



**SERVICE
FIRST,
NOW!**

Dr. Brita Andercheck

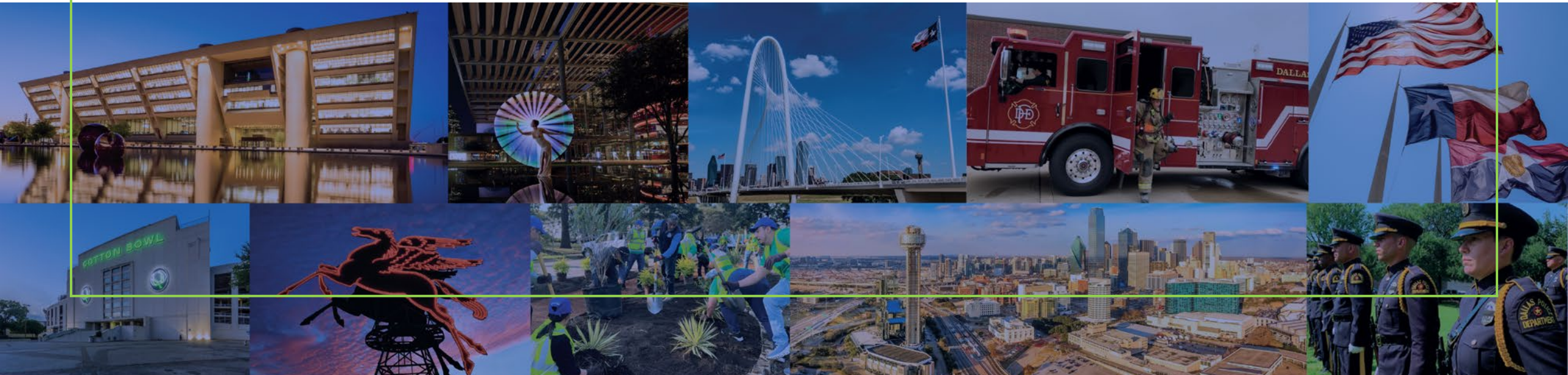
Chief Data Officer

Data Analytics and Business Intelligence

Data Analytics and Business Intelligence Overview

Committee on Government Efficiency

August 10, 2026



Presentation Overview



- BACKGROUND
- FEDERAL & STATE MANDATES
- SCOPE OF RESPONSIBILITIES
- EFFICIENCIES AND SAVINGS
- WORK AND IMPACT
- RECOGNITION
- CITYWIDE AI INITIATIVES

Background: *Founded in 2020*

The Office of Data Analytics and Business intelligence was founded October 1, 2020, with a Council vote.

- Internal department designed to create efficiency, and evidence-based decision making in city operations.
- Mission: Use data to improve lives.
- History: Three attempts to build an analytics program as part of routine technology operations never reached their intended strategic value. Current structure was intentionally different, and now delivers measurable improvements, cost savings, and data-driven decision-making across the organization.

Background: *Distinction between ITS and DBI*

ITS

- Network, servers, cloud infrastructure
- Hardware, software
- Identity, access, cyber security
- System uptime, reliability, and incident response

** Ensures the organization's technology runs reliably and securely.*

DBI

- Statistical modeling and advanced data analysis
- Operational Intelligence and process documentation
- Data Governance
- Artificial Intelligence

