



# Philadelphia's Integrated Data System

2024 Year in Review

## IDEA: Philadelphia's Integrated Data System (IDS)

IDEA is the central hub within City government that can support cross-systems data projects and partnerships with external institutions. The goal of the IDEA IDS is to bring together, in one place, existing administrative data to enhance the lives of Philadelphia's residents. IDEA integrates and stores data about clients from 1997 to the present based on 14 unique source systems spanning health, human services, and public safety.

As stewards of the IDS, the IDEA team:

 **Links person-level data** from across City systems

 **Helps staff request and use data** from the IDS

 **Creates data products** based on integrated data

 **Maintains & grows the infrastructure** of the IDS

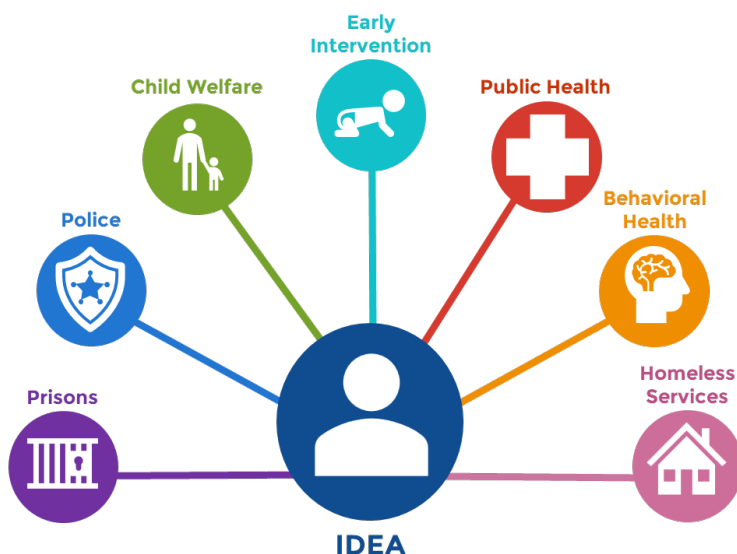


## Key Uses of the IDEA IDS

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

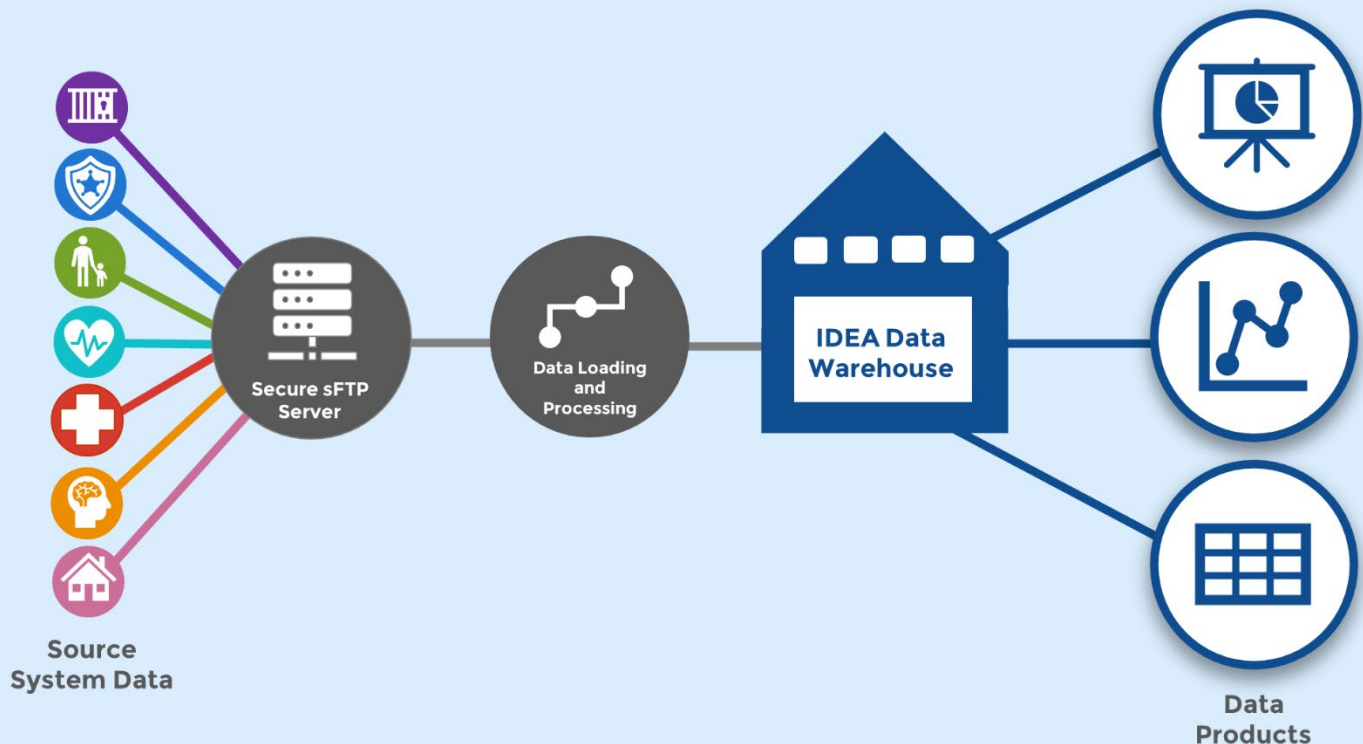
## People-Centered Data

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 or encounter in one domain and an outcome in another. Below is the list of data systems currently contributing to the IDEA IDS.



