**Best Practices Review**

Prepared by: Zulykath Lucero, Shishir Poreddy, Ruth Ayele, Arafat Bhuiyan, Avindra Mahesh, Daniel Araj

A comparative analysis of how other municipalities have successfully contributed to the portal.

**Mount Rainier:**

1. Datasets uploaded to the portal:
   1. [City of Mount Rainier Municipal Boundaries](https://opendata.maryland.gov/d/atca-bdj8)
   2. [City of Mount Rainier Boundaries vs. Zip Code 20712](https://opendata.maryland.gov/d/rc4z-rq4c)
   3. [Mount Rainier: County Designated Historical Sites & National Register of Historic Places Sites](https://opendata.maryland.gov/d/nifh-ijgb)
   4. [Map of Zip Code 20712](https://opendata.maryland.gov/d/cdet-mmji)
   5. [OGRGeoJSON](https://opendata.maryland.gov/d/t9cz-nvcc)
2. Metadata Information:
   1. Agency in charge of Updates: Department of Information Technology
   2. Update Frequency: As Needed
   3. Categories: Planning, Administrative
   4. Data Source: Mount Rainier’s Website
3. Upload Method:
   1. Mount Rainier has their Open Data Administrator upload datasets to the portal.

**City of Frederick:**

1. Datasets uploaded to the portal:
   1. [Issued Permits](https://opendata.maryland.gov/Administrative/City-of-Frederick-Issued-Permits/xrz3-9xhj/about_data)
   2. [Code Enforcement Violations](https://opendata.maryland.gov/dataset/City-of-Frederick-Code-Enforcement-Violations/fqwk-5r78/about_data)
   3. [General Map](https://opendata.maryland.gov/Administrative/SpiresGIS-General-Map-Frederick-City-/4zg6-uitp/about_data)
2. Metadata Information:
   1. Agency in charge of Updates: City of Frederick
   2. Update Frequency: Static Data (no updates)
   3. Categories: Administrative (Some datasets are not categorized)
   4. Data Source: City of Frederick’s Website
3. Upload Method:
   1. Map data is uploaded via a static link to a map updated daily, while other datasets are uploaded as static files.

**City of Baltimore:**

1. Datasets uploaded to the portal:
   1. [Metro Subway Lines](https://opendata.maryland.gov/Transportation/MD-iMAP-Maryland-Transit-Baltimore-Metro-Subway-Li/ykwh-r4a8/about_data)
   2. [Map of Baltimore Neighborhoods](https://opendata.maryland.gov/Society/MD-iMAP-Maryland-Baltimore-City-Neighborhoods/dbbp-8u4u/about_data)
2. Metadata Information:
   1. Agency in charge of Updates: Not Listed
   2. Update Frequency: Not Listed
   3. Categories: Administrative, Society
   4. Data Source: ArcGIS Online for Maryland
3. Upload Method:
   1. The city of Baltimore does not directly upload data to the Maryland Open Data Portal. The city hosts its own open data portal and posts information on ArcGIS Online. The state and its agencies get information from those sources and upload it to the Maryland Open Data Portal.

**Best Practices:**

1. The way different municipalities get their data on the Maryland Open Data Portal differs from case to case. There are three main methods we have seen municipalities use:
   1. Method 1:
      1. Create an account on the Maryland Open Data Portal for the city.
      2. Establish a connection via Socrata Gateway.
      3. Upload datasets from the city’s website into the portal.
      4. Have a member of DoIT perform the updates to the datasets.
   2. Method 2:
      1. Create an account on the Maryland Open Data Portal for the city.
      2. Upload static datasets or links to the portal.
      3. The city is responsible for all updates.
   3. Method 3:
      1. Create a separate Open Data Portal for the city, usually hosted on a service such as Tyler Technologies.
      2. Contact the Maryland Open Data Portal to establish a connection to the city’s portal.
      3. Updates will be handled internally on the city’s portal.
2. Choosing the best way to contribute to the portal should be based on which method allows the city to follow these standards:

* Ensure information is updated appropriately, or mark the dataset as static.
* Fill out as many metadata fields as possible.
* Each row of a dataset should be a single instance of the “thing” being measured (for example, in a dataset measuring website visitors, it is one record of a particular site user, or, in a dataset measuring hospital patients, it is one record of a particular patient).
* Each column of a dataset should be one type of data—a characteristic that the record being measured inherently has (for example, in a dataset measuring website visitors, it might be a timestamp indicating the time and date that the user visited. Or, in a dataset measuring hospital patients, it is the medical issue that the patient is experiencing). Each column should have a header, or name, indicating what characteristic that column is measuring. When naming columns, avoid abbreviations and acronyms to ensure that the widest possible audience can interpret the dataset.
* Do not include any empty rows or columns where feasible.
* Do not include symbols (%, $, etc.) in the cells of your dataset. Data can be configured once it is uploaded to the portal. However, decimals are acceptable, as are parentheses (for denoting a negative value).
* When uploading time series data—data measuring the same object/instance at different points in time to observe a change—the unit of measurement for time should have its own column, rather than being paired with data from another characteristic/field.
* Data & Insights can interpret columns with date and time values. When uploading a dataset with a date and time column, use one of the three following formats:
  + ISO 8601 Subset
    - yyyy-MM-dd
  + ISO 8601 Subset for Timezone
    - yyyy-MM-dd[‘T’]HH:mm:ssZ
  + American date format
    - MM/dd/yyyy
* Data & Insights can interpret columns with location values. When uploading a dataset with a location column, use one of the following formats:
  + Exact latitude and longitude in one column
    - Example: (38.898303, -77.036561)
  + Latitude and longitude are separated into two columns
    - Example: Latitude Longitude

38.898303 -77.036561

* + American Street Address in one column (note the comma separations)
    - Example: 1600 Pennsylvania Avenue SE, Washington, DC, 20003
  + American Street Address in several columns
    - Example: Street Address City State ZipCode

1600 Pennsylvania Avenue Washington DC 20003