Position Code
1. ITPRANAJ08N

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 DHHS
4. Civil Service Position Code Description INFO TECH PRGMR ANALYST-A	**10. Division** Data, Analytics, & Visualization
5. Working Title (What the agency calls the position) ITPA12 – Senior Data Warehouse Modeler	**11. Section** Data Warehouse Admin & Health Systems Reporting
6. Name and Position Code Description of Direct Supervisor WILCOX, DAWN E; INFO TECH MANAGER-3	**12. Unit** Architecture & Administration
7. Name and Position Code Description of Second Level Supervisor HANNA, RYAN M; STATE ADMINISTRATIVE MANAGER-1	**13. Work Location (City and Address)/Hours of Work** Grand Tower, 235 S Grand Ave, Lansing, MI 48933 / 8:00am-5:00pm, Monday-Friday / Hybrid schedule

14. General Summary of Function/Purpose of Position

As a Senior Database Administrator, the employee performs a complete range of information system database analyst assignments including, but not limited to, designing, developing, testing, and implementing database systems for the Michigan Department of Health and Human Services (MDHHS) Data Warehouse (DW) located on the State of Michigan Enterprise Data Warehouse (EDW). This individual will be looked upon to provide technical support to other team members and evaluate new database solutions and technologies. They will provide maintenance, support and assistance to specialist DBAs with installation and configuration of clustered database failover, database replication, and database backup solutions.

This position will act as the Senior Data Warehouse Modeler and has responsibility for the 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 serves as a primary source of strategic and operational information. The Senior 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.

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:**   **80**

As a senior level IT programmer/analyst, use advanced principles and procedures of systems design methodology, structured systems design, and automated data processing techniques for new and existing complex computer applications.

Individual tasks related to the duty:

• Research, draft, and recommend database standards and policies.
• Coordinate with vendor support to address technical issues that could not be resolved in-house.
• Participate in the planning process to match emerging technologies with future business needs.
• Establish standards and guidelines for database space allocation based on best practices and implementation considerations based on business requirements.
• Calculate disk space requirements for existing and/or new installations and growth based on changing requirements.
• Measure and/or forecast current capacity, gauge the growth of capacity over time, and factor in the anticipated capacity requirements to determine whether the existing infrastructure can sustain the anticipated workload.
• Research/Analyze/Determine appropriate changes to DBMS parameters to support future application, database needs.
• Research/Analyze/Determine appropriate hardware changes to support future application and database needs. Report recommendations to appropriate DBA specialist and/or technical services.
• Review results of database integrity checks. Resolve identified issues.
• Design appropriate strategy to reorganize database objects to release unused space or repair fragmentation.
• Provide maintenance, support, and assistance to specialist DBAs with installation and configuration of clustered database failover, database replication solutions, and database backup solutions.
• Design security model based on set standards. Create schemas in production environments based on defined and approved forms and procedures.
• Implement data encryption.
• Design, configure, and initiate auditing with appropriate options as needed.
• Create and deploy new database in development and test environments.
• Ensure and validate the integrity and quality of the scripts to be promoted to any of the environments.
• Provide guidance to systems analysts, based on documented standards, in creating and modifying application specific database objects.
• Perform Data Export/Import/Load and data transformations between databases in production environments.
• Perform production data file transfers between systems, across state agencies, federal government, vendors, etc.
• Analyze and resolve database space utilization in production environments. Analyze and resolve issues with database integrity in development, test, and production environments.
• Design/Implement database backup solutions based on business needs including configuration, testing, implementation, modification, automation and monitoring of backup and recovery solutions and troubleshoot more complex backup issues. Work with Enterprise Backup & Recovery to design and implement backup policy using available technology.
• Perform database restorations and point in time recovery to avoid data loss and meet service levels objectives.
• Perform troubleshooting of performance issues and provide required solution.
• Analyze databases for optimal performance and investigate poorly performing SQL statements and offending database sessions. Perform database performance tuning by identifying index candidates, updating database statistics, using appropriate optimization techniques, optimizer hints and other methods. Document tuning procedures.
• Perform thorough analysis and investigation to resolve locking conflicts. (i.e.: Locking conflicts can be shared or exclusive. Shared is multiple users accessing at the same time. Exclusive is only one user/process can access at a time. Locking conflicts can also be at different levels and an incorrect resolution can cause corruption or loss of data.)
• Analyze and resolve issues related to undo/redo/transaction log configuration and sizing in development, test and prod.
• Analyze and resolve server generated and threshold-based alerts. Perform resolution for the alert causes and provide recommendations for setting up appropriate alert thresholds.
• Implement defined initialization parameters, database instance memory structures, and physical data layout for optimal performances.
• Monitor database jobs and scheduled processes, perform troubleshooting, and provide resolution for any issues with jobs/processes as necessary. Document solution and provide root cause analysis.
• Agrees to follow all policy, standards and procedures of DTMB.