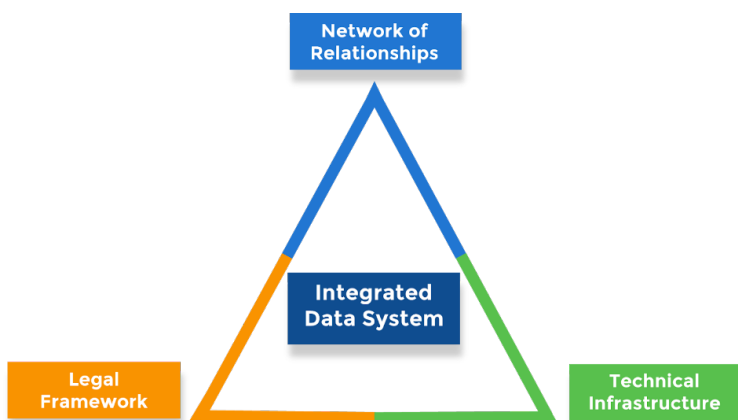
## Features of the IDEA Technical Environment

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. 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 picture of the client’s demographics and/or contact information.



## Three Essential Components of the IDEA IDS

Many people focus on the technical aspects of integrating data, but the legal foundations and “people work” of integrated data are just as important in maintaining a well-functioning IDS. The IDEA IDS is based on these three critical components:



1. **A legal framework** that ensures source systems maintain control over each use of their data and verifies that data sharing is compliant with all federal, state, and local laws;
2. **A technical infrastructure** that allows data from multiple source systems to be linked and warehoused in a secure environment; and
3. **A network of cross-agency relationships** that fosters inter-departmental collaboration around complex issues requiring data from multiple domains.



## 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.

**IDEA's mission is to facilitate the secure and ethical linkage and use of administrative data to better serve Philadelphians.**

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*Executive Director*

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*Project Manager*

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*Technical Manager*

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*Oracle Developer*

Bolaji Agbara  
*Database Administrator*

Dinesh Kumar  
*Database Administrator*

## Working With IDEA

The IDEA team works collaboratively to meet a variety of needs around integrated data projects. This work involves consultation with our team at each step of the way to ensure that available data can be used to help generate actionable information.

### What Does a Project With IDEA Involve?



### What Does the IDEA Team Do?



#### 1 Define the Project Idea



- Help conceptualize a project
- Refine research questions
- Assess data availability
- Provide consultation around use of analytic strategies
- Help create documentation with a project description form

#### 2 Obtain Approvals



- Route the project description for review to appropriate parties
- Help negotiate legal approval
- Facilitate department approval processes

#### 3 Develop a Query Spec



- Develop non-technical document that outlines the data request for our technical team
- Convert the data request into technical language to pull from the IDEA data warehouse

#### 4 Match and Extract Data



- Set match point thresholds
- Extract matched data from IDEA data warehouse and match to external data sources if needed
- Transform and/or mask data to support project needs
- Securely transfer the data set

#### 5 Analyze and Create Products



- Create data products and data visualizations
- Discuss analytic findings
- Provide consultation around the interpretation of results and assist with presenting findings to key stakeholders

#### 6 Determine Next Steps



- Discuss actionable steps that can be taken from project findings
- Determine if additional projects or analyses are necessary
- Produce datasets and/or data products on a routine basis for recurring projects

# IDEA's Portfolio of Work

IDEA supports a variety of different cross-system data projects, which typically fall into one of the following categories:

- 1. Connecting Philadelphians to critical benefits and resources**
- 2. Helping to better coordinate City services**
- 3. Conducting case reviews to improve understanding of complex issues**
- 4. Evaluating problems, programs, and policy responses**

Each category of work is crucial to improving the lives of Philadelphians. Several key projects that IDEA supported in 2024 are highlighted in more detail in the section that follows.

For more information about the types of projects IDEA supported in 2024, see the full project list on the final page of this report.

## Project Spotlight: Early Childhood Risk, Resilience, and Response Project

The Early Childhood Risk, Resilience, and Response Project (ECR3) project began as an investigation of the links between early risk factors captured by the City's administrative data and children's educational outcomes through 3<sup>rd</sup> grade. IDEA has since expanded this work to produce a ready-to-use dataset including information about children's risk factors, strengths, and interactions with government systems and services.