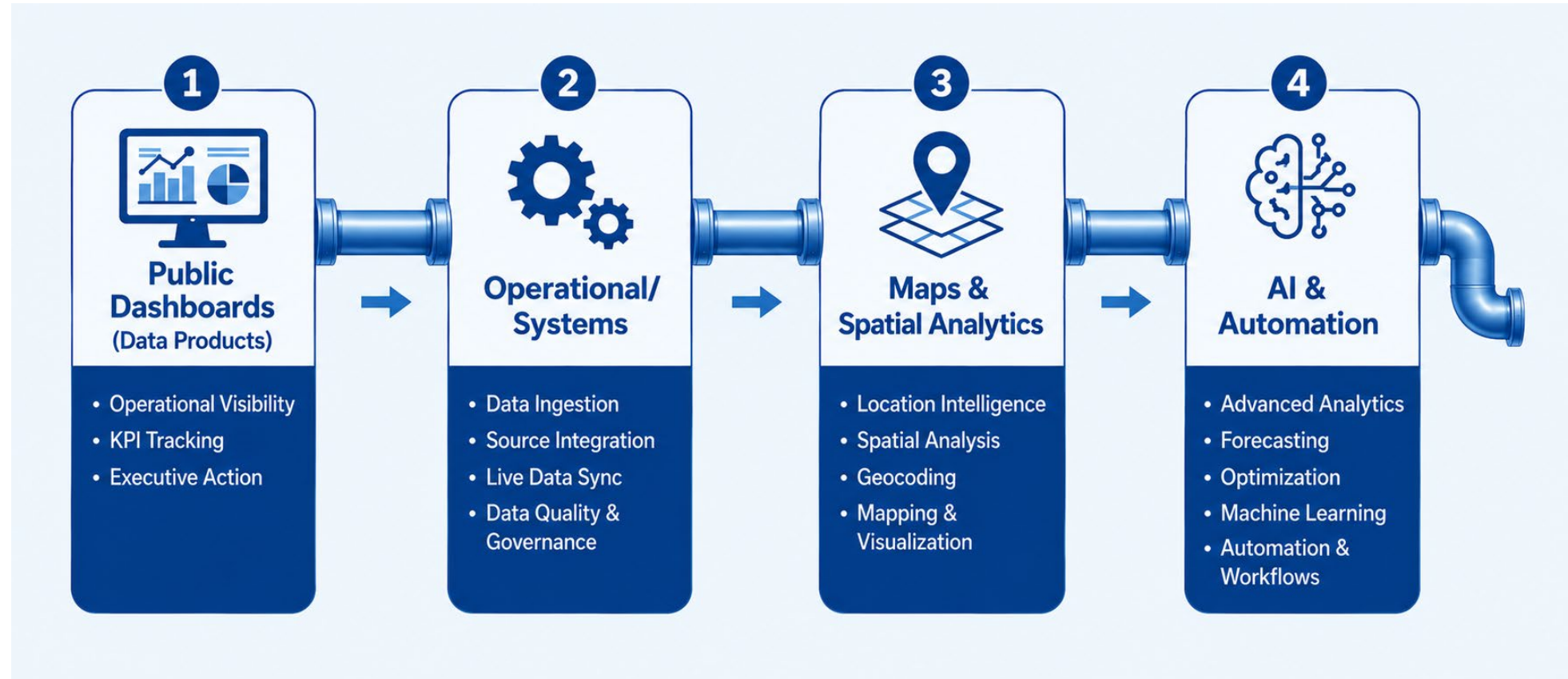
** Use data and AI to drive smarter operations and department outcomes.*

Background: *Data's Growing Impact*

Data's Growing Impact

- **From Insights to Operations:** Data no longer just informs leadership decisions; it actively automates and powers daily operations.
- **Modern Infrastructure:** Digital data streams are now an essential public utility, as vital to the community as roads, water, and power grids.
- **Economic Engine:** Local commerce, jobs, and organizational value are now driven by data assets rather than physical property.

Background: *The Range of Data Work*



Background: *Intelligence*

- **Operational Intelligence:** Providing the core operational intelligence behind city departments.
- **Public Safety Partners:** Integrating directly with first responders to power critical emergency services.
- **First Responder Clearances:** Background-checked and CJIS certified to handle sensitive, protected public data.

This Work is Not Optional

THE MANDATE

Federal and state law requires Dallas to maintain data compliance.

THE RISK WITHOUT DBI

- Federal grant eligibility
- FOIA compliance
- 911 readiness

Without DBI supporting the city's data backbone, Dallas would not meet their legally required state and federal data obligations.

STATE · 2023

Texas Data Privacy & Security Act

Mandates data governance across city systems.

STATE · 2025

Texas Responsible AI & Governance Act

AI oversight and procurement compliance.

FEDERAL · 2018

Federal Evidence Act

Data-driven policy required for federal grant eligibility.

FEDERAL · 911

Next Gen 911 NIMS · NIPP

GIS address, road, and emergency-boundary data.

FEDERAL · 16/19

FOIA & Open Government Act

Proactive, machine-readable public data publishing.

