

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 CENTRAL OFFICE
3. Employee Identification Number	9. Bureau (Institution, Board, or Commission) Transportation Planning
4. Civil Service Position Code Description Transportation Planner-E	10. Division Data Inventory & Integration
5. Working Title (What the agency calls the position) Transportation Planner	11. Section Geospatial Management and Reporting
6. Name and Position Code Description of Direct Supervisor THICK, JOSEPH P; TRANSPORTATION PLANNING MGR-3	12. Unit Geographic Information Systems (GIS) Unit
7. Name and Position Code Description of Second Level Supervisor JOHNSON, CORY G; STATE ADMINISTRATIVE MANAGER-1	13. Work Location (City and Address)/Hours of Work 425 W Ottawa St Lansing, MI 48909 / 8:00 a.m. - 5:00 p.m. M - F (may vary)

14. General Summary of Function/Purpose of Position

This position performs duties relating to research, coordination, development, and implementation of Geographic Information Systems (GIS) technology on a department-wide basis. The role of this position includes the support and preparation of the Michigan Department of Transportation (MDOT) business data for use within the Transportation Asset Management System (TAMS) and related decision support solutions for various rural and urban transportation system development activities and projects.

This position supports department staff in an assortment of efforts, including creating and plotting effective thematic maps, building dynamic map services using ArcGIS Server technology, and providing GIS troubleshooting and business data maintenance. Preparing and editing enterprise geospatial data to allow for the compiling of reports and summaries as needed.

This position assists in the development of enterprise Linear Referencing System (LRS) map services for MDOT business systems and manages online mapping products of that data for the users of those systems. These services allow business owners to maintain their own enterprise LRS data permitting MDOT to sustain its business data more efficiently which allows for data driven decisions based on current data. This position is responsible for the ongoing research, development, and preparation of leading-edge GIS and LRS applications and solutions to meet MDOT's strategic mission.

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

Supports the department wide use of the Esri Roads & Highways technology in MDOT's ArcGIS Enterprise Portal environment. This includes supporting web tools and users of LRS data in MDOT's ArcGIS Enterprise Portal.

Individual tasks related to the duty:

- Coordinates with MDOT Business Areas to develop their LRS tools and provides training; ensures their business area understands LRS tools and the data they are responsible to manage is kept current on an ongoing basis; creates metrics and validations as needed to accomplish this goal. Supports LRS map services for use in ArcGIS software and other integrations via the server Application Programming Interface (API). Works to identify and deploy innovative and more efficient workflows for MDOT business processes.
- Collaborates with the Department of Technology, Management & Budget (DTMB) Agency Services and the Center for Shared Solutions (CSS) to support the development and deployment of LRS and Event Data editing tools for MDOT staff to manage and maintain business data.
- Researches and analyzes the latest updates, bugs, and patches for the ArcGIS Enterprise environment and partners with DTMB and CSS to ensure a stable environment for MDOT workflows.
- Supports updating and enhancing the ArcGIS Enterprise environment and the workflows that would be impacted.
- Coordinates with the MDOT GIS Unit, DTMB-Center for Shared Solutions, DTMB-Agency Services and MDOT Business owners on the ArcGIS Enterprise updates.
- Assists in the coordination of testing the GIS software and ArcGIS Enterprise updates with DTMB/CSS and MDOT staff.
- Provides support to MDOT's ArcGIS Portal organization account administrator.
- Researches the ArcGIS Portal technology and plans for how and expansion of the technology would best benefit MDOT.
- Supports statewide projects for data collection, management, analysis, and reporting.
- Supports testing and evaluation of mobile technology in support of GIS hardware and software to determine if it will meet the department's needs. Identifies field-based workflows that would benefit the most and communicates these solutions to the Data Inventory & Integration Division (DIID) management; implements workflows as alignment is achieved.
- Supports research and development of new software and products to determine best practices. Compiles summaries and makes recommendations back to DIID management.

Duty 2

General Summary:

Percentage: 20

Supports ESRI's Workflow Manager (WMX) software and the dynamic Esri Roads and Highways workflows.

Individual tasks related to the duty:

- Trains MDOT staff on using WMX to support business workflows and seeks to identify efficiencies on an ongoing basis.
- Makes recommendations to team regarding user feedback as it relates to WMX, compile reports, statistics, and presentations as needed.
- Identifies and creates WMX workflows for business areas to manage business data as a formal and repeatable process to ensure standards are maintained and a stable process is established.
- Supports efforts to establish and organize WMX standards and documentation and regular communications; participates on the Roads and Highways Team.
- Coordinate with bureau leadership, DTMB Agency Service, the Center for Shared Solutions (CSS) and the LRS SME's to ensure the integration of WMX with the VueWorks software for SiGAMS and other IT projects.
- Research and collaborate to establish efficient business workflow orchestration utilizing ESRI's Workflow Manager technology.
- Communicate and collaborate with MDOT data business owners on request to discuss and outline how the TAMS solution could best meet their business needs.
- Supports the Transportation Data Management System (TDMS) workflows as they relate to the integration with the Roads and Highways environment.
- Supports the GIS centric Highway Performance Monitoring System (HPMS) solution and its integration with Roads and Highways technology and the workflows that ensure a timely and successful annual HPMS submittal.

Duty 3

General Summary:	Percentage: 20
Supports of the integrated TAMS GIS environment, services, and related workflows. (Enterprise asset management)	
Individual tasks related to the duty:	
<ul style="list-style-type: none"> • Works on designing, implementing, and operating GIS centric workflows within the VueWorks environment. • Supports the TAMS GIS environment, services, and related workflows. • Validates and loads business data into enterprise GIS databases for use by VueWorks and related workflows; review planned workflows to ensure they function as intended. • Creates and manages map services for use in the TAMS environment. Reviews business requirements and works with business owners to ensure business needs are being met as part of workflows. • Researches and analyzes ArcGIS Server Technology trends to support GIS centric TAMS activities. Makes recommendations to DIID management as needed to remain in alignment with current technology. • Assists in troubleshooting issues with the TAMS environment, keeps GIS services up and running in support of TAMS. 	