The ECR3 dataset is a person-level, fully integrated file that IDEA has assembled with input from City departments that contribute data to the IDEA data warehouse. It contains information on all young children residing in Philadelphia at the time of their birth, including over 250 variables collected in administrative records from various City departments. From this comprehensive dataset, IDEA can quickly create custom data files tailored to the needs of specific inquiries or data use cases, as permitted under the City's data-sharing agreements and in compliance with federal, state, and local privacy laws.

Customized versions of the ECR3 dataset have been used in multiple projects to enhance support for young children and their families in the City. For example, ECR3 data have been used to understand the geographic distribution of young children in Philadelphia experiencing multiple publicly-monitored risk factors that have demonstrated negative impacts on educational outcomes. This knowledge allows the City to strategically allocate critical educational resources, such as the provision of high-quality pre-K slots, to better support young children in these neighborhoods.





## Additional 2024 Project Highlights



### Criminal and Juvenile Justice Debt Relief

Health & Human Services. Managing Director's Office

**Project Summary:** The Criminal and Juvenile Justice Debt Relief Program pays the justice debt of Philadelphians who live in low-income households. Because it creates more opportunities for clearing criminal records, this program increases access to employment, housing, and economic opportunities.

**IDEA's Role:** IDEA provided up-to-date contact information for potential participants to make program outreach possible. IDEA also streamlined eligibility determination for debt relief by identifying individuals who meet program eligibility requirements (e.g., live in low-income households).

**Project Impact:** As of the close of CY2024, the City has paid the criminal justice debt of 148 adults and the juvenile justice debt of 42 juveniles. Through this program, the City has paid roughly \$350,000 in debt.

### Child Identification for Early Intervention Screening

Department of Behavioral Health and Intellectual disAbility Services (DBHIDS) & Office of Homeless Services (OHS)



**Project Summary:** DBHIDS's Philadelphia Infant Toddler Early Intervention (ITEI) Program offers developmental screening and support services to young children at no cost to the family. It is critical for ITEI to connect with families, particularly those experiencing risks that can affect children's learning and development. This project ensures that children experiencing housing instability as reported by OHS are referred to ITEI for screening and supports.

**IDEA's Role:** Each month, OHS and IDEA identify children under the age of three whose families are experiencing housing instability and securely share this information in compliance with privacy requirements with ITEI.

**Project Impact:** Due in part to this data-sharing effort, 200 families were successfully connected to resources that support children's growth and learning.



### Kensington Cohort Analysis

Overdose Response Unit

**Project Summary:** For years, the Kensington neighborhood has struggled with serious challenges related to public safety, substance use, homelessness, and economic opportunity. This project used IDEA data to help understand the scale and nature of complex issues faced by people in Kensington.

**IDEA's Role:** IDEA analyzed the administrative records of people who lived or spent time in Kensington in 2023. The project particularly focused on estimating the scale of people in Kensington who were unstably housed or arrested for drug-related crimes. Additionally, the project explored the history of these individuals' touches with City systems to provide more context about their experiences.

**Project Impact:** The findings of this project were shared with cross-departmental City leadership to inform the City's policy and operational responses in Kensington.

# Projects IDEA Supported in 2024

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 and/or data analysis. Below are the four broad categories our work tends to fall into along with a list of specific projects that we've supported within each category over the past year.

## 1. Connecting Philadelphians to critical benefits and resources

- Connecting With Hard-to-Reach Water Customers to Prevent Water Shutoff
- Criminal and Juvenile Justice Debt Relief Outreach
- Philadelphia Joy Bank Outreach
- Senior Tax Freeze Property Tax Exemption Outreach
- Water Shutoff Avoidance and Auto-Enrollment into Financial Assistance Programs for Water
- Zero Fare Transit Program Outreach

## 2. Helping better coordinate City services

- Connecting DHS-Involved Children to Early Developmental Screening
- Connecting OHS-Involved Children to Early Developmental Screening
- Screening of Child Welfare Population for Supportive Medicaid Services

## 3. Conducting case reviews to improve understanding of complex issues

- Fetal-Infant Morbidity Review
- Maternal Mortality Review
- Opioid Death Review

## 4. Evaluating problems, programs, and policy responses

- Child Tax Credit Outreach Evaluation
- Domestic Violence Perpetrators Analysis
- Foster Youth HUD Vouchers Report
- Early Childhood Risk Dataset & Dashboard
- Evaluation of COVID Reentry Payment Program
- Evaluation of Juvenile Assessment Center
- Kensington Cohort Analysis
- OHS Discharge Planning Analysis
- Pinpoint Area Analysis
- P3 Eligibility Study
- Suicide Deaths and Attempts Among Medicaid Population Study