Chief Data Officer *Colorado Dept of Transportation*

Job Description

Description of Job

The Colorado Department of Transportation is seeking an exceptional business-focused individual to drive the longterm definition and implementation of CDOT's data strategy, maximizing data integration and architecture, driving data acquisition, ensuring data security, and most importantly, evaluating and implementing how big data aids in the achievement of CDOT's strategic objectives to improve safety and mobility on our transportation system.

Overview of the Position

With the rise in service-oriented architectures (SAP and GIS), the need for large-scale system integration, and heterogeneous data storage/exchange mechanisms (Traffic Management System - CTMS/XML feeds, Traffic Safety Data on FoxPro, GIS data and many other data systems) at CDOT, the Chief Data Officer will need to possess a combination of business knowledge, technical skills, and people skills to guide data strategy. This role is not simply about architecting data or designing databases, but rather overseeing these projects from a high level and working to methodologically define the data business strategy CDOT should pursue across its many divisions with a focus on two priorities:

- 1. Defining and sharing actionable data for external stakeholders, partners and the public;
- 2. Defining and sharing actionable data to improve internal operations, planning and implementation.

As part of the Executive Management Team, this position is also a unique opportunity to transform the transportation department and its business models, as transportation moves into the use of data to maximize investment decisions, and the operations and safety of its system and to facilitate the rapidly changing transportation technology environment (vehicle to vehicle and vehicle to infrastructure data, etc.).

This role will operate as a global center of excellence across various divisions within CDOT for advanced analytics tools, technology and methodology to make Colorado one of the leading states in travel mobility, safety and reliability, and use of data to guide business and investment decisions. Some relevant data may be collected, maintained, or owned by other agencies, requiring coordination and integration. During the first few months, the person in this position will be responsible for analyzing the current state of CDOT's operations in this area and making recommendations as to the organizational structure and makeup of the data division that this person will be leading, including any direct or indirect supervision of staff and coordination with other divisions.

Responsibilities:

- Develop and manage CDOT's data vision and strategy and create the roadmap to meet enterprise needs while working closely with the senior leaders across multiple divisions of CDOT including Division of Transportation Development, Transportation System Management and Operations, Office of Information Technology, Traffic Safety and others
- Develop a big data architecture that employs advanced quantitative methods, including data mining techniques, to create predictive analyses to achieve CDOT's strategic objectives
- Define the data assets and functional capabilities for data and advanced analytics

- Oversee implementation of data initiatives and programs in collaboration with senior leaders, stakeholders, data stewards and OIT
- Create a more nimble, efficient, and effective data architecture capable of facilitating CDOT's overall data strategy and strategic objectives including defining the platforms used for data storage, data distribution and integration
- Work with senior management, data owners, and data stewards to achieve data quality accuracy and process requirement goals for all internal and external customers
- Define a systematic approach to measure and evaluate data quality
- Act as a key opinion leader and provide industry feedback
- Champion global data management, governance, quality, and vendor relationships across the enterprise by establishing a data governance council that helps create data policies, standards, organization and enforcement of concepts as established
- Report on progress of enterprise data management governance, including metrics
- Oversee the monitoring of data quality efforts within the organization and provide a central authority for the resolution on data management issues that cannot be resolved by the data governance council
- Establishes data vendor management strategy and provides oversight to support implementation and coordinates with OIT
- Oversee the education of the organization on data management concepts, the appropriate usage of data, enterprise master data management and data quality concepts, enterprise decision-support concepts, data vendor capabilities, definition and appropriateness of data management, rules on data access, and other data-related issues
- Has executive responsibility for enterprise information/data management budget and data-related systems initiatives
- Understands and stays abreast of data requirements for federal government (USDOT, NHTSA, FHWA, etc.)

Additional Job Details Employment Type: Full Time

Salary range: \$100,000 - \$150,000