Creating a Data Dictionary

Purpose

A data dictionary is a collection of names, definitions, and attributes about data elements used or captured in a database or information system. In the state data portal, a data dictionary can provide information about data assets that are not themselves available for internal or public consumption to facilitate data sharing requests from other state agencies. This document provides access to data dictionary templates and the procedure for completing the template.

Templates

The data dictionary template is offered as either a Google Sheet or an Excel file. Use the following links to either create a copy of the Google Sheet template or download the Excel template.

[Copy Google Sheet]
[Download Excel File]

Procedure

1. Copy the Google Sheet or Download Excel File using the links provided above.
2. Move the Google Sheet to Drive folder of your choice, or save the Excel File to local or shared directory. Recommend using database name (see step 3b below) as part of the file name along with “Data Dictionary” (e.g. Local Government Valuation & Finance System Data Dictionary).
3. On the Cover Worksheet:
    a. Select the agency name using the provided list of options
    b. Enter the name of the database name.
    c. Where applicable, add a release number.
    d. Provide a description of the database to explain what the system does and is used for.
    e. Do not modify the data dictionary date, it will be calculated based on the change log
4. On the Tables Worksheet, complete the following for each table containing data fields you want to highlight:
    a. Under Table Name, enter the name of table used within the database
    b. Under Description, provide a brief description highlighting the purpose of the table.

   c. Add or delete rows as needed in Google Sheets. In Excel, within the Design menu, resize the Tables table based on the number of rows completed, then within the Page Layout menu, set the print area to match rows completed.

5. On the Fields Worksheet, complete the following for each data field you want to highlight:
   a. Under Field Name, enter the name of the field containing values for a single underlying attribute.
   b. Under Table, select the table the field belongs to from using the provided list of options. If none show up, revisit step 4.
   c. Under Description, provide a brief description highlighting the purpose of the field.
   d. Under Data Type, select the type of data allowed in the field using the provided list of options: Text, Numeric, Date/Time, Boolean, and Unique ID.
   e. Under Length, enter the maximum number of characters allowed where applicable.
   f. Under Precision, enter the number of decimal places allowed in the numeric field where applicable.
   g. Under Unit, enter the unit of measure for numeric values where applicable.
   h. Under Null, in Google Sheets, check the checkbox if null values are allowed in the field. In Excel, select either “Yes” or “No”.
   i. Under Acceptable Values, list rules that limits the values that can be entered into the field such as enumerated lists, dependencies (i.e., look-ups), minimum and maximum values, etc.
   j. Add or delete rows as needed in Google Sheets. In Excel, within the Design menu, resize the Fields table based on the number of rows completed, then within the Page Layout menu, set the print area to match rows completed.
6. On the Change Log Worksheet, complete the following for each modification or update made:
   a. Under Table/Field Changed, for the first draft, list “All.” For subsequent amendments, provide the name of the table or field modified or added.
   b. Under the Description of Change, for the first draft, list “First Draft”. For subsequent amendments, highlight the change made to the table or field, or where added just indicate that the table or field was added.
   c. Under Date of Change, enter the date the initial draft was complete or approved by your agency. Where modified, enter the date the modification to the data dictionary was approved.
   d. Under Change By, enter the name of the individual completing the initial draft or subsequent modification.
   e. Add or delete rows as needed in Google Sheets. In Excel, within the Design menu, resize the Change_Log table based on the number of rows completed, then within the Page Layout menu, set the print area to match rows completed.
7. If using Excel, save your file, then under the File menu:

   a. Under Printer, select Microsoft Print to PDF
   b. Under Settings, select Print Entire Workbook
   c. Click the Print button
   d. Provide a file name for the PDF document - recommend using the same name as Excel file.
8. If using Google Sheets, download as PDF document:
   a. Go to File > Download > PDF document (.pdf)
   b. For Export, select Workbook
   c. For Select, keep as All sheets
   d. Under paper size, change as needed. Recommend either Letter or Legal
   e. Under page orientation, leave as landscape
   f. Under scale, leave as Fit to width
   g. Under margin, leave as Normal
   h. Under formatting, leave default settings
   i. Under headers & footers, uncheck Date if different from version date, leave other default settings
   j. Click “Export” button at top
9. Use the PDF document to publish a document on the state data portal.