DBI Program Structure

Intelligence, AI & Advanced Analytics Systems

\$1,355,412

15 FTEs

PROGRAM DESCRIPTION

Develops and operates the City's intelligence and reporting systems that underpin Public Safety and essential services; leads Data and AI Governance; and delivers the advanced analytics and AI capabilities that critical City operations rely on.

WHAT IT DELIVERS

- Powers crime analytics, missing persons algorithms, and DFR operational intelligence.
- Leads citywide AI governance, ensuring safe, compliant AI adoption.
- Produces the majority of all citywide leadership reports and Council data requests.

Data Engineering and System Administration

\$999,502

9 FTEs

PROGRAM DESCRIPTION

Manages the platforms and tools that ensure secure, reliable data access while data engineering turns raw data into organized, trustworthy information the City relies on for timely insights, stronger decisions, and effective analytics and AI.

WHAT IT DELIVERS

- Maintains the data backbone that feeds 95% of public-facing City data.
- Ensures secure, governed data access across all departments.
- Enables \$11M+ annual savings by making all analytics and AI possible in-house.

Enterprise GIS

\$1,129,423

12 FTEs

PROGRAM DESCRIPTION

Manages the core technology and systems that are the City's geospatial infrastructure, maintains the servers, licenses, and enterprise tools that make mapping and spatial analysis possible; delivering critical location-based insights that drive planning, enhance public safety, and improve City services.

WHAT IT DELIVERS

- Powers address validation, road centerlines, and emergency boundaries for 911 dispatch.
- Enables distribution of services and location-based public safety analytics.
- Provides geospatial foundation for planning, code enforcement, and citywide services.

DBI Program Structure

Intelligence, AI & Advanced Analytics Systems

STATE · 2023

Texas Data Privacy & Security Act

Mandates data governance across city systems.

DBI leads citywide AI governance and ensures compliant deployment.

RISK WITHOUT THIS PROGRAM

- DPD and DFR lose automated intelligence — back to manual, month-long processes.
- City loses AI oversight capability as TX Responsible AI Act (2025) takes effect.
- Council data requests go unanswered.
- Loss of 14,000+ staff hours savings; departments revert to manual data work.

Data Engineering and System Administration

FEDERAL · 16/19

FOIA & Open Government Act

Proactive, machine-readable public data publishing.

DBI powers the Open Data Portal, accessible public data platform— 50M views in 5 years.

RISK WITHOUT THIS PROGRAM

- Every dashboard, model, and report goes dark — no data pipeline, no insight.
- City fails TX Data Privacy & Security Act (2023) data governance requirements.
- Publicly accessible data platform goes dark — lack of resident oversight and accountability.

Enterprise GIS

FEDERAL · 911

Next Gen 911 NIMS · NIPP

GIS address, road, and emergency-boundary data.

Enterprise GIS maintains the road and address datasets to ensure reliable 911 response.

RISK WITHOUT THIS PROGRAM

- 911 dispatch revert to manual processes—losing precious time.
- DFR and DPD spatial analytics go offline; residents are less safe.
- FOIA map products and public-facing GIS services go dark.

Data Streamlining

- DBI helps connecting hundreds of disconnected source systems (aka software system).
- Helps replace slower and error-prone manual data reporting with faster automated and accurate results for everyone.
- Inter-departmental collaboration and data sharing leads to improved services to Dallas residents.

Efficiencies and Savings

- **\$11M** saved annually
 - Represents avoided external expenditures, not budget reductions, demonstrating the value retained by performing the work internally rather than procuring equivalent services from outside vendors.
 - How we calculate (assuming same level of effort):
 - $\text{Avoided cost} = \text{Vendor Cost} - \text{City Cost}$
 - City Cost = employee salary + benefits
 - Vendor Cost = conservative estimate based on prior contracts

Efficiencies and Savings

- Since 2024, the City has spent **\$15.45M** on 19 vendor-delivered data projects.
 - These projects averaged **\$813K** each.
 - Vendor projects are **8x** more expensive than DBI-delivered projects.

Efficiencies and Savings

- **7 positions** cut last budget cycle via DBI-enabled automation.
 - Two other departments were able to reduce a total of 7 positions because DBI automated the work of those positions.

