

**State of Michigan
Civil Service Commission**

Capitol Commons Center, P.O. Box 30002
Lansing, MI 48909

Position Code

1. ITPRANE

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 TECH, MGMT AND BUDGET - IT
3. Employee Identification Number	9. Bureau (Institution, Board, or Commission) Agency Services supporting MDHHS
4. Civil Service Position Code Description Info Tech Prgmr Analyst-E	10. Division Data, Analytics, & Visualizations
5. Working Title (What the agency calls the position) ITPA11 – Data Warehouse Modeler	11. Section HUMAN SERVICES BUSINESS INTELLIGENCE
6. Name and Position Code Description of Direct Supervisor AL-ANSARI, MUSTAFA H; INFO TECH MANAGER-3	12. Unit CHILD WELFARE REPORTING TEAM
7. Name and Position Code Description of Second Level Supervisor WYMER, JASON; STATE ADMINISTRATIVE MANAGER-1	13. Work Location (City and Address)/Hours of Work Elliott-Larsen, 320 S Walnut St. Lansing, MI 48933 / 8:00am-5:00pm, Monday-Friday / Hybrid schedule

14. General Summary of Function/Purpose of Position

This position functions as an information technology analyst responsible for design, development, and maintenance of logical and physical database models for the Michigan Department of Health and Human Services (MDHHS) Data Warehouse (DW) databases located on the State of Michigan Enterprise Data Warehouse (EDW). The MDHHS Data Warehouse modeler serves as a primary source of strategic and operational information. The Data Warehouse Modeler needs to understand the current models and determine models to be developed based on the needs of the agency. Additionally, this position ensures standards, such as naming, abbreviation, definitional, and diagram, are followed to ensure consistency and adherence to best practices. The position will represent the team and coordinate team activities with other data warehouse teams on complex, multi-team projects, and will work with other data warehouse developers to review existing data warehouse structures, modify DDL work items as needed, or propose different designs.

This position is located on Michigan Department of Health and Human Services (MDHHS) Data Warehouse Team. Knowledge of data warehouse tools used to design and manage database schemas in multiple environments, along with relational database experience is required to help develop and maintain MDHHS data warehouse applications and queries. Additionally, this position ensures standards, such as naming, abbreviation, definitional, and diagram, database schemas are followed to ensure consistency and adherence to best practices

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: 60

Database design, development and deployment/Performance monitoring/turning/break-fix/troubleshooting. Support the developers and customers in the design and implementation of the database. Complete database change requests going from development into QA and production. Monitor and/or tune memory allocation, input/output, system and database performance and database objects. Address production database problems. Serve as a technical resource in the area of database administration for all supported relational database management systems.

Individual tasks related to the duty:

