ALAMEDA-CONTRA COSTA TRANSIT DISTRICT

STAFF REPORT

MEETING DATE: 4/9/2025   **Staff Report No.** 25-161

TO: **AC Transit Board of Directors**

FROM: **Kathleen Kelly, Interim General Manager/Chief Executive Officer**

SUBJECT: **Data Governance Program Update**

ACTION ITEM

AGENDA PLANNING REQUEST: ☐

RECOMMENDED ACTION(S):

Consider receiving a briefing on AC Transit's Data Governance Program, including key accomplishments, ongoing initiatives, and the roadmap for continued progress.

Staff Contact:
Ahsan Baig, Chief Information Officer

STRATEGIC IMPORTANCE:

Goal - Convenient and Reliable Service
Initiative - Service Quality

The Data Governance Program ensures District data is reliable, accessible, and secure, supporting evidence-based decision-making, operational efficiency, and service quality. By fostering a data-driven culture, the program aligns with AC Transit's goals of safety, equity, efficiency, and sustainability.

BUDGETARY/FISCAL IMPACT:

There is no fiscal impact in receiving this report.

BACKGROUND/RATIONALE:

The Data Governance Program was initiated to address challenges in data accessibility, quality, and security, enabling AC Transit to align its operations with the District's Strategic Plan. The program aims to foster a data-driven culture, supporting evidence-based decision-making while enhancing operational efficiency and transparency.

As part of this effort, the IT Department has established IT Strategic Pillars, based on the District Strategic Plan, by studying ongoing market trends, collecting feedback surveys, and conducting interviews with key stakeholders. The resulting IT Data Strategy supports data-driven decision-making through accurate and reliable data from an accessible enterprise platform. Key initiatives of this strategy include improving data quality and governance across systems, implementing an Enterprise Data Warehouse as the "Single Source of Truth," and deploying an Enterprise Business Intelligence (BI) platform.

Since its inception, the program has provided a structured framework for managing data as a strategic asset, empowering leaders and stakeholders with reliable insights to guide the District's initiatives.

Introduction

AC Transit's Data Governance Program, launched in alignment with the District's Strategic Plan approved on April 10, 2019, continues to serve as a cornerstone for fostering a data-driven culture. This initiative, informed by comprehensive feedback from executives, stakeholders, and managers, addresses critical challenges in data accessibility, quality, and security through a robust and evolving framework.

2019:
- Completion of the Data Gap Analysis Project, which outlined recommendations to address data quality, sources, definitions, and governance processes.

2020:
- Development of the Data Management Framework, approved by executives.
- Launch of the Data Governance Program, which is underpinned by the Data Governance Plan, rooted in the principles of the Data Management Framework. This framework emphasizes leadership, accountability, and interdepartmental collaboration to ensure the consistent management of critical data assets.
- Formation of the Data Governance Committee to align data initiatives with organizational goals.

2021:
- Delivery of various webinars, awareness sessions, and remote training focused on data governance policies, the Data as a Service Portal, internal and external data requests, publishing processes, and BI tools.

2022:
- Launch of the Data as a Service Portal to streamline data access and enhance operational insights.
- Introduction of the Open Data Portal for internal and external users, designed to enhance data-driven decision-making, increase operational efficiency, and provide a one-stop shop for data services.

These initiatives have empowered AC Transit with accurate, reliable, and secure data resources, fostering improved decision-making and aligning with District goals of safety, efficiency, equity, and sustainability. This update provides an overview of accomplishments, ongoing initiatives, and the roadmap, reflecting the program's continued evolution and strategic alignment with the District's mission.

Accomplishments (2023-2024)

The Data Governance Program has achieved several significant milestones since 2022, demonstrating its strategic value in driving data-driven decision-making:
- Open Data Administrative Regulation: Established to ensure data transparency and access across the District.
- Enhanced Open Data Portal (2023): A centralized platform providing public datasets to enhance accessibility and usability for stakeholders. Several additional datasets were added, expanding transparency and delivering greater value to both internal and external users.
- AI Policy Publication: Guidelines were created to ensure the ethical and responsible use of artificial

intelligence in District operations.

- Enhanced Data Standards: Improvements in data quality and consistency ensure that decision-makers have reliable and actionable data.
- Organizational Structure Development: Committees and working groups have been established to oversee and sustain governance efforts.

Demonstrating Data Governance Value

Data is the backbone of AC Transit's ability to deliver safe, reliable, and high-quality transit services. Over the past few years, the Data Governance Program has demonstrated its value by enabling transformational improvements across critical initiatives. This program is not just about managing data; it's about fostering collaboration and ensuring that teams across the organization have the tools, standards, and frameworks needed to succeed.

