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Bay Region

Construction - Bay City, Davison, Mt. Pleasant, and the Thumb Area (which includes cities such as Bad Axe, Port Huron, Sandusky)

Interns will have opportunities at each of our Transportation Service Center (TSC) locations assisting with construction projects assigned to the TSC working alongside construction technicians and engineers to promote plan review, application of the specifications/plans/proposals/ manuals. This is primarily a field position.

Bridge - Saginaw

Interns will gain experience with bridge inspections, bridge repairs, and the project development process. Interns will spend a considerable amount of time in the field.

Design - Saginaw

Interns will assist in designing transportation plans by drafting, plan development, quantity calculations, and gathering miscellaneous field information. Work is primarily in the office with minimal work in the field.

Planning - Saginaw

Interns will gather information for MDOT's five-year road and project plan along with attending meetings with local agencies, cities, counties, and legislators; assist with corridor, nonmotorized, feasibility, and environmental studies; and experience with GIS activities.

Scoping - Saginaw

Interns will assist the Road Scoping & QA Engineer with preparing cost estimates and preparing scoping documents for future road projects to be included in the five year transportation program. Interns will also assist the Pavement Management Engineer with analyzing pavement histories and conditions to determine potential fixes. Work is primarily in the office with minimal work in the field.

Traffic and Safety – Saginaw

Interns will primarily assist with inspection of the regionwide pavement markings contract but may also assist with various operational and traffic safety-related tasks. Other tasks may include speed studies, traffic counts, crash data analysis, etc. This is primarily a field position but will spend some time in the office as well

Surveying – Saginaw

Interns will spend most of the time in the field gathering survey data. Interns will be exposed to surveys related to right-of-way (ROW) and alignment retracement, boundary surveys for ROW acquisition, hydraulic surveys, and topo/mapping surveys for proposed road and bridge design projects. Interns will gain experience in survey research at the Register of Deeds as well as using our robotic total stations, GNSS receivers, and CADD software to develop digital terrain models and survey deliverables to be used for the design of the project.

Grand Region

Construction - Cadillac, Grand Rapids, and/or Muskegon

Grand Region will hire construction interns at any or all our Transportation Service Center (TSC) locations. These positions will assist with construction projects assigned to the TSC working alongside construction technicians and engineers to promote plan review and application of the specifications/plans/proposals/ manuals. This is primarily a field position and may require overtime.

Operations - Positions may be available in Grand Rapids and/or Muskegon Interns will assist with drafting traffic maintenance plans, transportation projects in design, traffic counts, field reviews for upcoming design projects for the 5-year plan, utility coordination, and conflict resolution for projects currently being designed. This is primarily an office position but will spend some time in the field.

Bridge - Grand Rapids

Interns will gain experience with bridge inspections, bridge repairs, and the project development process. Interns will spend a considerable amount of time in the field.

Design - Grand Rapids

Interns will assist in designing transportation plans by drafting, plan development, quantity calculations, and gathering miscellaneous field information. Work is primarily in the office with minimal work in the field.

Materials - Grand Rapids

Interns will perform sampling, testing, and reporting on respective materials in both the field and lab.

Planning - Grand Rapids

Interns will gather information for MDOT's five-year road and project plan along with attending meetings with local agencies, cities, counties, and legislators.

Surveying - Grand Rapids

Interns will work with the survey team gathering data and performing field site surveys for road projects. This is based in the office but spends considerable time in the field.

Metro Region

Construction - Chesterfield Township, Detroit, Pontiac, and Taylor

Interns will have opportunities at each of our Transportation Service Center (TSC) locations assisting with construction projects assigned to the TSC working alongside construction technicians and engineers to promote plan review, application of the specifications/plans/proposals/manuals. These are primarily field positions.

Operations - Detroit

Interns will assist with drafting traffic maintenance plans, transportation projects in design, traffic counts, field reviews for upcoming design projects for the 5-year plan, utility coordination, and conflict resolution for projects currently being designed. This is primarily an office position but will spend some time in the field.

Bridges - Southfield

Interns will gain experience with bridge inspections, bridge repairs, and the project development process. Interns will spend a considerable amount of time in the field.

Materials and Testing - Sterling Heights

Interns will perform sampling, testing, and reporting on respective materials in both the field and lab.

