

from the Pandemic Rapid Response Team



# BUSINESS DATA DICTIONARY GUIDANCE FOR COURTS

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This document outlines the purpose for developing a business data dictionary and important considerations for courts looking to develop this resource in their jurisdiction. A business data dictionary is a reference tool that defines the various data elements collected by the court. It provides standardized definitions and explanations for terms, data fields, and other relevant information related to court data. A business data dictionary promotes clarity, consistency, and understanding of data across different departments and stakeholders. It serves as a vital resource for facilitating effective data management, governance, and utilization within the court.

This document is not a guide for developing a technical dictionary, which describes the attributes of the data and is a technical document primarily used by IT professionals. The development of a business dictionary falls within the broader data governance framework outlined in the National Center for State Courts (NCSC) [Data Governance Policy Guide](#).

# WHAT IS A DATA DICTIONARY?



A data dictionary is a resource that defines data elements that are collected. In court systems, data dictionaries can serve as an interpreting device between business staff and technical staff, helping both groups to communicate about data needs and findings.

BUSINESS	VS	TECHNICAL
<ul style="list-style-type: none"><li>✓ Court staff who enter data or use data to make decisions</li><li>✓ Want information on trends, outcomes, court processes, etc.</li><li>✓ Serve as experts on business use of data</li></ul>		<ul style="list-style-type: none"><li>✓ IT Professionals, data experts</li><li>✓ Want to ensure data security/management</li><li>✓ Serve as experts on data and technical capabilities</li></ul>

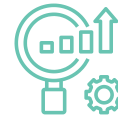
# DATA DICTIONARIES IMPROVE:

Data management, governance, and utilization.



## CLARITY AND CONSISTENCY

Establishes a common language for shared data, improving uniform interpretation and usage.



## DATA QUALITY

Reduces ambiguity and errors, improving data quality for more accurate and reliable data.



## EFFICIENCY AND PRODUCTIVITY

Enables court staff to quickly understand and utilize data in various business processes.



## DATA GOVERNANCE

Serves as a foundation by documenting data assets, establishing accountability, and ensuring compliance with policies and regulations.



## DATA INTEGRATION

Establishes a common vocabulary across different systems, streamlining data exchange and interaction between disparate sources and applications.



## DATA ANALYSIS AND REPORTING

Improves comprehension to derive actionable insights and reduces the likelihood of misunderstanding or misinterpreting data.

# WHY IS IT NEEDED?



A data dictionary is a vital tool in data governance. The absence of standardized definitions and usage for data elements hampers the ability to draw meaningful and accurate conclusions from the data.

## IMPROVE DATA QUALITY, CONSISTENCY, AND ACCURACY

Standardized definitions and descriptions for data elements improve clarity and consistency in how data is understood and used across the court. Providing clear guidelines on data formats, definitions, and usage helps reduce ambiguity and errors in data entry, manipulation, and analysis. This, in turn, enhances data quality by ensuring that data is accurate, reliable, and consistent throughout its lifecycle.

## **FACILITATE DATA GOVERNANCE AND COMPLIANCE**

Effective data governance requires clear documentation and management of the court's data assets. Documenting ownership, usage guidelines, and compliance requirements for each data element is crucial. This helps to establish accountability, enforce data standards, and ensure compliance with regulatory requirements and internal policies.

## **ENHANCE COLLABORATION AND COMMUNICATION AMONG TEAMS AND STAKEHOLDERS**

Effective collaboration and communication rely on a shared understanding of terminology and data definitions. Providing a standardized vocabulary and clear definitions for data elements fosters collaboration and communication among staff and stakeholders. This ensures that everyone involved in data-related activities, from different departments to external stakeholders, speaks the same language and can effectively exchange and interpret data.

## **IMPROVE THE ABILITY TO USE DATA FOR DECISION-MAKING**

Access to accurate, reliable, and understandable data is essential for informed decision-making. Providing standardized definitions for data elements enhances the organization's ability to use data for decision-making. This enables decision-makers to confidently interpret and analyze data, leading to more informed and effective decision-making processes.

## **FOSTER TRANSPARENCY**

Transparency is essential for building trust and accountability. Providing visibility into the court's data assets, their definitions, and their usage guidelines helps build trust by ensuring that data-related decisions and processes are well-documented, accessible, and understood by all relevant parties. It also enables tracking changes to data definitions and understanding the rationale behind them, fostering a culture of openness and accountability.

Establishing consistent definitions and usage for data elements via a data dictionary is vital for enhancing the efficiency and effectiveness of court operations.



# HOW DO YOU CREATE A BUSINESS DATA DICTIONARY?



The National Open Court Data Standards (NODS) serves as a valuable resource for developing the Business Data Dictionary. The Conference of State Court Administrators and NCSC have created NODS to establish business and technical standards for court data. NODS facilitates the creation, sharing, and integration of court data by ensuring clarity on data representation and promoting user-friendly data sharing formats. It also allows flexible jurisdictional data mapping, recognizing that courts may need to adapt data collection to their specific needs.