Below are examples of how the Data Governance Program supported District teams to deliver impactful results:

Ensuring Bus Operator Meals/Rest Break Compliance

A cross-functional team involving operations, IT experts, and data stewards developed dashboards to monitor and ensure that bus operators take their legally mandated breaks on time. The Data Governance Program played a key role by providing the foundational data standards, governance policies, and secure access protocols that enabled accurate and timely monitoring.

Optimizing the Realign Network Program

Planners, data analysts, and operations teams collaborated to refine the transit network, using analytics tools such as heatmaps to track performance metrics like ridership growth and service efficiency. The Data Governance Program ensured the availability of high-quality, reliable data and facilitated interdepartmental coordination, which made these real-time evaluations possible.

Enhancing Accident Reporting and Analysis

Safety managers leveraged predictive analytics tools to identify accident trends and high-risk zones. This initiative was powered by the Data Governance Program's emphasis on accurate data collection, cleaning, and accessibility, enabling timely interventions and fostering a safer environment.

Elevating Service Quality Enhancement

Teams across departments implemented dashboards to monitor on-time performance and customer satisfaction, leading to targeted improvements. The Data Governance Program established the necessary infrastructure, data pipelines, and quality checks that ensured these tools provided actionable insights.

Strengthening Safety Management Enhancements

Field teams, safety officers, and compliance specialists collaborated on deploying safety scorecards to track and resolve safety violations. The Data Governance Program supported this initiative by standardizing data collection and reporting processes, fostering accountability and continuous improvement.

Current Initiatives

AC Transit continues to strengthen its data governance framework with the following ongoing initiatives:

- Data Security Enhancements: Implementing measures to safeguard sensitive data and ensure compliance with regulatory standards.
- Data Classification and Cataloging: Organizing data assets for improved accessibility and usability across departments.
- Cloud Migration: Transitioning to scalable cloud-based infrastructure to support growing data needs.
- AI Strategy and Roadmap Development: Establishing a framework to leverage AI for operational efficiency and innovation.
- Expanding Business Intelligence (BI) Capabilities: Adding datasets and improving tools to empower evidence-based decision-making.
- Open Data Portal Expansion: Continuously adding datasets to improve transparency and provide greater value to the public.

Challenges

Despite its successes, the program faces several challenges that are critical to address for sustained progress:

1. **Security and Privacy Balancing:** Protecting sensitive information while maintaining transparency and accessibility.

2. **Legacy System Upgrades:** Transitioning older systems to meet modern data requirements and ensure seamless integration.

3. **Data Ownership Clarification:** Clearly define responsibilities for managing and maintaining data across departments to improve accountability and governance.

4. **Upskilling Staff:** Focusing on technical and professional development.

5. **Resources:** Balancing "Keeping the Lights On" activities with budget and staffing needs.

Organizational Structure

The Data Governance Program operates through a structured governance framework supported by key leadership and working groups:

- Executive Steering Committee: Aligns data governance efforts with District goals.

- Advisory Committee: Promotes collaboration across departments to enhance data initiatives.

- Specialized Working Groups:

  - Data Quality Working Group: Focuses on improving data standards for decision-making.

  - Infrastructure & Architecture Working Group: Modernizes systems and enhances cloud platform utilization.

  - Open Data Working Group: Advances transparency and public trust through data-sharing

initiatives.

- o Business Intelligence Working Group: Improves reporting and supports better decisions through analytics.

- o Cyber-Security Working Group: Safeguards data and ensures compliance with regulatory standards.

This governance structure fosters alignment, collaboration, and sustained progress in data governance efforts.

Roadmap

The roadmap outlines strategic priorities to further the data governance program's goals:
- Establish governance metrics to measure progress and demonstrate the value of data governance initiatives.
- Update and enhance the data catalog to streamline accessibility and usability for stakeholders.
- Support artificial intelligence and machine learning capabilities to drive innovation and operational efficiency.
- Expand data-sharing frameworks to support internal and external collaboration.
- Provide advanced training programs to empower staff and cultivate a data-driven culture.
- Integrate advanced BI and predictive analytics tools to support comprehensive and forward-looking insights.

These initiatives will position AC Transit as a leader in leveraging data for improved service quality, operational efficiency, and strategic decision-making.

ADVANTAGES/DISADVANTAGES:

The Data Governance program enables a data-driven culture within AC Transit's executives and decision-makers. It provides reliable data and resources for developing future strategies and roadmaps, using accurate, consistent, and secure critical datasets.

ALTERNATIVES ANALYSIS:

This report does not require an alternative analysis.

PRIOR RELEVANT BOARD ACTION/POLICIES:

SR 20-122 - IT Strategic Plan
SR 22-142 - Data Governance Program
SR 23-079 - Open Data Initiative and Activities
SR 24-335 Major IT Projects Update

ATTACHMENTS:

1. Presentation Slides

2.　　　Data Governance Plan

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