Projects & Contracts - Detroit

Interns will assist in designing transportation plans by drafting, plan development, quantity calculations, and gathering miscellaneous field information. Work is primarily in the office with minimal work in the field.

North Region

Construction - Alpena, Gaylord, and Traverse City

Interns will have opportunities at each of our Transportation Service Center (TSC) locations assisting with road and bridge construction projects assigned to the TSC. Interns will work alongside construction technicians and engineers reviewing plans, testing construction materials, and assuring application of specifications/plans/proposals/manuals. This is primarily a field position.

Bridges - Gaylord

Interns will work independently to collect streambed cross sections throughout the Region and have several opportunities to work with the bridge unit to gain experience with bridge inspections, bridge repairs, and the project development process. This is primarily a field position.

Design - Alpena, Gaylord, or Traverse City

Interns will work with the North Region Design Team to familiarize themselves with the design process. Interns will work alongside Transportation Engineer and staff and aid in the preparation of preliminary and final design plans for various transportation infrastructure design projects in the region.

Planning - Alpena, Gaylord, or Traverse City

Interns will work with the North Region Planner on regional non-motorized planning, carpool lot development, public engagement on transportation projects, GIS mapping, and review of local planning documents related to community transportation needs. This position is based in the office but spends time in the field.

Surveying - Alpena, Gaylord, or Traverse City

Interns will work with and be part of the Survey team, completing topographic surveys, Right of Way surveys, alignment surveys, hydraulic surveys, monument preservation surveys, and Right of Way acquisition surveys. The survey intern position will include field survey data collection, survey data adjustment, and Computer Aided Drafting and Design (CADD) data reduction for the completion of survey maps and drawings. This role is based in the office but involves considerable time in the field.

Traffic and Safety - Alpena, Gaylord, or Traverse City

Interns will assist with various operational and traffic safety-related tasks, including speed studies, traffic counts, and crash data analysis. This position is based in the office but spends considerable time in the field.

Southwest Region

Construction - Coloma, Kalamazoo, Marshall

Interns will have opportunities at each of our Transportation Service Center (TSC) locations assisting with construction projects assigned to the TSC working alongside construction technicians and engineers to promote plan review, application of the specifications/plans/proposals/ manuals. This is primarily a field position.

Bridge - Kalamazoo

Interns will gain experience with bridge inspections, bridge repairs, and the project development process. Interns will spend a considerable amount of time in the field.

Design - Kalamazoo

Interns will assist in designing road plans by drafting, plan development, quantity calculations, and gathering miscellaneous field information. On the job training will be provided. Work is primarily in the office with minimal work in the field.

Materials and Testing - Kalamazoo

Interns will perform sampling, testing, and reporting of asphalt, concrete, aggregates, along with other various construction materials. Work is approximately 30% field work and 70% lab work. Field work will involve collecting samples from the project sites, quarries, and manufacturing locations. Lab work will consist of testing the asphalt, aggregates, and concrete. Interns will be required to attend certification courses at Ferris State University in Big Rapids, Michigan during the first few weeks of employment.

Planning and Environmental - Kalamazoo

Interns will assist in project planning activities in Southwest Region. Interns will attend local/state/federal rural and urban planning technical group meetings. Work is primarily in the office with minimal work in the field. Through environmental, interns will gain

experience in various topics such as soil erosion and sedimentation control, vegetation management, threatened and endangered species regulations, hazardous materials guidelines, permitting, wetland delineations, and much more. Work will be split between office and field duties.

Projects & Contracts – Kalamazoo

Interns will gain experience in design with the Projects & Contracts unit working on developing capital program projects and preparing required information for the Call for Projects process. Interns will assist with field reviews, traffic counts, crash analysis', etc. Work will be split between office and field duties.

Superior Region

Construction - Crystal Falls, Escanaba, and Newberry

Interns will have opportunities at each of our Transportation Service Center (TSC) locations assisting with construction projects assigned to the TSC working alongside construction technicians and engineers to promote plan review, application of the specifications, plans, proposals, and manuals. This is primarily a field position.

