'25SEP22 PM 1:59 CITY CLERK

City and County of Honolulu

Property Data Inventory

Kira Chuchom

Chief Data Officer (MAY/MDO)

September 24, 2025

MAYOR'S MESSAGE 144 HHP

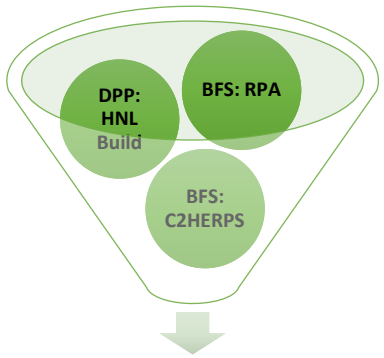
Property Data Inventory: A Central Data Repository Use Case

Background: Pursuant to Charter function §6-1802(b), the DHLM Director shall "Prepare and maintain a perpetual inventory of city real property interests, including all lands owned, leased, rented or controlled by the City."

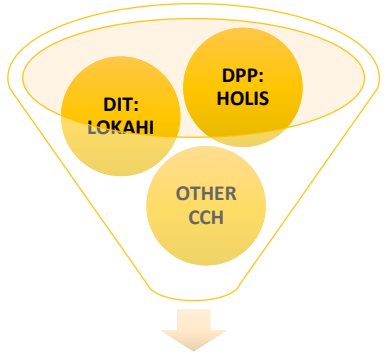
Current State	Future State
• There is no comprehensive organized central inventory of city real property interests, including lands owned, leased, rented or otherwise controlled by the City.	• Build a comprehensive organized **central consolidated data repository** for city real property interests, including lands owned, leased, rented or otherwise controlled by the City.
• Critical information is scattered in various data sources, systems, applications, and archives maintained by various departments including BFS, DFM, DDC, DPP and others.	• Provide capability and capacity to enable integration of relevant property data from various Data Sources (irrespective of system/application) into the **central consolidated data repository**.
• There is variation in the level of detail, cross-departmental distribution/accessibility, and frequency of updates, across these various data sources, creating gaps in knowledge.	• Initiate and sustain structured data management and data governance best practices into the **central consolidated data repository**. Provide capabilities via User-friendly Interfaces.
• Relevant property data is stuck in each Application's **Data Jail**	• **Release** relevant property data stuck in each Application's **Data Jail!**

CCH Property Data Inventory Conceptual Design

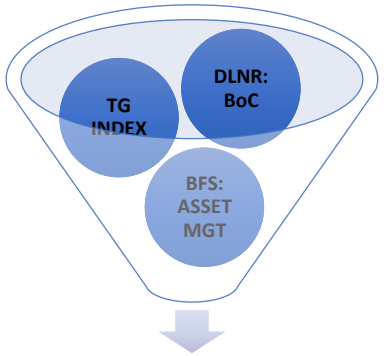
DATA SOURCES



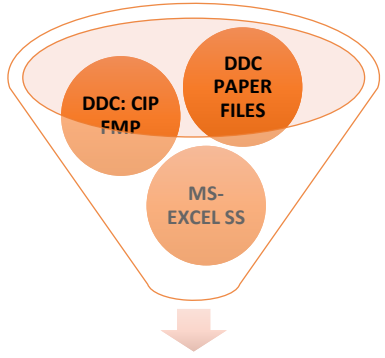
CCH CORE BUSINESS OPERATIONS DATA



CCH GIS LAYERS (MAPS)



