

POSITION DESCRIPTION

This position description serves as the official classification document of record for this position. Please complete the information as accurately as you can as the position description is used to determine the proper classification of the position.

2. Employee's Name (Last, First, M.I.)	8. Department/Agency TRANSPORTATION
3. Employee Identification Number	9. Bureau (Institution, Board, or Commission) Highway Operations
4. Civil Service Position Code Description Transportation Engineer-A	10. Division Grand Region
5. Working Title (What the agency calls the position) Region Traffic Operations Engineer	11. Section Operations
6. Name and Position Code Description of Direct Supervisor PEPLINSKI, SUZETTE R; ENGINEER MANAGER LICENSED-3	12. Unit Traffic Safety & Operations
7. Name and Position Code Description of Second Level Supervisor TELLIER, THOMAS; STATE ADMINISTRATIVE MANAGER-1	13. Work Location (City and Address)/Hours of Work 1420 Front Ave. NW, Grand Rapids MI 49504 / M-F, 7:30am-4:30pm (hours may vary)

14. General Summary of Function/Purpose of Position

This position functions as the recognized resource Grand Region Traffic Operations Engineer responsible for the region system mobility program. The goal of this position is to reduce congestion and improve safety in the Region, minimizing traffic impacts utilizing tools and services, to ensure optimal operation of the region-wide transportation system. This position manages the region Intelligent Transportation Systems (ITS) maintenance program, including the performance of the maintenance contractor, coordinates the West Michigan Transportation Operations Center (WMTOC)'s system integration for ITS devices, and is the liaison with the Department of Technology, Management & Budget (DTMB) regarding the WMTOC's hardware and software needs. This position works closely with the other region Traffic Safety & Operations staff and region Transportation Service Centers (TSCs) to continually innovate and advance traffic operations throughout the region.

15. Please describe the assigned duties, percent of time spent performing each duty, and what is done to complete each duty.

List the duties from most important to least important. The total percentage of all duties performed must equal 100 percent.

Duty 1

General Summary:

Percentage: 40

As the recognized resource Traffic Operations Engineer, coordinate and support development of projects during planning and design to maximize future mobility. Serve as region technical support for work zone mobility analysis and implementation.

Individual tasks related to the duty:

- Review plans and attend milestone meetings to ensure Regionwide consistency related to work zone safety and mobility and to coordinate projects, closures, and detours throughout the Region. Participate in mobility planning and maintaining traffic meetings.
- Review project Transportation Maintenance Plans (TMPs) including Construction Congestion Cost (CO³) System analysis to ensure compliance with MDOT's TMP standards. Utilize CO³, Regional Integrated Transportation Information System (RITIS), and mobility analysis.
- Assist project managers in the development of Maintenance of Traffic (MOT) Special Provisions. Perform MOT development for region and TSC projects as workload needs dictate.
- Research potential projects and prepare or assist other region staff with submittal documents for Freeway and Non-freeway Operations template projects. Assist TSCs with identifying projects and preparing submittal documents for Safety template projects.
- Research innovative methods or techniques for system mobility and propose implementation.
- Coordinate Region efforts to comply with the Work Zone Safety and Mobility Manual (WZSMM) including:
 - Review and track project TMPs.
 - Participate on Region Peer Review Team and assist with preparation of review documents.
 - Compile and analyze mobility and safety data for region work zones throughout the year. Prepare year-end Work Zone Safety and Mobility reports.

Duty 2

General Summary:

Percentage: 20

Oversee MDOT's ITS Maintenance Contractor's activities for Grand Region.

Individual tasks related to the duty:

- Work closely with the region Senior ITS Engineer and the ITS Program Office to administer the maintenance contract. Review scope changes and identify improvements to future maintenance contracts.
- Monitor contractor activities to ensure delivery of a high level of service that maintains a reliable ITS system.
- Meet with contractor(s) to review work plans, priorities, and to provide direction for maintenance activities.
- Ensure contractor is in compliance with the terms of the contract, including system availability, contractor response and repair times, and cost and schedule performance.
- Evaluate funding needs and assist in developing the region ITS maintenance budget.
- Develop statements of work, scopes of work, and work authorizations for maintenance contractors. Approve completion of work and payment of invoices.
- Coordinate ITS device availability initiatives. Maintain procedures to detect failed devices, troubleshoot, and coordinate repairs.
- Work closely with region Senior ITS Engineer to identify existing device replacement needs for Device Modernization Program.