- Follow and enforce database standards, policies & procedures. Research and draft guidelines within the boundaries of current policies and standards.
- Through continuous education, keep abreast of new technology and standards. Report back findings to senior level DBA and team regarding current assignments and apply that learning to environment.
- Monitor space allocation across databases. Under direction of DBA, perform adjustments in test and development environments as necessary and as prescribed by predefined standards/guidelines.
- Calculate disk space requirements for existing and/or new installations of existing business needs working with a senior-level DBA as necessary.
- Modify DBMS parameters based on capacity changes as determined by senior-level DBA.
- Under the authorization of a senior-level DBA:
 - Configure and execute database integrity checks.
 - Implement the strategy to release unused space or repair fragmentation in test and development environments.
 - Install database management software for development and test environments.
 - Install database patches and service packs for development and test environments.
 - Monitor and support clustered database environments.
 - Monitor and support database replication.
 - Monitor and support database backup environments.
 - Execute (run) scripts provided by Systems Analysts or Database Architect/Designer for creating and modifying database objects (tables, views, constraints, indexes, etc.)
 - Implement roles and profiles
- Working with senior-level DBAs, research security patches.
- Create database user accounts and new schemas in development and test environments.
- Implement & enforce standard password security policies.
- Implement audit options.
- Perform Data Export/Import/Load and data transformations between databases in development and test environments.
- Perform development and test data file transfers between different systems.
- Monitor for database space utilization and report issues to senior level DBAs. Resolve fragmentation in development and test environments.
- Monitor for database integrity checks. Report integrity issues to senior level DBAs.
- Monitor database back-ups to ensure recoverability. Troubleshoot backup errors and report unresolved issues to a senior-level DBA.
- Monitor development, test and production database environments for performance. Notify senior-level DBAs about performance issues and participate in resolution
- Identify, monitor, and report locking conflicts to senior-level DBAs.
- Monitor for undo/redo/transaction log configuration issues affecting database functionality and performances and report them to senior-level DBAs.
- Review server-generated and threshold-based alerts, resolve alerts or notify senior-level DBAs as necessary.
- Monitor database environments (using alert logs, trace files, alert mechanisms, and other tools) for issues and problems with database functionality, connectivity, or downtime.
- Monitor database jobs and scheduled processes in development, test and production environments. Notify senior-level DBAs and application support staff about any issues. Participate in troubleshooting.
- Agrees to follow all policy, standards and procedures of DTMB.

Duty 2

General Summary:

Percentage: 20

Using Teradata, the MDHHS Data Warehouse environment and other data environments, this position independently supports other developers supporting MDHHS Data Warehouse. This includes overseeing the creation of the DDL scripts and quality assurance processes and verifying that development standards are utilized during the design processes. This position is also responsible for determining that all development has been done in a manner that will maintain acceptable system response times. This requires a thorough understanding of the data models of the originating production systems' tables and the relationship of those tables.

Individual tasks related to the duty:

- Recommend action to increase application performance i.e., update, response time, throughput, reliability, scalability, etc.
- Evaluate and recommend software fixes to resolve problems with modeling tools.
- Represent DTMB Child Welfare data warehouse as a technical resource at meetings.
- Provide professional technical expertise to the DTMB IS PMO Managers and client agency manager and supervisors in IT project planning, scheduling and execution.
- Perform deployment activities across Production, Test and Development servers.
- Apply and manage security restrictions (application level, folder level and object level) based on user profile and groups.
- Write complex SQL/PL SQL Queries.

Duty 3

General Summary:

Percentage: 15

Develop and maintain logical and physical data warehouse models supporting MDHHS' strategic directions and to meet their missions/goals and day-to-day business needs.

Individual tasks related to the duty:

- Develops and maintains logical and physical data models based on information provided by MDHHS's business and data analysts
- Enhance logical and physical data warehouse models to meet new and changing MDHHS business requirements
- Provide guidance to systems analysts, based on documented standards, in creating and modifying application specific database objects
- Coordinates the mapping of the source data elements to their target destinations within the data warehouse models
- Calculate disk space requirements for existing and/or new installations and growth based on changing business requirements
- Makes recommendations and offers alternative strategies for implementation of MDHHS's business needs as logical and physical models
- Acts as a technical expert to development staff in all phases of the database design process

Duty 4

General Summary:

Percentage: 5

Performs special assignments as assigned.

Individual tasks related to the duty:

- Keep abreast of new technologies through professional reading, seminars, etc.
- Serve on IT related advisory groups and interview panels upon request.
- Attend IT related meetings and seminars upon request.
- Update tracking systems (i.e. project office, remedy tickets, service desk) effectively and efficiently.
- Perform research to support special projects.
- Perform related work as is deemed necessary and appropriate by the supervisor.
- Identify, recommend and implement improvements in the IT operations of assigned systems.
- Participate in IT projects that impact area of responsibility, as needed.
- Participate in statewide IT initiatives as necessary, appropriate and required by supervisor.