Operations - Newberry

Interns will assist with drafting traffic maintenance plans, transportation projects in design, traffic counts, field reviews for upcoming design projects for the 5-year plan, utility coordination, and conflict resolution for projects currently being designed. This is primarily an office position but will spend some time in the field.

Bridge - Escanaba

Interns will work independently to collect streambed cross sections throughout the Region and have several opportunities to work with the bridge unit to gain experience with bridge inspections, bridge repairs, and the project development process. This is primarily a field position with overnight travel required.

Surveying – Gladstone, Ishpeming, L'Anse and Newberry

Interns will work with professional surveyor's gathering data and performing field site surveys for design projects. This is primarily a field position with overnight travel required.

University Region

Construction - Brighton, Jackson

Interns will have opportunities at each of our Transportation Service Center (TSC) locations assisting with construction projects assigned to the TSC working alongside construction technicians and engineers to promote plan review, application of the specifications/plans/proposals/ manuals. This is primarily a field position.

Bridge - Jackson

Interns will gain experience with bridge inspections, bridge repairs, and the project development process. Interns will spend a considerable amount of time in the field.

Materials and Testing Laboratory - Jackson

Interns will assist the unit in a range of responsibilities related to the daily operational needs of the laboratory by providing administrative and technical assistance/support in bituminous testing operations, aggregate sampling and testing, and assisting in overseeing the daily functions of the materials and concrete laboratory.

Planning - Jackson

Interns will gather information for MDOT's five-year road and project plan along with attending meetings with local agencies, cities, counties, and legislators.

Surveying - Jackson

This is primarily a field position. Interns will spend most of their time gathering survey data. Interns will be exposed to surveys related to right-of-way (ROW) and alignment retracement, boundary surveys for ROW acquisition, hydraulic surveys, and topo/mapping surveys for proposed road and bridge design projects. Interns will glean experience in survey research at the Register of Deeds as well as using our robotic total stations, GNSS receivers, and CADD software to develop digital terrain models and survey deliverables to be used for the design of the project.

Lansing Area

Bureau of Bridges and Structures - Lansing

Intern duties may include field, office and/or lab work such as assist in inspection and sampling of construction materials; develop design plans and contract documents for new, reconstruction, rehabilitation, and emergency bridge projects computer aided design (CAD) and perform 3D modeling; develop work plans and designs that address emergency bridge repairs; perform specialized bridge inspection and maintenance; assist in conducting boring and coring operations, collecting subsurface information, and performing in-situ testing; perform detailed preparation and testing processes for soil, aggregates, and geotextiles; perform bridge and culvert inventory data quality control and analysis for bridges in Michigan.

Bureau of Development - Lansing

Intern duties may include field, office and/or lab work such as use of 3D modeling software to contribute bridge and highway construction designs; use MicroStation to draft, model, and visualize hydrological infrastructure; review and evaluate bridge inspection and project scoping documents associated with applications for funding of non-trunkline bridge replacement, rehabilitation, or preventative maintenance projects; use precision Global Positioning System (GPS) equipment to measure and relate elevations to the Earth's surface

Bureau of Field Services - Lansing

Intern duties may include field, office and/or lab work such as sampling and test aggregates in the field and the lab; receive and process daily asphalt binder samples; analyze and evaluate Soil Erosion and Sedimentation Control (SESC) reports, prepare detailed reports using Microsoft Excel, and present compliance findings, assist in monitoring compliance with state, local and federal rules and regulations; support deployment of software program; assist with Intelligent Transportation Systems (ITS) asset inventory and GIS mapping, connected vehicle infrastructure deployment, and laboratory development; receive and process daily asphalt binder samples; assist with data gathering, tracking, and analyzing pavement performance testing, including the Capital Preventative Maintenance Program (CPM); assist with operational freeway analysis and

traffic death reduction initiatives; conduct field reviews of traffic signal locations, installation design plans, package transportation work authorizations, and inspection work authorizations; participate in the integration of traffic signals into the central signal control software (CSCS); analyze various maintenance systems and policies and perform quality assurance checks for areas; evaluate statewide crash data and trend evaluation; collect and document statewide retro-reflectivity signing data.

