local organizations offered internships to CSU Students. Prospective interns were interviewed and I was offered one of the positions available through Weld County's Public Works Department. Over the course of the summer, I was able to participate in many of the various aspects involved in a county public works office.

ROLES AND RESPONSIBILITIES

The first position that I took part during the internship was working under the planning and development staff. In this position I reviewed referrals from the County Planning Department to ensure all engineering requirements of the county were met. These requirements included current as well as future right-of-way, access, geological and water reports, and zoning. The level of referrals ranged from municipal referrals from local municipalities, all the way through the development process that consisted of sketch plans, change of zone and final plats. Other duties included preparing for and attending Planning Commission hearings, Utility Board hearings, and the County Commissioner board meetings. A secondary role that was taken on in this segment of the internship was assisting with referrals for recorded exemptions and subdivision exemptions. Simply, these exemptions pertain to land splits. From these types of land splits I researched right-of-way history, previous splits, and survey monument records.

The second area in which I worked involved closure and tracking of permits pertaining to county construction projects. Tasks that I performed included site visits to recently completed construction sites and research of current permits for completed as well as active sites. In this role I created a spreadsheet that will be used to record and track current and future permits held by the county.

Another area that I participated in was construction inspection. More specifically, I assisted in the preparation and inspection of asphalt overlay projects including full pavement overlay and slurry seal operations. Geo-technical testing and analysis was also included in this role.

The final position that I held pertained to traffic studies and average daily traffic volume counts throughout Weld County. Each department that I had worked in each had some tie to the traffic volumes on the numerous roads throughout Weld County. Reports of traffic counts were utilized by Planning and Development review to obtain historical traffic levels in areas under review in order to determine the impact of the proposed development. Construction and maintenance projects are often scheduled based on historic traffic counts as well as projected counts. Needless to say, it appears that traffic counting is extremely vital to the county and not nearly as boring as the title may imply. Many types of traffic studies were performed, varying in length from 24 to 48 to 72 hours, and even from weekday to weekend counts. The type of counts also

varied from classified counts to raw-volume counts. My role was first to learn the ropes by assisting with traffic counts that resulted from dust complaints on unpaved roads. From there, I began my own traffic studies on paved roads that were warranted by either current development or areas in which the counts on record with the county had become outdated. In this role I also established a method of recording and analyzing data collected by a certain type of counter that was not being used due to the lack of interface software. The database I created allows for a user-friendly interface in which the data is simply transferred from the counter manually.

INTERNSHIP BENEFITS

The experience, knowledge, and understanding of the workings of county government that were acquired through this internship will undoubtedly assist me throughout my career. No matter what sector of engineering I may find myself in, I am certain that I will be able to utilize the experience that I have gained, either directly in the work I am involved in, or even in an understanding of fields that I am not directly involved in. I feel that the understanding of planning and development, inspection, construction, and even traffic counting are providing an excellent foundation on which to build my future.

INTERNSHIP SUGGESTIONS

The program through CSU that provides the opportunity for students to apply for internships such as the one I participated in is extremely beneficial and is a valuable resource to the students of CSU as well as the organizations that take part in the program. The exposure that students are able to receive from the internships offered by the program is extremely valuable in opening up other opportunities in the future.

The only suggestion that I might have is to increase an awareness of the program throughout the student body as well as throughout the local engineering community. The increased awareness will undoubtedly cause the program to grow, increasing student interest and allowing more companies and organizations to reap the benefits of the program.

7. NORTHERN COLORADO TRANSPORTATION INTERNSHIP PROGRAM CONCLUSION

Since its inception, NFR-TRIP successfully has placed about 50 students into internship positions. Several of those students have gone on to work full time in transportation engineering. NFR-TRIP provides the initial introduction to employers, which is critical to the job search success of new college graduates.

The program is growing each semester with new employers joining the ranks all the time. Many employers hire an intern each semester to continue the work of the previous student. That type of continuing commitment to the program is a testament to its success.

In 1999, CSU student Matt Salek was hired as an intern by Mountain Plains Consortium (MPC) to prepare a web site for MPC and NFR-TRIP. The web site includes information about MPC and the process of applying for an NFR-TRIP internship (Appendix D). The web site helps publicize the internships and provides students with an electronic alternative for obtaining and submitting an application. Since that time, other student employees have maintained and upgraded the web site.

In the future, NFR-TRIP plans to expand its list of employers and provide as many internships as possible for those students interested. Each semester there are many more applicants than there are internships. NFR-TRIP would like to see every qualified student receive an internship and, eventually, full time employment in transportation engineering.

APPENDIX A. INTERNSHIP INFORMATION

ENGINEERING JUNIORS AND SENIORS –
ARE YOU LOOKING FOR AN INTERNSHIP?