Duty 4	
General Summary:	Percentage: 10
Provides GIS Software, Geospatial Services, Data Collection & Reporting and Enterprise GIS Support.	
Individual tasks related to the duty:	
<ul style="list-style-type: none"> • Participates in efforts to solve GIS problems and develop new technology. • Attends trainings to become knowledgeable of the ArcGIS Online environment, Vueworks software, the latest ArcGIS Server Technology trends, and other software in order to assist staff with its implementation to support GIS centric activities. • Takes part in efforts to support GIS users to include training and troubleshooting problems throughout the department. • Identifies data errors and coordinates data cleanup efforts with users to enhance decision making with improved data sets. • Assists in the testing and evaluation of mobile technology in support of GIS hardware and software to determine if it meets the department's needs. • Identifies data errors and coordinates data cleanup efforts with users to enhance decision making with improved data sets. 	

Duty 5	
General Summary:	Percentage: 10
Other duties as assigned.	
Individual tasks related to the duty:	
<ul style="list-style-type: none"> • Assists with related bureau functions as assigned. • Works as assigned to assist in completing strategic plans and goals of the bureau/department. • Prepares thematic maps and data sets for analysis, decision making by management, and publication in MDOT documents. 	

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

Due to the technical nature of duties, guidelines for task or project completion are frequently not available. The journey level employee is expected to exercise considerable independent judgment and initiative in order to complete the required tasks. Whenever possible, identify, recommend, and implement improvements in the methods and material utilized in the position.

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

When established procedures do not produce satisfactory results, when controversy arise, when newly developed procedures impact others, when conflict in priorities occur, or when established schedules cannot be met.

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.

Must be able to receive, understand, research, and respond to reports, memos, letters and other materials. Must be able to travel independently, by commercial transportation or automobile, to attend meetings, project locations, or other work-related activities. Must be able to represent MDOT and make presentations in meetings with local officials, legislators, transportation agencies, or other organizations. Normal effort needed within an office environment. Ability to use a computer. Travel away from work location is required on an occasional basis to other areas, including other cities or states, for periods of time up to several days. Position may require availability outside normal working hours based on operational

needs.

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"/> Complete and sign service ratings. | <input type="checkbox"/> Assign work. |
| <input type="checkbox"/> Provide formal written counseling. | <input type="checkbox"/> Approve work. |
| <input type="checkbox"/> Approve leave requests. | <input type="checkbox"/> Review work. |
| <input type="checkbox"/> Approve time and attendance. | <input type="checkbox"/> Provide guidance on work methods. |
| <input type="checkbox"/> Orally reprimand. | <input type="checkbox"/> 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 performs duties relating to research, coordination, development, and implementation of Geographic Information Systems (GIS) technology on a department-wide basis. The role of this position includes the support and preparation of the Michigan Department of Transportation (MDOT) business data for use within the Transportation Asset Management System (TAMS) and related decision support solutions for various rural and urban transportation system development activities and projects.

This position supports department staff in an assortment of efforts, including creating and plotting effective thematic maps, building dynamic map services using ArcGIS Server technology, and providing GIS troubleshooting and business data maintenance. Preparing and editing enterprise geospatial data to allow for the compiling of reports and summaries as needed.

This position assists in the development of enterprise Linear Referencing System (LRS) map services for MDOT business systems and manages online mapping products of that data for the users of those systems. These services allow business owners to maintain their own enterprise LRS data permitting MDOT to sustain its business data more efficiency which allows for data driven decisions based on current data. This position is responsible for the ongoing research, development, and preparation of leading-edge GIS and LRS applications and solutions to meet MDOT's strategic mission.

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?

The Geospatial Management & Reporting Section is responsible for development and maintenance of the department's geographic information systems (GIS), ArcGIS Online & Enterprise Portal program applications and map services, and data as well as the Transportation Asset Management System (TAMS). GIS support staff are organizationally located within this section and this position performs duties relating to research, coordination, development, and implementation of Geographic Information Systems (GIS) technology on a department-wide basis.

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

EDUCATION:

Possession of a bachelor's degree in any major with at least 30 semester (45 term) credits in one or a combination of the following: planning (city, community, environmental, regional, and/or urban), environmental studies and/or sustainability, environmental sciences, engineering, statistics, mathematics, geography, geographic/geospatial information systems, logistics and/or supply chain management, or economics.

EXPERIENCE:

Transportation Planner 9

No specific type or amount is required.

Transportation Planner 10

One year of professional experience in the planning, mapping, or assessment of transportation, land use, environmental, or community systems equivalent to a Transportation Planner 9.

Transportation Planner P11

Two years of professional experience in the planning, mapping, or assessment of transportation, land use, environmental, or community systems equivalent to a Transportation Planner, including one year equivalent to a Transportation Planner 10.

KNOWLEDGE, SKILLS, AND ABILITIES:

Must know the fundamental principles of GIS. Must also be able to communicate ideas, concepts, and products to a wide range of audiences. Must have knowledge of Global Positioning Systems and techniques used in the collection, organization, and analysis of transportation related data. Must have the ability to plot effective maps and develop methods and procedures for use in the compilation, analysis, and interpretation of data. Must be able to communicate effectively with others.

CERTIFICATES, LICENSES, REGISTRATIONS:

None.

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.

N/A

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

LOGAN BRISTOL

4/3/2026

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