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

- Design and implementation of DDL scripts for MDHHS data warehouse.
- Data source and content of MDHHS reports and queries.
- Distribution of customer requested queries.
- Users of MDHHS Applications in State are affected by these decisions.

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

- Major security actions affecting MDHHS.
- Implementation of new security policies and standards.
- Decisions that have or may have legislative, legal, or budgetary impact.
- Action to be taken in the event of a major security problem.

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.

No physical or environmental restrictions. Position is assigned to a desk/professional office environment. The majority of the work is performed sitting at a workstation suitable for a personal computer user. A minimum effort may be required to travel to other locations within the area.

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):

- | | |
|---|--|
| ☐ Complete and sign service ratings. | ☐ Assign work. |
| ☐ Provide formal written counseling. | ☐ Approve work. |
| ☐ Approve leave requests. | ☐ Review work. |
| ☐ Approve time and attendance. | ☐ Provide guidance on work methods. |
| ☐ Orally reprimand. | ☐ 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 will be responsible for the design, development, and maintenance of all logical and physical models of all MDHHS Data Warehouse databases located on the SOM Enterprise Data Warehouse Teradata platform.

Competencies (in alphabetical order): Building Strategic Working Relationships, Building Trust, Coaching, Communication, Contributing to Team Success, Customer Focus, Decision Making, Initiating Action, Innovation, Technical/Professional Knowledge

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

Establishment

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

The Data, Analytics, & Visualizations (DAV) Division develops and maintains Data Warehouse (DW) applications to support Michigan Department of Health and Human Services (MDHHS) programs. This position is part of the support structure of a service-oriented organization. Knowledgeable, technical staff are needed to meet the commitments of the Department/Agency without further compromising staffing of other priority projects.

The MDHHS Data Warehouse serves as a primary source of strategic and operational information. This position has responsibility for the design, development, and maintenance of logical and physical database models for the MDHHS Data Warehouse databases located on the State of Michigan Enterprise Data Warehouse (EDW). This position determines the models to be developed and ensures consistency and adherence to best practices.

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

EDUCATION:

Information Technology Programmer/Analyst 9

Possession of an Associate's degree with 16 semester (24 term) credits in one or a combination of the following: computer science, data processing, computer information systems, data communications, networking, systems analysis, computer programming, information assurance, IT project management or mathematics.

Information Technology Programmer/Analyst P11/12

Possession of a Bachelor's degree with 21 semester (32 term) credits in one or a combination of the following: computer science, data processing, computer information systems, data communications, networking, systems analysis, computer programming, information assurance, IT project management or mathematics.

EXPERIENCE:

Information Technology Programmer/Analyst 9

No specific amount or type is required.

Information Technology Programmer/Analyst P11

No specific type or amount is required.

Alternate Education and Experience

Information Technology Programmer/Analyst 9

Educational level typically acquired through the completion of high school and two years of experience as an application programmer, computer operator, IT Technician, or two years (4,160 hours) of experience as an Information Technology Student Assistant may be substituted for the education requirement.

KNOWLEDGE, SKILLS, AND ABILITIES:

- Knowledge and proven skills in data modeling and data modeling tools
- Knowledge and proven skills in data warehousing and Teradata tools
- Knowledge of one or more computer programming languages and basic programming logic
- Ability to prepare detailed written instructions and documentation
- Ability to analyze instructions and data
- Ability to gather and analyze facts, define problems, and devise solutions
- Ability to plan and develop basic and detailed mechanical and clerical procedures for use in data processing systems
- Ability to effectively make oral and written reports and presentations and prepare clear and concise graphs and charts
- Ability to maintain records, prepare reports, and conduct correspondence related to the work
- Ability to communicate technical terminology at a level appropriate to the audience
- Ability to support and design in MS SQL Server and/or Oracle SQL

CERTIFICATES, LICENSES, REGISTRATIONS:

Duties may involve the use of a vehicle.

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.

AMY MILLER

8/19/2026

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