Efficiencies and Savings

- **14,000 staff hours saved**
 - Through a direct cross comparison of workflow process before and after DBI work.

Efficiencies and Savings

- **30,000 investigation hours saved**
 - We enable Dallas Police and Dallas Fire-Rescue to spend less time on tedious tasks and more time solving cases and protecting residents.
 - We do this by unifying disconnected source systems, automating reports, and conducting advanced analyses.

Efficiencies and Savings

50 Million Open Data Portal views in the last five years

- Open Data Portal delivers the equivalent of 10 million open record requests per year.
 - City Secretary's Office and DPD receive ~45,000 formal open record requests per year.
 - By making data openly available, the Portal proactively fulfills 99% of all City open record requests.
- If staff had to do this manually, would need 225 more staff, costing approx. \$25M.

Work and Impact

Human Trafficking

- Over a 50% reduction (from 100 to less than 50) in current missing/runaway juvenile high-risk victims of human trafficking by reducing days of manual review to automated daily updates.
 - In 2025, DPD recovered 194 high-risk victims, an increase of 77 recoveries (65%) compared to 2024 with 117 recoveries.

Emergency Response With Data

- DBI emergency response tools accelerated emergency response, returning crew to normal business operations faster and saving the City more than \$1M+ in operational costs.

Work and Impact

Overdose Response Text Mining

- Identifies and prioritizes overdose-related, community health follow-ups, streamlining the manual review processes by 35%.
 - Through automation, the tool saves 3000 hours of manual review work yearly, or approximately \$180K in staff salaries.

Permitting Analysis

- Reduced new commercial construction permit wait times by 33% (9 months to under 6 months) and eliminated a backlog of 1,000 permits by unifying disconnected source systems and identifying bottlenecks.

Work and Impact

DFR Site Suitability

- Advanced spatial data analysis identified potential fire station locations to better serve and safeguard residents' properties and lives while avoiding an estimated \$400K consultant study.

DFR Fleet Management

- Identifies out-of-service fire vehicles before operations are impacted, reducing reassignment time by 75% and ensuring residents receive emergency services without delay.

Work and Impact

Priority Q&A for Dispatch

- 911 call-taking compliance across dispatchers used to take a month to measure, it can now be completed in just one day, a ~97% reduction, allowing for consistent DFR 911 dispatches.

Subrogation

- By unifying crash data and reports, DBI reduced ORM's subrogation workflow from two weeks to one day, a 93% improvement, accelerating recovery efforts on approximately \$500,000 in annual damage claims.

Recognition

DBI continues to be nationally recognized for innovation and excellence in data-driven government:

- Harvard Bloomberg Center: ***“Most sophisticated Data Analytics shop in the country”***
- Dr. Brita Andercheck: Gartner **Top 5 Global CDO**
- Gartner: **Top Innovation**
- What Works Cities: **Gold Certification**
- GovTech: **GOV-X Award**
- ONCON Icon: **Top 10 Data Analytics Team Worldwide (2025)**

Citywide AI Initiatives

- Performance Measure: All Citywide AI Initiatives show a measurable benefit with 12 months.
- Budget Presentation in April highlighted use of AI for efficiencies.

Citywide AI Initiatives

Clearview Facial Recognition

DALLAS POLICE DEPARTMENT

AI investigative platform enables lead generation using a search function, sourced from public-only web sources.

Measurable Benefit:

Accelerates suspect identification speed from days or weeks to seconds, with 305 requests processed and 25 confirmed arrests supported.

Parks Cameras AI Detection

PARKS AND RECREATION

Smart camera network turning passive video monitoring into proactive, automatic infraction alerts.

Measurable Benefit:

Reduced violation detection time from days to minutes by developing an AI-powered camera system that automatically alerts rangers and marshals in near-real-time.

3rd Eye On-Board Cameras

SANITATION

The 3rd Eye AI camera system provides 360-degree exterior visibility and in-cab monitoring to reduce blind spots, detect unsafe driving behaviors, and support safer, more efficient operations.

Measurable Benefit:

By turning AI-flagged video into ~400 coachable events each month, the tool boosts targeted driver coaching and strengthens safety and service performance.



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