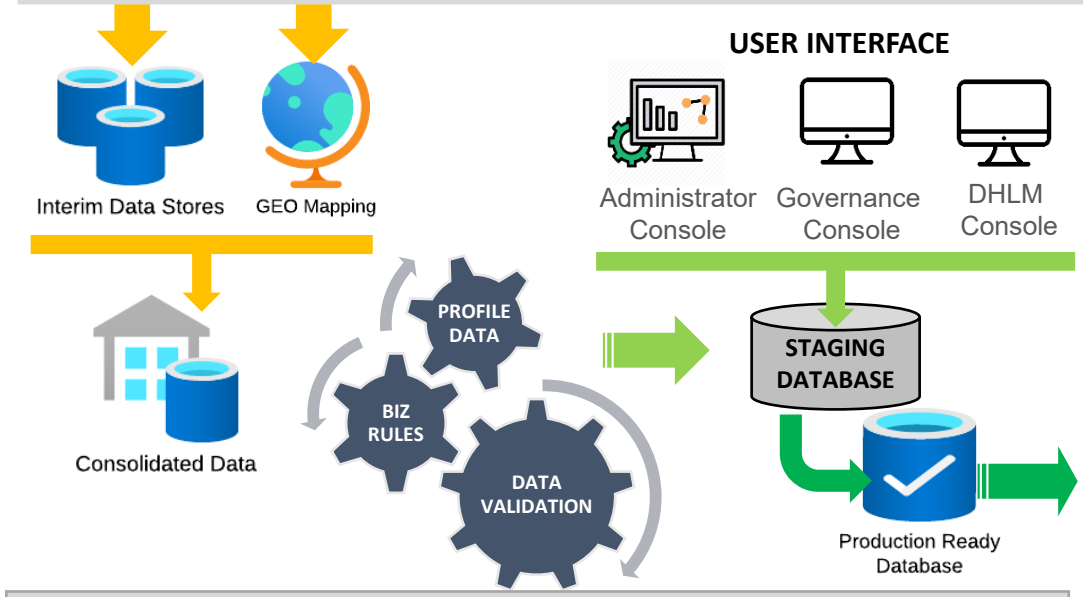
OTHER DATA SOURCES



OFFLINE DATA SOURCES

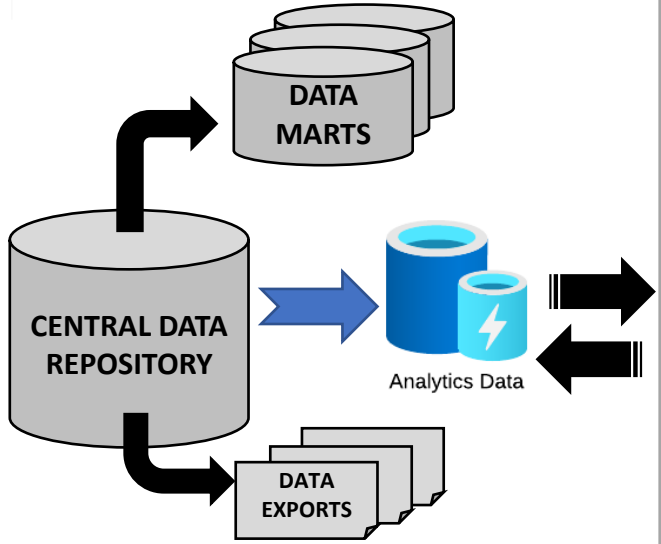
DATA INTEGRATION LAYER: EXTRACT/LOAD/TRANSFORM (ETL)/APPLICATION PROGRAMMING INTERFACE (API) CALLS/DIRECT DATABASE QUERIES

DATA STAGING



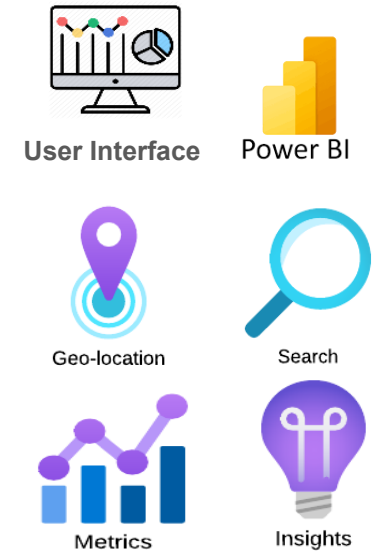
DATA CONSOLIDATION/RECONCILIATION LAYER

DATA LOADING



DATA STORAGE LAYER

DATA ANALYTICS



PRESENTATION LAYER

CCH Property Data Inventory Timeline

Ideation

- Ideation initiated December 2024
- Stakeholder Kickoff: July 16, 2025
  - DHLM
  - BFS
  - DPP
  - DCS
  - DDC
  - OER
  - DIT
  - MDO (CDO)
- Complete Conceptual Design
- Complete Data Architecture
- Target September 2025

Discovery

- Stakeholder Interviews
- Requirements Analysis
- Systems Analysis
- Identify Dependencies
- Validate Findings
- Evaluate NASPO and SPO Vendors of Data Integration Tools and Platforms
- Select Data Integration Software and Services (IPaaS)
- Target Completion Mid-October 2025

Resource Alignment

- Hire & Onboard Data Scientist
- Hire & Onboard Data Governance Analyst
- Procure Data Integration Software Licenses and Services (IPaaS)
- Onboard DIT Teams
  - Applications Development
  - DBA
  - Infrastructure
  - Security
- Target Completion Mid-November 2025

Set Up Data Infrastructure

- Data Integration Tools Set Up
- IPaaS Platform Set Up
- Set Up Databases
- Secure Access to Data Sources
- Complete Central Data Repository Data Model
- Build Data Pipelines
- Design Data Governance Process
- Target Completion November 2025

Data & UI Development

- Build Out Data Integration Layer
- Build Out Data Consolidation
  - Profile Data
  - Insert Business Rules
  - Validate Data
- Build User Interfaces
  - Development
  - Staging
  - Production
- Develop Data Visualizations and Dashboards
- Target 6-month Development Timeframe November 2025 – April 2026

Operationalize

- Test and Validate Data Pipelines
- Migrate Data from Staging Database to Production Ready Database
- Load Data into Central Data Repository
- Enable Analytics Data Access
- Complete Property Data Inventory Search and Dashboards
- Complete User Interface Development
- User Acceptance Testing
- Target Go-Live May 2026

Thank You!!