





Philadelphia's Integrated Data System

2022 Year in Review

IDEA: Philadelphia's Integrated Data System

The goal of the IDEA IDS (previously known as CARES) is to bring together, in one place, the capacity to answer questions about the efficacy of the programs used to support Philadelphia's residents. IDEA integrates and stores data about clients from 1997 to the present based on 14 unique data sources spanning health, human services, and public safety. IDEA is the central hub within City government that can support internal cross-systems data projects and partnerships with external institutions.

As stewards of the IDS, the IDEA team:

-  **Links person-level data from across City systems**
-  Helps staff **request and use** integrated data
-  **Creates data products based** on integrated data
-  **Maintains & grows the infrastructure of integrated data**

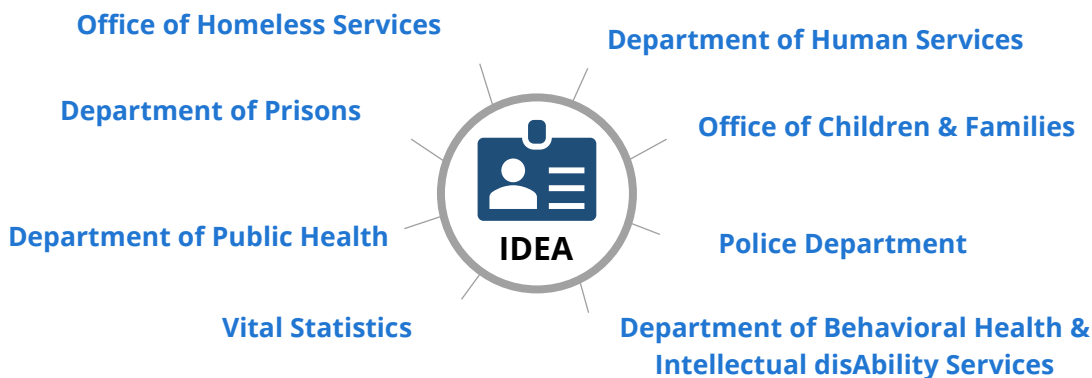


Key Uses of the IDEA IDS

- Planning
- Monitoring & Quality Improvement
- Program Evaluation
- Service Coordination
- Direct Client Outreach & Streamlined Enrollment
- Grant Applications & Deliverables
- Research

People-Centered Data

An IDS allows decision-makers to put individuals, not departments or programs, at the center of analysis. We can help leaders understand connections between a City service/contact in one domain and an outcome in another. Below is the list of data systems currently contributing to the IDEA IDS. We hope to add additional sources in the future.





Meet Our Team

The City's IDS is maintained by the Office of Integrated Data for Evidence & Action (IDEA), formerly the Data Management Office. IDEA sits within the Office of the Managing Director. **Our mission is to facilitate the secure and ethical linkage and use of administrative data to help Philadelphians prosper.**

James Moore, MA
Executive Director

Qaira Stead, MA
Project Manager

Naomi Tariku
Intern

Business Team

Kristen Coe, PhD, MSW
Dir. Research, Analytics & Evaluation

Daniel Galpern, MPH
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Technical Team