For courts aiming to enhance case management effectiveness and address policy and monitoring inquiries, NODS serves as a valuable tool for initiating discussions on data collection.



Courts can identify data elements by reviewing data across court databases and related ancillary systems. Most database management systems have built-in, active technical data dictionaries. These dictionaries should be reviewed to ensure data elements are oriented to court processes and to inform content in business data dictionaries.

To assess strengths and areas for improvement in data governance, courts can utilize NCSC's Data Governance Self-Assessment. Additional resources on data governance and the self-assessment tool are available on NCSC's [Data Governance Website](#).

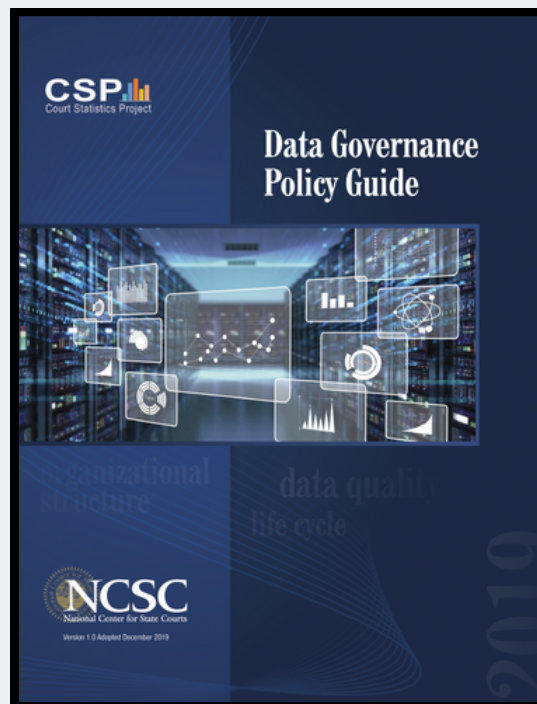
# WHO SHOULD BE INVOLVED?



In order to foster and enforce standardization across the court and across jurisdictions, it is important to establish a multidisciplinary data governance committee. The most effective data quality efforts (including business data dictionaries) are the result of collaborative efforts with related system stakeholders. Multidisciplinary groups can create a clear picture of case characteristics more efficiently than each stakeholder group working to collect data individually.

The diverse perspectives of a data governance committee bring varied domain-specific expertise that is useful for defining data elements accurately. A multidisciplinary group can also work towards ensuring that the identification and definition of data elements align with organizational objectives and goals.

NCSC's Data Governance Policy Guide provides courts with guidance on who should serve on a data governance committee. The committee can then use this same resource to create, evaluate, and maintain good data governance policies and practices. The data governance principles in the guide provide ways to ensure that data are used as strategic assets for courts, while highlighting the pivotal role of a data governance committee and best practices in data quality.



**Gold Standard:** The business data dictionary is a living document. The data governance committee should conduct regular reviews and updates to maintain consistency.

# WHAT SHOULD BE INCLUDED?

## DATA DICTIONARY

### Checklist



- Data Elements:** Names, acronyms, and definitions.
- Data Types:** Categories of data such as text, numeric, alphanumeric, date, etc.
- Data Formats:** Standards for presenting data, including currency format, date format, phone number format, etc.
- Data Sources:** The origins or points of origin for data, encompassing data systems, applications, external sources, or manual input.
- Data Relationships:** Details on the connections or interdependencies among various data elements.



**Gold Standard:** Review CourTools measures and Common NODS elements when developing the business data dictionary data elements and definitions.

# HOW DO YOU IMPLEMENT THE BUSINESS DATA DICTIONARY?



The Data Governance Committee should collaborate to develop the business data dictionary, bringing in additional personnel as necessary. Once established, this dictionary must be readily accessible to data entry staff for easy reference. Additionally, the Committee should formally introduce the adoption of the business data dictionary, ensuring awareness across all levels of personnel.

Consistent and accessible training is vital for data entry staff, especially in environments with high turnover rates. Relying solely on informal knowledge transfer can lead to long-term data quality issues. Training protocols should align with documented guidelines and office procedures, including protocols for communicating and monitoring new rules. All data entry personnel, including attorneys in courts with e-filing systems, should undergo training. In cases of persistent errors, supervisors should prioritize retraining employees over correcting errors themselves, fostering a culture of continuous learning.

Implementing a business data dictionary involves several key steps to ensure its effectiveness in managing and organizing data assets. This process can include:

## Assess Existing Data Assets

- Conduct a comprehensive inventory of all existing data assets within the organization, including databases, spreadsheets, documents, and other data sources.

## Define Data Standards

- Establish clear and consistent data standards and conventions that will be used throughout the organization to describe and classify data elements.
- Define naming conventions, data types, formats, units of measure, and other attributes for data elements.
- Document these standards and conventions in the data dictionary to ensure consistency and alignment across different data assets.