Duty 3

General Summary:

Percentage: 20

Lead systems engineering and ITS integration efforts for region and WMTOC. Support MDOT efforts in advanced technology programs and identify opportunities for Grand Region utilization to benefit safety and mobility.

Individual tasks related to the duty:

- Oversee the integration of ITS devices from projects, maintenance activities, and other efforts into region systems.
- Assist project managers and engineers in resolving technical issues during construction.
- Provide technical input during project development phase of projects regarding specifications, integration needs, and potential conflicts.
- Apply the understanding of ITS technologies to identify system vulnerabilities. Propose and implement, where possible, actions to mitigate the vulnerabilities.

- Support WMTOC in resolution of our Advanced Transportation Management System (ATMS) issues.
- Work closely with ITS Program Office on Grand region's systems engineering efforts and statewide contracts such as video sharing, asset management, ATMS and reporting tools, Road weather information systems (RWIS), Real Time Data Exchange, and Connected and Automated Vehicle technologies.
- Serve as a liaison between MDOT and DTMB to manage their resources deployed at WMTOC and their impact to the ITS firewall and network.

Duty 4

General Summary:

Percentage: 15

As the recognized resource Traffic Operations Engineer, coordinate work zone efforts to improve mobility throughout Grand Region.

Individual tasks related to the duty:

- Review regionwide projects weekly to mitigate project conflicts and coordinate closures and detours throughout the Region. Work with TSC Project Engineers to coordinate mobility. Projects include construction, maintenance, and permits work zones.
- Coordinate with WMTOC, Region, and TSC staff regarding high impact closures and special events.
- Monitor safety and mobility performance and data for significant work zones and report weekly during active projects. Prepare weekly and annual reports to document projects' performance.
- Work with the TSC Traffic Operations Engineers to coordinate and improve processes with construction staff regarding closures and mobility.
- Perform traffic impact analysis on work zones and lane closures utilizing RITIS or other methods. Maintain updated traffic data and information for future projects.
- Assist Region Operations technicians with work zone traffic control reviews for compliance to project staging plans and MDOT standards.
- Lead the post-construction work zone safety and mobility review process for the Region. Determine projects to be reviewed, track reviews, and document best practices and lessons learned.

Duty 5

General Summary:

Percentage: 5

Other duties as assigned.

Individual tasks related to the duty:

- Prepare and analyze data for the WMTOC operations and systems.
- Support Transportation Systems Management and Operations (TSMO) efforts within the region and statewide, including traffic safety, traffic signals, TOC operations, and other traffic operations.
- Participate in region Road Safety Audits, as needed.
- Serve on statewide teams related to mobility, maintenance of traffic, work zone safety, and ITS.
- Research new technologies, meet with vendors and attend training and events to support TSMO efforts.

16. Describe the types of decisions made independently in this position and tell who or what is affected by those decisions.

This position will make decisions as to means and methods to collect facts, analyze and present data to improve overall highway operations. Decisions will involve standard practices, procedures, and policies applying engineering principles and practices consistent with MDOT, Federal Highway Administration (FHWA), and American Association of State Highway and Transportation Officials (AASHTO) standards and guidelines. This position's decisions will affect and impact the TSC's, region and statewide direction toward an operationally focused department. Decisions will impact the traveling public, transportation providers, and stakeholders within the region on present and future highway operations.

17. Describe the types of decisions that require the supervisor's review.

- When changes in policy are required or existing policy is unclear.
- Changes in previously approved project scope, cost, or schedules.
- Conflicts in engineering standards, practices, or legal requirements.
- Correspondence to or from elected officials.
- Issues that may have State-wide impacts or could be precedent-setting.
- When a decision may be required from an executive level.

18. What kind of physical effort is used to perform this job? What environmental conditions in this position physically exposed to on the job? Indicate the amount of time and intensity of each activity and condition. Refer to instructions.

- Field work (site reviews), exposure to live traffic, and exposure to the natural elements (walking, climbing, and standing required), transporting materials up to 25 pounds.