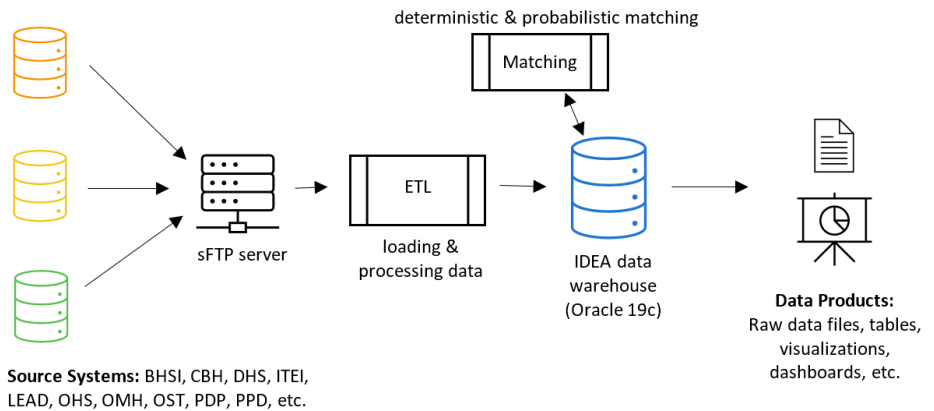
Zheng Wen, PhD
Senior Oracle Developer

Ahmad Elsaedi
Junior Oracle Developer

Dinesh Kumar
Database Administrator

The IDEA Environment

The data warehouse environment is a secure environment that contains linked, individual-level records collected by government agencies. Routine feeds allow for a highly efficient process in which government can extract and transform data to address a wide variety of priority areas. Due to the sensitive nature of the data, access is strictly limited to IDEA staff, a data request process ensures appropriate use and handling of the data, and the environment is routinely audited to comply with federal, state, and city requirements.



Features of the IDEA Environment

- In addition to matching routine sources, IDEA can match files on a one-time basis for specific projects.
- Once matched, common attributes are used to generate a “best-fit” profile to provide a more accurate/recent picture of the client’s demographics and/or contact information.
- Secure infrastructure.

The Three Essential Building Blocks of the IDEA IDS

Many people focus on the technical aspect of integrating data, but the legal framework and “people work” of building relationships, cultivating use cases, and communicating transparently about the work we do is just as important. For this reason, we think of the IDS as a triangle or “three-legged stool” that is dependent on each leg.

People

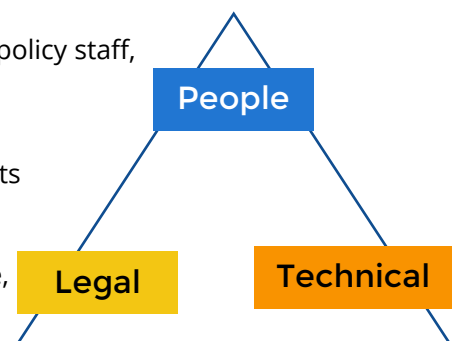
Leadership, technical staff, policy staff, lawyers, analysts, clients

Legal

legal review and agreements

Technical

Servers/hardware, software, documentation



Projects IDEA Worked on in 2022

IDEA's primary function is to provide linked data in secure and legally permissible ways. For some projects we are also involved in the front-end conceptualization of the project and/or data analysis.

Water Shutoff Avoidance for Low-income Households

Equity Analysis of Water Shutoff Practices

Senior Tax Freeze Property Tax Exemption Outreach and Auto-Enrollment

Early Childhood Risk, Resilience, and Response Dataset & Dashboard

Child Tax Credit Outreach

Emergency Rental Assistance Eligibility Review

Community Violence Intervention Gun Violence Disruption Outreach and Eligibility Screening

