Position Identification

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Position Title	Data Architect		
Position Replaces	N/A		
Position Level	Employee	**Position Code**	2026
Pay Group	Group 12	**Date (last revised)**	Jun-24
Supervisor Title	Manager, Enterprise Data & Analytics	**Sup. Position Code**	1324
Additional Requirement	CRC	TMA	
Division	Information Technology	**Flexible Work Arrangement**	Flexible or Remote

Organizational Description

BC Transit is a provincial crown corporation responsible for the overall planning and delivery for all of the different municipal transportation systems within British Columbia, outside Greater Vancouver.

Our Mission: Delivering transportation services you can rely on

Department Summary

The Enterprise Data and Analytics team is responsible for ensuring that the use of Data & Analytics and Data Management are carried out in a manner that is secure, sustainable, and benefits BC Transit at an enterprise scale. In this role the team leads the Data Governance process as well as providing subject matter expertise and support in a variety of Data Management practices from Business Intelligence and Reporting to Operational Data Engineering.

The Data Architect role is responsible for making sure that organizational data is managed and integrated with an enterprise scope, in a fashion that reduces duplication, promotes reusability, and promotes agility. To accomplish this, they will work in concert with the other data disciplines on the EDA team to bridge business needs (Governance) with technical needs (Engineering) so they can bring maximum value to the business.

Job Overview

Reporting to the Manager, Enterprise Data & Analytics, The Data Architect's role is to apply a holistic lens to the design of the data systems, flows and models, that enable BC Transit to store, curate and integrate data assets in a way that maximizes value for the enterprise.

This role requires close collaboration with business and technical SMEs to bridge the gap between requirements and implementation. The Data Architect will carry out their work in a way that simultaneously accommodates individual use cases, while promoting consistency and reusability. This role is responsible for implementing reference & master data practices that eliminate organizational data silos and enables business processes such as Reverse ETL and self-serve analytics. In addition, the Data Architect plays a pivotal role in designing and documenting the bi-directional flow of data between new projects/systems and the existing enterprise data estate.

This role requires a deep understanding of modern data management and architecture practices. This includes a solid grasp of core data management and IT principles as well as extensive experience designing and developing conceptual, logical, and physical enterprise data models and data flow diagrams.

You will employ best practice in development, security, accessibility, and design to achieve the highest quality of service for our customers as part of a cross-discipline agile team whose goal is to help each other solve problems across all business areas.

Key Accountabilities and Expectations

Key Accountability	Expectation
Leadership and Governance	- Mentor other data professionals on best practices and grow data capability within the team. - Leads and participates in the peer review and quality assurance of project architectural artifacts across the EA group through governance forums. - Defines and manages standards, guidelines, and processes to ensure data quality.
Technology Evaluation	- Evaluates and recommends emerging technologies for data management, storage, and analytics. - Continuously simplifying existing data architecture, delivering reusable services and cost-saving opportunities in line with the policies and standards.
Project Support and Strategy Implementation	- Support IT projects by applying data architecture practices to solution design and implementation. - Provide subject matter expertise on the growth and evolution of the data platform and assist in developing roadmaps for future innovation.

	• Interpret and deliver impactful strategic plans improving data integration, data quality, and data delivery in support of business initiatives and roadmaps. • Participate in Agile work planning to align tasks with business needs. • Support the development of standards for database management systems across BC Transit. • Works with other IT teams, architecture groups, project teams, and data analytics members to understand data consumers' needs and develop solutions.
Data Design and Modelling	• Develop and maintain conceptual and logical enterprise data architecture diagrams that map where data is generated, stored, and used as well as how data flows between different systems. • Develop conceptual and logical enterprise data models that decouple data from source systems and map relationships between business entities to support consistent integrations, reporting, and KPIs. • Design master datasets for corporate assets such as business units, vehicles, employees, etc. • Design reference datasets for corporate entities such as transit systems, service types, vehicle types, etc. • Designs processes and standards for the data management processes (e.g., ETL, integrations, etc.) from various sources into BC Transit's data systems. • Translates high-level business requirements into data models and appropriate metadata, test data, and data quality standards.
Additional Duties	• Performs related duties in keeping with the purpose and accountabilities of the job

Summary of Qualifications and Job Specific Competencies	
Education	• Post secondary degree in Computer Science, Software Engineering or related technical degree • Certifications in TOGAF, Open CA, or Zachman are considered an asset. • Certifications in cloud platforms (e.g. AWS Solution Architect, Azure Solutions Architect), ITIL, or other architecture certifications are considered an asset. • Certified Data Management Professional certification (CDMP) or equivalent
Experience	• Five (5) years' experience designing and implementing data models for enterprise data initiatives. • Two (2) years of demonstrated experience designing and documenting sustainable data architectures at enterprise scale.

	• Experience in implementation of enterprise-scale cloud or software projects in corporate environments using agile, hybrid, and waterfall methodologies. • An equivalent combination of education and experience may be considered
Key job-specific competencies	• Demonstrated experience collaborating with data analysts, software developers and business stakeholders to understand data requirements and translate them into technical solutions. • Demonstrated experience designing and implementing enterprise data models for sustainable and scalable use in enterprise data warehouses & data lakes. • Experience leading projects involving data warehousing, data modeling, and data analysis • Ability to design and implement modern cloud data stacks utilizing big data technologies such as Spark, Databricks, Synapse, etc. • Proven skills in applying data management fundamentals to business processes such as, master data management, data quality control, metadata, reference data management, security, storage etc. • Ability to demonstrate mentoring & coaching of data teammates and developing team capability. • Experience contributing to innovation roadmaps related to data management. • Experience working and leading in an Agile Product Management environment. • Proficiency in the design and implementation of modern data architectures and concepts such as cloud services (AWS, Azure, GCP), real-time data distribution (i.e.: Kafka, Dataflow), and modern data warehouse tools (Onelake, Snowflake, Databricks) • Experience with database technologies such as SQL, NoSQL, Oracle, Hadoop, or Teradata • Understanding of entity-relationship modeling, metadata systems, and data quality tools and techniques • Ability to think strategically and relate architectural decisions and recommendations to business needs and client culture • Ability to assess traditional and modern data architecture components based on business needs • Experience with business intelligence tools and technologies such as ETL, Power BI • Ability to regularly learn and adopt new technology, especially in the ML/AI realm