



MAINE TURNPIKE AUTHORITY Job Description

Job Title: Director of Data Engineering and Analytics
Pay Range: Management/Confidential 24
Reports To: Chief Engineer

Department: Engineering
FLSA Status: Exempt

Summary

Reporting to the Chief Engineer, the Director of Data Engineering and Analytics is responsible for advancing the Maine Turnpike Authority's enterprise data, analytics, and reporting capabilities by combining hands-on analysis and delivery with strategic leadership. This role partners with executive and department stakeholders to define a vision and roadmap for data access, data analysis and data visualization, establish governed performance metrics and decision-support frameworks, and ensure high-quality, executive-ready reporting across the organization. The Director will build, lead, and mentor a high-performing team of data scientists and analytics professionals, guiding the development and adoption of scalable solutions across business intelligence, data warehousing, GIS, advanced analytics, and AI-enabled capabilities.

Essential Job Functions

These functions reflect management's assignment of essential duties; it does not prescribe or restrict all the tasks that may be assigned.

- Leads and creates data reporting and analysis solutions for high-impact business problems.
- Works with other departments on the development, adoption, and use of the data warehouse and business intelligence platform.
- Collaborates with cross-functional teams to integrate data solutions into enterprise systems.
- Accesses well-governed data from IT department and develops reporting, insights, data storytelling, and compelling data visualizations to support the operation of the Maine Turnpike.
- Recruits, develops, and manages a high-performing team of data scientists.
- Drives innovation through the adoption of emerging technologies and methodologies.
- Collaborates on data governance, compliance, and performance optimization.
- Communicates complex solutions and insights to executive stakeholders.
- Ensures executive-ready and detailed reporting, performance metrics, and decision support frameworks are established and governed.
- Builds effective relationships across the organization.
- Researches and adapts to advances in tolling, business intelligence, data and analytics, and geographic information systems.
- Analyzes problems, provides alternatives, identifies solutions in support of established goals, anticipates consequences of proposed actions, and implements recommendations.

To perform this job successfully, an individual must be able to perform each essential function satisfactorily. Reasonable accommodations under applicable law may be made to enable qualified individuals to perform these essential functions.

Minimum Position Qualifications

- Bachelor's degree in data sciences, engineering, finance, mathematics, or similar field.
- 10 years of experience in data warehousing, business intelligence, advanced analytics, geographic information systems, artificial intelligence, program controls, and data governance.
- 5 years of staff management experience.
- Experience with on premises and cloud-hosted data environments.
- Strong leadership, management, communications, presentation, business relationship, interpersonal skills.



- Experience with practical applications of Artificial Intelligence (AI).
- Experience supporting executive leadership and boards.
- Experience with enterprise-wide strategy related to reporting, analytics, program controls, and external partnerships.

Preferred Position Qualifications

- Master's degree in data sciences, engineering, finance, mathematics, or similar field.
- 5+ years' experience with GIS applications.
- 5+ years' experience supporting business operations with more than 1 million daily transactions.
- Strong working knowledge of cost modeling, database, and presentation software, including MS Excel, Tableau, and PowerBI.
- Prior familiarity with the tolling industry, including collections back-office systems, IT systems, roadway systems, engineering, and asset management.
- Experience with Python, Scala, JavaScript.