Bureau of Transportation Planning - Lansing

The Bureau of Transportation Planning (BTP) performs transportation planning for all modes and monitors statewide travel and traffic volumes, as well as forecasting travel demand. BTP consists of three program areas: Statewide Transportation Planning Division, Asset Management and Policy Division, Data Inventory and Integration Division which includes GIS and Data Collection and Reporting.

Examples of the work assignments Internship Program participants will be performing for BTP at an entry and intermediate level are detailed below:

Statewide Transportation Planning:

- Assist with the Five-Year Transportation Program (5YTP) presentation development for the State Transportation Commission.
- Assist with 5YTP public comment summary and responses.
- Assist with Call for Project analysis, such as cost per lane mile tables, and with the review of candidate projects.
- Assist with funding monitoring reports for trunkline and local templates.
- Review federal and state revenues and assist with trend analysis updates.
- Assist the legislative policy specialists with review and analysis of state and federal legislation and policies.
- Assist the legislative policy specialists in drafting letters to the federal register or legislature.
- Assist the nonmotorized program staff in Act 51 compliance and training coordination.
- Assist in the development of the State Long-Range Transportation Plan.
- Assist in the development and analysis of the Attitudes and Perceptions survey.
- Assist statewide planning staff with assessments of transportation needs, community composition, and community impacts of MDOT programs.

Asset Management and Policy:

- Assist the legislative policy specialists with review and analysis of state and federal legislation and policies.
- Assist the legislative policy specialists in drafting letters to the federal register or legislature.
- Assist the nonmotorized program staff in Act 51 compliance and training coordination.
- Assist in the administrative support to the Transportation Asset Management Council on data analysis, review of policies and other assignments as requested.
- Assist the MDOT Asset Management Section with support of data analytics and review and analysis of MDOT's asset management program coordination.

Geographic Information Systems (GIS):

- Learn and perform the daily tasks of a GIS professional.
- Learn how GIS and geospatial data supports ongoing MDOT business.

- Learn ArcGIS Pro tools and perform analysis.
- Design ArcGIS Online and ArcGIS Enterprise applications.
 - Dashboards
 - Real time reporting applications
 - Story maps
 - Collector applications
- Develop GIS services.
 - Map services
 - Feature services
 - Geodatabase services
 - Data services
- Assist with spatial data creation, editing and data management through a variety of tools.
- Learn to design business and technology project workflows.
- Gain an understanding of Linear Referencing Systems.
- Assist staff in the maintenance of enterprise geodatabases.
 - Design event and feature class schemas
 - Manage business data via Event Editor
 - Create domains
 - Validate datasets
 - Post and reconcile editing versions
 - Field data collection experience

Data Collection & Reporting

- Learn about MDOT's traffic and pavement data collection activities and reporting requirements.
- Learn about the Transportation Data Management System (TDMS) and the various modules used to analyze and report traffic data.
- Learn about the systems and processes used to retain and perform QA/QC on traffic and pavement data.
- Learn how various types of transportation data is collected in the field and uploaded into TDMS and PaveMaPP.
- Generate data reports to support ongoing MDOT business.
- Perform QA/QC work on traffic count data.
- Review, upload, and edit data in the traffic count database and ESRI's Roads and Highways.
- Coordinate traffic count scheduling and data collection with local transportation and planning agencies.
- Maintain and improve traffic segmentation in GIS environment.
- Leverage a variety of applications for spatial analysis and data manipulation
- Assist with projects to improve traffic monitoring program.

University Region - Lansing Transportation Service Center (TSC) – Construction

Interns will have opportunities to assist with construction projects working alongside construction technicians and engineers to promote plan review, application of the specifications/plans/proposals/ manuals. This is primarily a field position.

Blue Water Bridge

Blue Water Bridge - Port Huron

Intern duties include field and office work at an international border crossing. Participate in operations, inspection, maintenance, and asset management tasks. Provide support for light-emitting diode (LED) lighting upgrades, procurement for plaza expansion, and preparation for the anticipated resurface, clean, and coat project. Work will also include support for an environmental reevaluation.

Mackinac Bridge Authority

Mackinac Bridge Authority - St. Ignace

Intern duties include field and office work at the Mackinac Bridge. Participate in operations, inspection, maintenance, and asset management tasks. Analyze traffic patterns using data to best chart anticipated peaks in traffic and provide recommended staffing needs.