Relationship of Lead Exposure to Gun Violence

Target populations to Inform Basic Systems Repair Program

The Impact of the COVID Emergency Release from Incarceration Policy

COVID Vaccination Demographics Match for Public Health

Opioid Death Review

Homicide Death Review

Maternal Mortality Review

Fetal-Infant Morbidity Review: Substance Exposed Newborns

100 Day Challenge: Connecting Street Homeless Populations to Housing & Treatment Resources

Barriers to Service for Unsheltered Homeless Populations

Connecting Vulnerable Child Populations to Early Developmental Screening

Screening of Child Welfare Population for Supportive Medicaid Services

Connecting Former Foster Youth to Temporary Cash Assistance

Connecting Low-Income Households to Free and Reduced Cost Internet Service

Outreach for the Healthy Start Program

Place of Injury Analysis for Gun Violence

Youth Residential Placement Task Force Annual Report

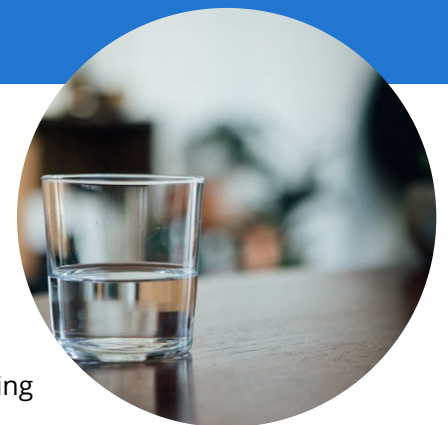
Impact of Permanent Supportive Housing on Behavioral Health Populations Evaluation

Impact of the Hi-Five Program on CJ Involved Populations w/ Substance Tx Needs

Support of PA DHS Evaluation of Medicaid Support for Homeless Populations

Featured Project: Water Shutoff Protections & Analysis

During the COVID-19 pandemic the City of Philadelphia made the decision to temporarily cease water shutoffs due to non-payment as a public health measure. In the spring of 2022, the shutoff moratorium ended with the condition that the City would strive to protect low-income households from shutoff if they were experiencing a true inability to pay. To support this effort, IDEA was asked to help the Philadelphia Water Department and Water Revenue Bureau by 1) identifying low-income households; and 2) providing descriptive analyses of the accounts experiencing, at-risk of, and protected from shutoff to understand whether existing protections were sufficient. These results helped protect nearly 100,000 accounts (more than 18,000 of which would have otherwise been shutoff for non-payment during 2022) and inform further changes to the City's water policy in 2023.





Where we've been...

2022: A Year of Growth

IDEA has been through a lot of changes recently, starting with our name. In March 2022, Mayor Kenney signed [an executive order](#) transforming the Data Management Office into the Office of Integrated Data for Evidence and Action (IDEA) and

establishing IDEA as the office responsible for integrating client-level data. As part of this transformation, IDEA moved from the Health & Human Services cluster to the Office of the Managing Director. This ensures IDEA's ability to support a broader list of Citywide priorities, including those related to public safety.

Following the executive order, IDEA was able to expand with the addition of three new full-time team members. These additions have increased our capacity to add new data feeds, support Citywide data governance work, and perform high-priority analyses for City leadership.

Investing in the Expansion and Use of Integrated Data

With a team that continues to grow, IDEA is looking forward to taking on new opportunities in 2023 and beyond. Our vision for this work includes:



...and where we're going

Connect with New Partners

IDEA has a long history with certain health & human service agencies, but some City partners are just getting to know us. We are conducting outreach within and beyond the City to share how integrated data can support routine city operations, policy, and practice.

Identifying & Pursuing Priority Data Sets

IDEA continues to build a list of high-value and/or population-based data sets for inclusion in the integrated data system. We hope to identify resources to negotiate legally permitted access and routines to receive the data. By expanding the records and areas of data included (i.e. public safety, health, education, etc.), the City can have a more wholistic understanding of residents' needs and a more equitable approach for outreach and service coordination.

Support City Data Governance Activities

Data quality is only as good as our data collection practices, and since IDEA doesn't collect data, we rely on our source systems to implement data collection best practices. IDEA hopes to develop processes and supports that identify available data sources, improve source data collection practices, normalize data across systems, ensure data capture inclusive of city populations, define change management procedures, and document data attributes and business rules to process data.

Improve Efficiency by Automating Processes

There are opportunities to automate processes and thereby improve efficiency on both the technical and business sides. By implementing automated routing processes, IDEA could better support the internal data request and external data request processes. On the technical side, some routines around software patching and data loading could also be further routinized.

Investments in the IDEA Integrated Data System have potential to grow the system in 3 important ways:

- Expand the breadth of coverage (both the domains of interest and the population)
- Improve data quality
- Increase the availability of data (frequency of feeds and speed with which IDEA can respond to requests)

These improvements will help this administration and the next address high-priority issues in a focused, data-informed manner and to monitor those actions to ensure they are meeting the City's goals.