JOB DESCRIPTION

NEW YORK STATE BRIDGE AUTHORITY (NYSBA)

TOLLING & DATA INSIGHTS MANAGER
Tolling, IT and Security

Reporting directly to the Director of All Electronic Tolling, the Tolling & Data Insights Manager will work with the Tolling & Revenue Audit, Information Technology and Safety & Security departments to establish agency business intelligence (BI) strategy, data governance policies, and lead data analysis and visualization across the organization. The Tolling & Data Insights Manager will also be responsible for oversight of the toll system integrator and assist with data mining at the E-ZPass Back Office system (BOS) to support reporting and management decision making.

There are three entities that comprise our E-ZPass and Toll By Mail program:

1. E-ZPass NY Customer Service Center consisting of Tolls By Mail Customer Service, E- ZPass Customer Service and Back Office Transaction Processing of all tolls;
2. Collections of NYSBA receivables, consisting primarily of All Electronic Tolling (AET) Unpaid Tolls; and
3. AET Toll Systems Provider (TSP)/Integrator.

The Tolling & Data Insights Manager will work with Department Directors, the Deputy Executive Director and the Executive Director in data analysis and visualization activities to support management decisions, directives and agency goals. They will also participate in program audits and ensure compliance with all necessary contract requirements.

Finally, the Tolling & Data Insights Manager will be responsible for mentoring and training NYSBA staff dedicated to data analysis activities.

The responsibilities of the Tolling & Data Insights Manager include:

AET Program and Toll System

ACTIVITY   Oversee AET Toll Systems Provider (TSP) to maximize system performance and reduce errors to maximize toll collection

TASKS:

1. Acquire an in-depth understanding of NYSBA toll system operations, protocols, and data flows to effectively translate operational needs into BI solutions
2. Collaborate with TSP and Analysts to derive insights that enhance toll operations, user experiences, and revenue generation
3. Lead toll system testing with system integrators, including review of test plans, test scripts, testing results etc.
4. Monitor toll system Key Performance Indicators (KPIs) and work with TSP to ensure KPIs are achieved
5. Review integrator deliverables and develop KPI tracking methodology to include in reports/dashboards
6. Work with TSP to ensure vehicle transactions including tag reads and images are successfully captured in toll lanes and transmitted to the back office

7. Provide regular review, analysis, and evaluation of the toll system performance in order to identify any areas of deficiency
8. Assist with the implementation and ongoing modifications to AET on NYSBA bridges between E-ZPass CSC Contractor, NYSBA staff, and AET Toll System Provider to ensure a seamless customer experience
9. Work with Toll & Revenue Audit staff to develop and maintain a management reporting system to keep management abreast of AET Program

Data Insights Manager

ACTIVITY   Manage Data Analysis and Reporting across multiple departments

TASKS:

1. Leverage toll system and multiple internal reporting system data to analyze traffic patterns, toll collection efficiency, user behaviors and the effectiveness and efficiency of staff responses to different types of incidents , identifying opportunities for optimization
2. Create comprehensive reports and interactive dashboards that offer valuable insights to stakeholders, aiding in operational improvements and strategic planning
3. Develop and maintain automated reporting processes to ensure efficient and accurate data delivery

ACTIVITY   Oversee Data Visualization Efforts

TASKS:

1. Design intuitive and visually appealing toll system and safety and security data visualizations and dashboards, facilitating easy interpretation for diverse stakeholders
2. Present complex toll data insights effectively to both technical and non-technical audiences, enabling well-informed decision-making

ACTIVITY   Develop Data Governance and Quality Programs

TASKS:

1. Work with inter-departmental teams to establish and implement data governance standards that ensure the accuracy, consistency, and security of toll system and traffic/security data
2. Conduct regular data quality assessments and validations to maintain the integrity of toll and traffic/security data for analytical purposes

ACTIVITY   Develop Business Intelligence Strategy

TASKS:

1. Collaborate with toll system and cross-functional teams to understand operational requirements and business objectives
2. Assist in establishing the Authority's BI strategy, aligning it with broader organizational goals, and ensuring seamless integration with toll operations
3. Stay abreast of toll industry trends, emerging technologies and best practices to drive continuous improvements and innovation

4. Participate in cross-functional teams in identifying and prioritizing how integrating Artificial Intelligence (AI) capabilities can safely drive operational and functional benefit to the Authority.

ACTIVITY   Implement Continuous Improvement Programs

TASKS:

1. Explore and recommend emerging BI technologies and toll system enhancements to optimize data utilization and operational efficiency
2. Mentor junior team members in BI concepts and practices, fostering a culture of learning and growth within the IT and Toll & Revenue audit departments

ACTIVITY   Upgrading & Developing Internal Authority Software Systems

TASKS:

1. Assist with upgrading Authority-developed software programs such as Incident Management Program, Accident Incident Reporting System, Time & Accrual Database
2. At the direction of the Director of IT, provide data analysis and reporting related to Authority developed programs and databases
3. Work with IT staff in the development of software programs, dashboards, databases, etc.

Other Duties:

Collaborate with Other Authority Functions – Includes coordination and collaboration with other Authority functions including, but not limited to: Engineering, Maintenance, IT, Public Information, and Traffic/Security.

Any other activities assigned by the Director of All Electronic Tolling