

# Data Modernization + Public Service Transformation in American Cities

What we are learning in Baltimore City's Office of Performance & Innovation (OPI)

**Our North Star: A trusted, explainable data + analytics capability that shortens the path from question → decision → better service.**

In cities, modernization is only real when residents and frontline staff can feel it: faster, clearer, and more reliable services.

**Dartanion Williams**  
Chief Data Officer for the City of Baltimore

# A resident doesn't experience a 'data platform'

1. They experience: a 311 request that gets done, the first time.
2. They experience: a permit application that doesn't get lost in the queue.
3. They experience: a street that gets swept on schedule and looks it.
4. And city staff experience: fewer spreadsheets, fewer calls, fewer “is this data right?” escalations.

*Recent 311 example: we found a software bug sending crews to pick up trash at the Battle Monument hundreds of times. Fixing the data fixed the work.*

# Four moves that make modernization show up as better service

**1**

## Enterprise modernization

Strengthen service delivery, operational resilience, and agency coordination by building shared foundations with fewer isolated projects.

**2**

## Data foundations

Enable timely and accurate intelligence and rapid deployment of resources for public safety, infrastructure, and community services.

**3**

## Responsible governance

Embed clear decision rights, privacy safeguards, and transparency practices that build public trust in high-impact programs.

**4**

## Workforce and culture

Develop a data-literate workforce and a continuous-improvement culture so that innovation lasts.

# 1) Enterprise data modernization

1

## Build a shared operating backbone across departments



1. Stop modernizing one agency at a time, modernize the shared backbone they all rely on.
2. Use performance routines to turn data into decisions, and decisions into follow-through.
3. Make resilience explicit with owners, SLAs, monitoring, and incident response for priority data feeds.
4. When the work spans agencies, activate a delivery mechanism (Tiger Teams) not another meeting series.

## 2) Data foundations for real-time & equitable decisions

### 2

### Build data products that show up in daily operations

#### 311 reliability + smarter triage

1. Fixed workflow + data so requests don't close before work is done.
2. Illegal dumping triage: ~50% routed directly for immediate cleanup.
3. Outreach plan focused on disinvested neighborhoods.

#### Permitting: from queue to visibility

1. Built internal + public permit dashboards to spot bottlenecks.
2. Teams alerts notify staff when applications "fall through the cracks."
3. Process mapping → SOPs → consistent reviews.

#### Infrastructure & safety decisions

1. Combined multiple sources to build an initial streetlight asset inventory.
2. Used service + operations data to target hot spots (cleaning, forestry backlog, traffic calming).
3. High-utilizer and prevention analytics to focus scarce resources.

*The principle: "Real-time" is not a dashboard refresh...  
it's an operational loop where the right person gets the right signal early enough to act.*

1. Prioritize a small set of "decision datasets" and put them under SLA first.
2. Instrument equity: ask "who benefits / who waits / who gets missed?" and cut KPIs by geography and population where it matters.

## 3) Responsible data governance → transparency & trust

### 3

#### Govern the data that matters (and publish what you can)

1. Open-by-default (when appropriate), with clear risk decisions for sensitive data.
2. Dataset owners + stewards, clear definitions, and change control for “official numbers.”
3. Quality gates before public artifacts (privacy review, plain language, accessibility, method cards.)
4. A public feedback loop; Make it easy for residents, researchers, and media to flag issues and request improvements.

## 4) Workforce + culture of continuous improvement

### 4

#### Build data-literate teams, and make excellence repeatable

1. Every agency needs a “data-driven officer” and a path to become data-capable—not just a central team.
2. Train in the flow of work: cohorts, office hours, templates, and coaching (not one-time trainings).
3. Make the routine humane but accountable: separate people from problems; insist on closure and learning.
4. Write it down! Definitions, decisions, runbooks, and SOPs are how you survive leadership transitions.

*Our mantra: “Make excellence repeatable, not personality-dependent.”*

# How city modernization can inspire city leaders

1. Treat data as a product: owners, contracts, documentation, and adoption metrics.
2. Put your “decision datasets” under SLA before you chase the long tail.
3. Embed analytics in operating routines (Stat / ops reviews / budget), not side dashboards.
4. Publish method cards and plain-language caveats; transparency is a design constraint.
5. Build a delivery muscle for cross-agency blockers (clear authorizers + weekly follow-through).
6. Invest in literacy so the system survives leadership and workforce turnover.

*Modernization succeeds when the “last mile” works: the frontline can act, and the public can see progress.*

# Modernization is a trust project

Start with services people feel.

Build shared foundations.

Govern responsibly.

Grow people.

**If you want AI to work, make the data, and the processes work first.**

Dartanion Williams, Chief Data Officer for the City of Baltimore