The CSU University Transportation Center, in conjunction with city and county municipalities in Colorado, anticipates needing interns to work in the field of transportation. The types of projects being considered for these possible internships include:

- Fort Collins truck route study
- North Front Range Transportation Alternatives Feasibility Study – Phase II
- Transit in university communities

The internships would begin in the summer of 1997 and continue through Fall semester. Hours will be contingent on the scope and timing of each project. Compensation for the internship will be a modest monthly stipend. The interns would work at the site of the projects, possibly with a consultant.

CSU's University Transportation Center is in the process of arranging the internships in cooperation with local transportation agencies in order to promote an ongoing relationship between the university and government. At this time the internships are not certain, but very likely.

If you are interested in this opportunity please fill out the enclosed form and drop it off at the Civil Engineering office (Engineering Building AR204) in Professor Gutkowski's mailbox. You can also fax the form to 491-2788. Or give us your information over the phone by calling 491-8291, or by Email at gutkowsk@engr.colostate.edu. If you have questions about these internships please call 491-8291.

Reply form for CSU University Transportation Center internships

Name: _____

Mailing Address: _____

City, State, Zip: _____

Daytime Phone: _____

Email: _____

Major: _____

Return form to:

Civil Engineering Office

Engineering AR204

*Dr. Gutkowski's mailbox

Or call: (970) 491-8291

Or fax to: (970) 491-2788

Or Email to: gutkowsk@engr.colostate.edu

Please complete the following:

I am/am not interested in this intership.

I am continuing as a CSU student in Fall 1998 _____.
Spring 1999 _____.

I expect to graduate at the end of _____ semester, in year _____.

If selected, I expect to take _____ credits in Fall 1998 and _____ credits in Spring 1999.

I expect I could work _____ hours in Fall 1998 and _____ hours in Spring 1999.

I am graduating this semester but I am interested anyway _____.

I am available beginning _____, 1998.

APPENDIX B. STUDENT APPLICATION FORM

STUDENT APPLICATION FORM

Name:----------Status (Freshman,etc.)----------
Local Address:----------
Phone:----------Earliest date you are available for employment:----------
Major:----------Anticipated date for graduation:----------
Name of Advisor:----------Department:----------
Other academic activities, honors, etc.:----------

Job opening you are responding to:----------

Skills pertinent to this opening:----------

Career goal and how you plan to reach it:----------

How does this job opportunity relate to your career goal?----------
---

Reasons why you should be considered for this position:----------
---

Previous Employers

Name of Company:----------
Dates of Employment:----------
Reference:----------
Responsibilities:----------

Name of Company:----------
Dates of Employment:----------
Reference:----------
Responsibilities:----------

Other pertinent experience, hobbies, interests:----------

Names and telephone numbers of two faculty references:----------
---

APPENDIX C. ADDITIONAL QUESTIONS ADDRESSED BY THE INTERNS

Additional Questions Addressed by the Interns (answers are given on the following page):

1. Do you have an interest in:
   a) Autocad
   b) Engineering planning
   c) Spreadsheets
   d) Modeling transportation environments
   e) Internet/web page design

2. Rank your interest in:
   a) Public involvement
   b) Technical work
   c) Solitary work

3. Now rank your ability in the same areas.

4. Do you have your own transportation?

5. Do you prefer a lot of supervision, or not?

6. Have you had transportation classes yet? Which ones?

7. Have you had Senior Design yet?

8. Where will you be living next semester?

APPENDIX D. WEB PAGES

Mountain-Plains Consortium

Colorado State University
University Transportation Center

At MPC:
TLN (CSU)
Internships

Related Sites:
CSU Civil Engineering Department
TLN (NDSU)
Upper Great Plains Transportation Institute
U.S. Dept of Transportation

Mountain-Plains Consortium (MPC) is a cooperative organization of universities in the former Region 8 of the U.S. Department of Transportation. MPC is headquartered at the Upper Great Plains Transportation Institute at North Dakota State University. Member Universities are Colorado State University, North Dakota State University, University of Utah, and University of Wyoming. The theme of MPC, due to the dominant characteristics of the region it serves, is rural and multi-modal transportation, but transportation and transit needs of small urban cities are pertinent too.

MPC exists to facilitate education, research, and technology transfer among the member universities and state departments of highway. At Colorado State, primary research areas include low-volume roads and bridges, safety of railroad bridges, performance crash testing of safety/security barriers, and environmental impacts, among others.

CSU has facilities at the Engineering Research Center to conduct many projects associated with bridges and other transportation infrastructure.

Research

CSU is a member of the Transporation Learning Network (TLN - formerly Tel-8 Network). This internet-based, two-way interactive telecommunications network is used to facilitate communication among MPC member organizations, and also allows students at MPC universities to enroll in distance learning courses. Course descriptions are added as information becomes available.

