# **Engaging Users: Enabling Data Analysis**

J. Hopkins<sup>1</sup>, B. Collett<sup>1</sup>, J. Rifer<sup>1</sup>, Greg Hoff<sup>1</sup>, MS, A. Hobbs<sup>2</sup>, JD, PhD, A. Fruhling<sup>1</sup>, PhD <sup>1</sup> UNO College of Information Science & Technology | Public Health Informatics Laboratory

<sup>2</sup> UNO School of Criminology and Criminal Justice

## Juvenile Case Management System (JCMS)

The JCMS system is a web-based database platform for agencies that work with Nebraska's at-risk youth. Program-specific screens allow agency personnel to record their work, maintain records, and access reports. JCMS was created through funding from the Juvenile Justice Institute (JJI) and the Nebraska Crime Commission (NCC). Neb Rev Stat § 43-2404 authorizes JJI to gather data and to evaluate the effectiveness of these programs.

## **Engaging Users**

JCMS engages users by:

- ☐ creating a one stop web portal for all at-risk agencies in Nebraska
- ☐ involving users in interactive user-interface screen design sessions
- ☐ providing specialized value-added capabilities such as:
- robust search functions
- in-depth data verification and validation processes
- customized reporting functions
- ☐ integrating the technology into the daily workflow of the user
- ☐ enabling electronic information flow to the Nebraska Crime Commission and the Juvenile Justice Institute
- □ serving multiple agencies that support programs for: mentoring, mental health, assessments, truancy, court diversions, electronic monitoring, tracking services, shelter care, reporting centers, prevention/promotion, and school-based programs(school resource officers, interventionists, alternative school, and after school).

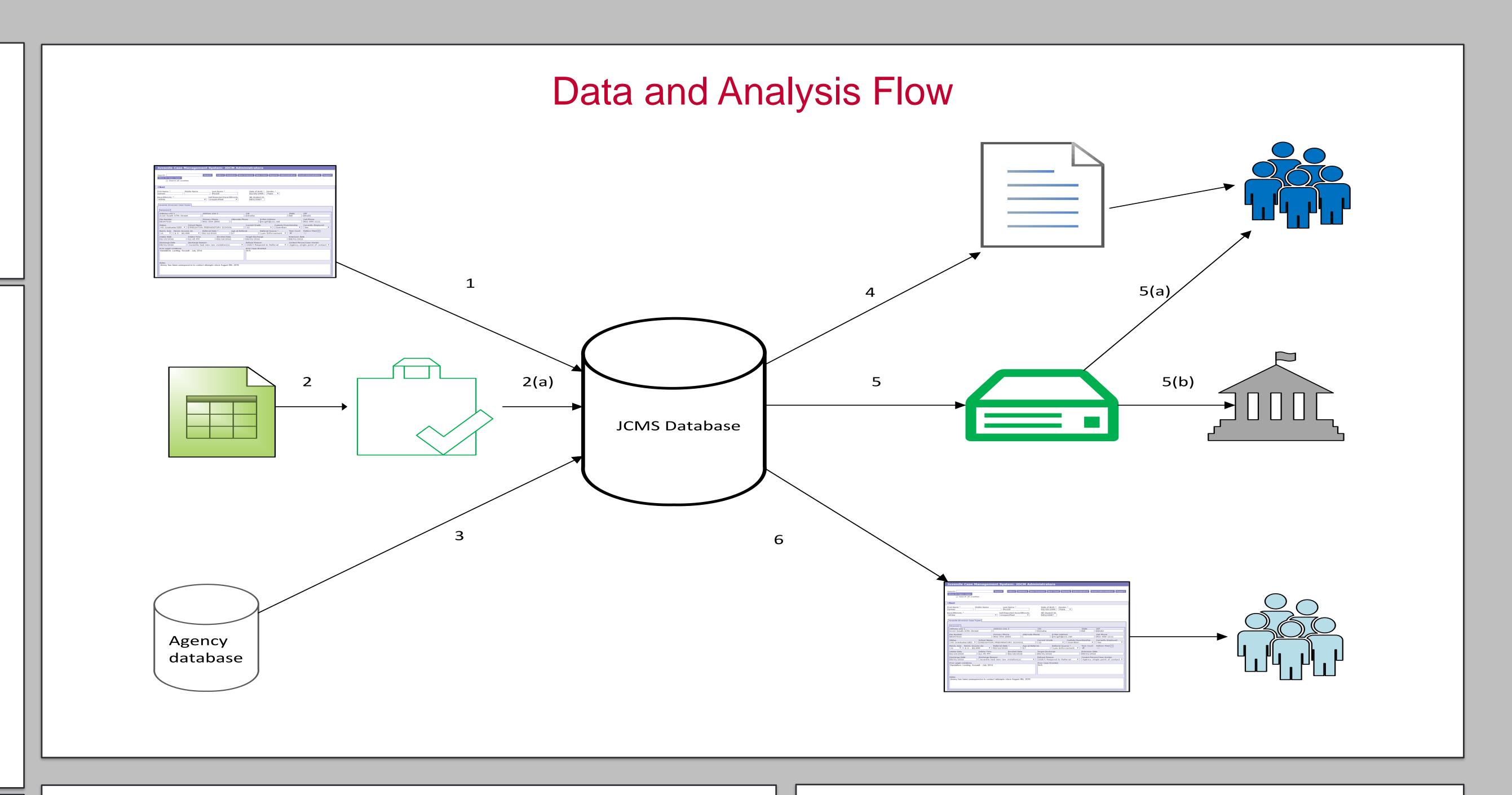
# **Enabling Data Analysis**

JCMS enables data analysis through:

- ☐ a centralized, homogenous database
- validated data integrity
- ☐ strategically organized data according to agency programs types
- quick and consistent administrator access to data

#### Public Health Informatics Research Lab

The Public Health Information Research lab's mission is to provide information technology and informatics solutions to support researchers, non-profit agencies, and government entities in their efforts to improve public health. The lab provides opportunities for students to further develop their technical skills and knowledge working on meaningful information technology research projects that are used by academic and community stakeholders. JCMS is an example of a synergistic collaboration among the Nebraska Crime Commission, UNO's Juvenile Justice Institute and the IS&T Public Health Informatics lab.



## Data and Analysis Flow

JCMS is populated from three sources:

- 1. Data entered directly via agency program-specific screens.
- 2(a). Data sent to JJI via EXCEL spreadsheets
- 2(b). Data is validated and uploaded to the database.
- 3. Electronic data feed from county agencies

Data in the system is accessed through the following processes:

- 4. Nebraska Crime Commission staff receive and review reports
- 5. JJI staff receive data extracts that enable them to perform data analysis.

Conclusions and reports from the data analysis are given to 5(a) Nebraska Crime Commission and 5(b) members of the Nebraska State legislature.

6. Agencies access their data via agency program-specific screens.

#### Benefits to Nebraska

- ☐ Nebraska agencies provide more effective and efficient services to at-risk juveniles via stream-lined workflow.
- ☐ University of Nebraska Juvenile Justice Institute staff spend less time collecting and analyzing agency data, thus reducing labor costs.
- ☐ Improved communication across agencies by leveraging the centralized database platform.
- ☐ Increased data consistency allowing thorough evaluation of the effectiveness of juvenile programming.
- ☐ High quality data provided to state legislators resulting in more accurate conclusions about the effectiveness of grant-funded projects.
- ☐ Efficient allocation of funds to agencies having the most impact.
- Workforce development by providing UNO students an opportunity to gain real world IT experience.