- May require extended periods of time working on a computer.
- Driving to meetings or training at various locations statewide, possibly outside the normal working hours.
- Must be able to communicate effectively both orally and in writing and possess ability to establish and maintain favorable customer relations.
- Reading documents and plans, both paper and electronic.

19. List the names and position code descriptions of each classified employee whom this position immediately supervises or oversees on a full-time, on-going basis.

Additional Subordinates

20. This position's responsibilities for the above-listed employees includes the following (check as many as apply):

- | | | | |
|----------------------------|------------------------------------|----------------------------|-----------------------------------|
| <input type="checkbox"/> N | Complete and sign service ratings. | <input type="checkbox"/> N | Assign work. |
| <input type="checkbox"/> N | Provide formal written counseling. | <input type="checkbox"/> N | Approve work. |
| <input type="checkbox"/> N | Approve leave requests. | <input type="checkbox"/> N | Review work. |
| <input type="checkbox"/> N | Approve time and attendance. | <input type="checkbox"/> N | Provide guidance on work methods. |
| <input type="checkbox"/> N | Orally reprimand. | <input type="checkbox"/> N | Train employees in the work. |

22. Do you agree with the responses for items 1 through 20? If not, which items do you disagree with and why?

Yes.

23. What are the essential functions of this position?

This position functions as the recognized resource Grand Region Traffic Operations Engineer responsible for the region system mobility program. The goal of this position is to reduce congestion and improve safety in the Region, minimizing traffic impacts utilizing tools and services, to ensure optimal operation of the region-wide transportation system. This position manages the region ITS maintenance program, including the performance of the maintenance contractor, coordinates the WMTOC's system integration for ITS devices, and is the liaison with the DTMB regarding the WMTOC's hardware and software needs. This position works closely with the other region Traffic Safety & Operations staff and region TSCs to continually innovate and advance traffic operations throughout the region.

24. Indicate specifically how the position's duties and responsibilities have changed since the position was last reviewed.

25. What is the function of the work area and how does this position fit into that function?

This position is within the Region Traffic Operations Unit which coordinates the traffic operations activities within the region, including Traffic Safety activities, system mobility, WMTOC, ITS technologies, and Traffic signals. This position coordinates the region mobility program, oversees the region ITS Maintenance program, and provides support for the other functions of the unit. The position works with TSC, Region, State, and transportation stakeholders to improve operations of the state roadway system to enhance mobility, modal connectivity, and safety.

26. What are the minimum education and experience qualifications needed to perform the essential functions of this position.

EDUCATION:

Possession of a bachelor of science degree in engineering.

EXPERIENCE:

Transportation Engineer 12

Three years of professional engineering experience involved in transportation systems and programs equivalent to a Transportation Engineer, including one year equivalent to a Transportation Engineer P11.

Alternate Education and Experience

Transportation Engineer 9 - 12

Possession of a registered professional engineer license as required by the State of Michigan may be substituted for 6

months of experience at the Transportation Engineer 9-12 levels. This substitution may only be used once for any employee for qualification of appointment or early reclassification.

KNOWLEDGE, SKILLS, AND ABILITIES:

Knowledge of:

- Design, construction, and maintenance of transportation projects.
- Traffic engineering practices and procedures.
- Customer service efforts.

Skill in:

- Organization.
- Team building.
- Facilitation.
- Leadership.
- Communication, both verbal and written.

Ability to:

- Read, interpret, and prepare engineering specifications and technical reports.
- Use and instruct others in use of engineering computer programs.
- Evaluate and present information effectively.
- Negotiate favorable solutions to complex issues.
- Maintain good stakeholder relations.

**CERTIFICATES, LICENSES,
REGISTRATIONS:**

Possession of a valid driver's license.

NOTE: Civil Service approval does not constitute agreement with or acceptance of the desired qualifications of this position.

I certify that the information presented in this position description provides a complete and accurate depiction of the duties and responsibilities assigned to this position.

Supervisor

Date

TO BE FILLED OUT BY APPOINTING AUTHORITY

Indicate any exceptions or additions to the statements of employee or supervisors.

None

I certify that the entries on these pages are accurate and complete.

KELSEA COLE

12/7/2022

Appointing Authority

Date

I certify that the information presented in this position description provides a complete and accurate depiction of the duties and responsibilities assigned to this position.

Employee

Date