Internships

CSU manages the North Front Range Transportation Research Internship Program. This program develops internships through the North Front Range Transportation and Air Quality Planning Council and places students in northern Colorado transportation agencies and private industry to work with ongoing transportation projects. Internships are generally available for a single semester and/or summer.

The MPC University Program Director at CSU is:

Dr. Richard M. Gutkowski
Offices: A103 Engr. Research Center, or A207 Engr Building
Phone: (970) 491-8291 or (970)491-6606 E-mail: gutkowsk@engr.colostate.edu

Mountain-Plains Consortium

Colorado State University
University Transportation Center

Home
TLN (CSU)

Application

Example Intern Summaries

2003

- Jonathan Jaeger
- Joe O'Malley

2004

- Nathanael Bokelman
- Ryan Gray
- Karol Miodonski
- Ted Swan

Internship Descriptions

CSU, in conjunction with city and county governments in northern Colorado is offering several internships in the field of transportation. These are available to Civil Engineering undergraduate majors at the junior and senior levels, including graduating seniors. The types of projects recently involved:

- Transit in university communities
- Transportation planning for a small northern Colorado community
- Mason Street corridor planning
- Bicycle and pedestrian planning
- County construction permit tracking l Enforcing stormwater permits l Transit surveys
- Map, analysis, and documentation of MS4 stormwater features

The internships typically extend through one semester plus a summer. Hours are contingent on the scope and timing of each project. Usually this is 20 hours/week in summer and 10-12 hours/week during the semester. Compensation for the internship is on an hourly pay basis. The interns work at the site of the projects, in some cases with a consultant.

CSU and the North Front Range Transportation, Planning and Air Quality Council organize these internships. Internships are arranged in cooperation with local transportation agencies in order to promote an ongoing relationship between the university and the government.

Applicants will be considered for all internships available via an interview and placement process.

If you have an interest in these positions, please fill out the Application. Submit the application request in one of the following ways:

- Electronically (see Application)
- Fill out a printed form and turn in to Professor Richard Gutkowski's mailbox in the Civil Engineering office,
- Rom A203, Engineering Building
- Fill out a printed form and fax to 970-491-2788, or
- E-mail the information requested to gutkowsk@engr.colostate.edu and vmclane@fcgov.com

Additional Application Requirements

1. Projected Fall 2005 Schedule and Finals Schedule for Spring 2005
2. Resume
3. Two References: one being a faculty member (Print out and complete these three additional requirements on the linked document and fax to Dr. Gutkowski at 970-491-2788, or place in to Dr. Gutkowski's mailbox in the Civil Engineering office, Room A203, Engineering Building.)

If you have questions about these internships, please call Professor Gutkowski at 970-491-8291 or e-mail him at the above address.

The application process typically begins March 1. Check back on this website as the date approaches for any additional information.

Northern Colorado Transportation Internships

Internship Application

Name:

Street Address:

City, State, Zip:

E-mail Address:

Major:

Academic Advisor and his/her department:

I am continuing as a CSU student in:
Summer 2005
Fall 2005

I expect to graduate:
(semester, year)

Number of credits I expect to take if offered an internship:
Summer 2005
Fall 2005

Hours I expect I could work per week during:
Summer 2005
Fall 2005

I am available beginning: , 2005

Academic activities, honors, etc.:

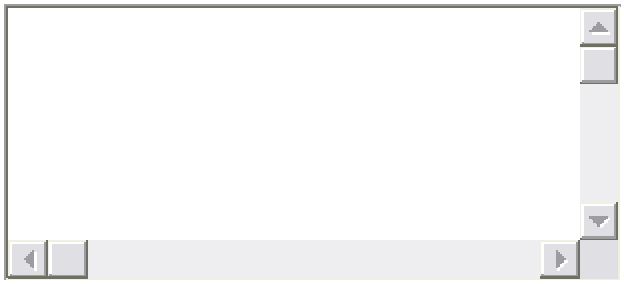
I have experience with:

AutoCAD ☐

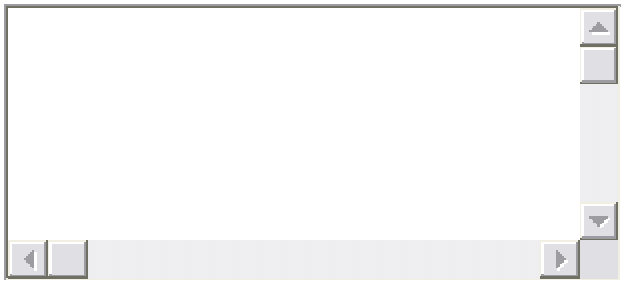
Spreadsheets ☐

Fieldwork ☐

Skills pertinent to this position:



What my career goal is and how this internship applies to it:



I have my own transportation:

Yes ☐

No ☐