Duty 2

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:

• Develop and maintain logical and physical data models of MDHHS's Data Warehouse based on information provided by MDHHS's business and data analysts.
• Enhance the logical and physical data warehouse models to meet new and changing MDHHS business requirements.
• Lead joint application development sessions with MDHHS to clarify technical needs, reporting and analytical requirements, and identify data sources.
• Oversee mapping of the source data elements to their target destinations within the data warehouse models.
• Make recommendations and offer alternative strategies for implementation of MDHHS's business needs as logical and physical models.
• Act as a technical expert to development staff in all phases of the database design process.
• Provide technical oversight on projects to develop new data warehouse applications and databases which assist MDHHS with their strategic objectives.
• Advise MDHHS executives and business analysts in the determination of data needs and availability.
• Develop and recommend data conversion strategies for MDHHS data warehouse designs.
• Assist BAs and MDHHS staff across all areas in identifying long-term, strategic data needs for MDHHS, defining how the data is related to the business processes and developing a conceptual and functional MDHHS-wide model of the data.
• Recommend and direct efforts to promote the sharing of information between systems.
• Coordinate and facilitate the resolution of data conflicts that arise because of multiple systems sharing information.
• Research MDHHS' reporting and analytical needs to ensure the efficiency of the database models.
• Lead joint application development (JAD) sessions with MDHHS to clarify reporting and analytical needs.
• Research/Analyze data needs to help develop modeling solutions to meet MDHHS's reporting/analytical requirements.
• Provide support in the development of Business Intelligence reports and analytics.

Duty 3

General Summary: **Percentage:**   **5**

Perform special assignments as required.

Individual tasks related to the duty:

• Perform special functions appropriate to the position as assigned by the immediate supervisor.
• Make presentations about the models to development teams, customers, Agency management, representatives from other State agencies/departments and others.
• Lead or participate in task forces, special committees, and research groups, to support development of major data processing applications and establishment of Agency standards.

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

The decisions that are made independently are those that involve the development and maintenance of the logical and physical models that are located on the MDHHS Data Warehouse. Appropriate decisions are made regarding designing models for MDHHS to ensure that MDHHS's business requirements are met with an efficient and scalable model. The results of this action could affect some or all customers of the MDHHS Data Warehouse environment, and all other customers of the Enterprise Data Warehouse (EDW). The position is responsible for making decisions on database performance and data integrity in the MDHHS Data Warehouse environment.

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

• Deviate from practices, standards, or written policies.
• Impact approved scope, schedule, or cost.
• Requires endorsement from managers of other impacted systems, and/or impact budget and staffing needs.
• Impacts the strategic priorities of the client agency.
• Impacts enterprise security considerations or decisions requiring additional review by policy.
• Involve recommendations for technical design that may have a direct impact on other MDHHS systems, other State Agency systems, or the Enterprise Data Warehouse.

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.

Position is located within a standard office location or standard conference room settings.
A minimum amount of effort may be required to walk or drive to locations other than primary work location.
Position subject to stress and pressure to resolve problems quickly and effectively.

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):

N	Complete and sign service ratings.	N	Assign work.
N	Provide formal written counseling.	N	Approve work.
N	Approve leave requests.	N	Review work.
N	Approve time and attendance.	N	Provide guidance on work methods.
N	Orally reprimand.	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 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 Trust, 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.

PD Update; the essential duties and tasks have not changed since last reviewed, the update is an additional duty added.

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 is 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 12
Two years of professional experience equivalent to an Information Technology Infrastructure or Programmer/Analyst P11.

Alternate Education and Experience

Information Technology Programmer/Analyst P11 - 12
Possession of an associate's degree with 16 semester (24 term) credits in computer science, information assurance, data processing, computer information, data communications, networking, systems analysis, computer programming, IT project management, or mathematics and two years of experience as an application programmer, computer operator, or information technology technician; or two years (4,160 hours) of experience as an Information Technology Student Assistant may be substituted for the education requirement.

OR

Completion of high school and four years of experience as an application programmer, computer operator, information technology technician, or four years (8,320 hours) of experience as an Information Technology Student Assistant may be substituted for the education requirement.

KNOWLEDGE, SKILLS, AND ABILITIES:

KNOWLEDGE OF:
• Relational database modeling, database administration, data warehousing, SQL
• One or more computer programming languages and basic programming logic
• Teradata and Business Intelligence
• ERWIN or other modeling software
SKILLED/EXPERIENCE IN:
• Database modeling
• ERWIN or other modeling software
ABILITY TO:
• Work with minimal supervision
• Independently apply critical analytical thinking and possess strong analytical ability
• Use excellent oral and written communication skills, as well as interview and elicitation skills
• Use excellent organization, facilitation, and coordination skills

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	1/6/2026
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**

Employee	**Date**