## Establish Data Governance Policies

- Develop data governance policies and procedures to ensure the effective management, protection, and utilization of organizational data.
- Define roles and responsibilities for data stewards, data custodians, and other stakeholders involved in managing and maintaining the data dictionary.
- Establish processes for data quality assurance, data security, data privacy, and compliance with regulatory requirements.
- Implement mechanisms for resolving disputes and conflicts related to data definitions and usage.

# HOW DO YOU MAINTAIN THE BUSINESS DATA DICTIONARY?



Updates to the business data dictionary may be driven by changes in data collection requirements stemming from court needs, funder requirements, or legislative changes. Therefore, the Data Governance Committee should conduct regular reviews and assessments of the business data dictionary and overall data quality to ensure it remains updated and accurate. Updates to the business data dictionary should adhere closely to established data standards, which serve as comprehensive guidelines and protocols governing data organization, formatting, storage, and management. These standards ensure consistency, accuracy, interoperability, and security of data across systems, organizations, and sectors. Adhering to and referencing these standards minimizes the need for additional documentation when the court implements changes.



Maintaining a business data dictionary involves several key steps to ensure its accuracy in managing and organizing data assets. This process can include:

## Evaluate the Data Dictionary

- Regularly review the data dictionary and overall data quality to identify any data elements that require elimination, addition, or modification based on current data processes and practices.
- If inconsistencies are identified within or across jurisdictions, the Data Governance Committee can devise strategies to address these inconsistencies.

## Update the Data Dictionary

- Promptly update the data dictionary to reflect changes as data needs evolve.
- Maintain version control mechanisms to track changes, revisions, and updates over time.
- Ensuring documentation remains aligned with the current data landscape.

## Provide Ongoing Training

- Staff turnover poses a risk to data quality, and long-tenured staff may develop habits that do not align with current data standards.
- Provide training to maintain fidelity to the definitions outlined in the data dictionary and ensure continuous data quality and improvement.

# BEST PRACTICES



By following these best practices, organizations can effectively manage their business data dictionaries to support informed decision-making, ensure data integrity, and drive organizational success.

## REGULARLY UPDATE AND MAINTAIN THE DATA DICTIONARY

Continuously review and update the data dictionary to reflect changes in data structures, processes, and standards. Regular maintenance ensures that the dictionary remains accurate and relevant to the organization's evolving needs.

## ESTABLISH OWNERSHIP AND ACCOUNTABILITY

Assign clear ownership of the data dictionary to individuals or teams within the organization. Establish accountability for maintaining the dictionary's integrity, ensuring that all stakeholders understand their roles and responsibilities in its upkeep.

## **PROVIDE TRAINING AND SUPPORT TO USERS**

Offer comprehensive training programs to familiarize users with the data dictionary's structure, purpose, and usage. Provide ongoing support to address any questions or concerns users may have, promoting widespread adoption and effective utilization of the dictionary.

## **INTEGRATE THE DATA DICTIONARY INTO ORGANIZATIONAL WORKFLOWS**

Embed the data dictionary into the organization's workflows and processes to ensure seamless integration with day-to-day operations. Incorporate the dictionary into relevant systems and tools used across departments, promoting consistency and standardization in data management practices.

## **PROMOTE COLLABORATION AND COMMUNICATION**

Foster a culture of collaboration and communication among stakeholders involved in managing and using the data dictionary. Encourage feedback and input from users to continuously improve the dictionary's effectiveness and usability.

## **ENFORCE DATA GOVERNANCE POLICIES**

Implement robust data governance policies to govern the creation, modification, and usage of data within the organization. Ensure that adherence to these policies is reinforced through regular audits and compliance checks.

## **MONITOR AND MEASURE EFFECTIVENESS**

Establish metrics and key performance indicators (KPIs) to measure the effectiveness of the data dictionary in improving data management processes and outcomes. Monitor usage metrics, data quality metrics, and user satisfaction to identify areas for optimization and refinement.

## **EVOLVE WITH TECHNOLOGICAL ADVANCEMENTS**

Stay abreast of technological advancements and industry best practices in data management. Continuously evaluate and update the data dictionary to leverage new technologies and methodologies that enhance its functionality and relevance to the organization's objectives.

# EXAMPLES OF DATA DICTIONARIES



National Center for State Courts. (2020). *National Open Court Data Standards (NODS) Model Diagrams*. <https://www.ncsc.org/consulting-and-research/areas-of-expertise/data/national-open-court-data-standards-nods>

Model Diagrams are provided for the following NODS:

- Civil
- Criminal
- Dependency
- Family
- Juvenile
- Probate
- Traffic

The Arizona Judicial Branch has publicly available resources on data element standardization. This includes data element definition checklists.

Arizona Judicial Branch. (2024, January 30). *Data Elements and Code Standardization*. Arizona Judicial Branch. <https://www.azcourts.gov/courtservices/Court-Operations-Unit/Data-Elements-and-Code-Standardization-Hub>

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