**DataSet URL**

Minneapolis Snow Emergency

<http://opendata.minneapolismn.gov/datasets?t=Snow%20Emergency>

**Snow Emergency Tags DataSets**

<http://opendata.minneapolismn.gov/datasets/snow-emergency-howe-tags-2018>

<http://opendata.minneapolismn.gov/datasets/snow-emergency-xerxes-tags-2018>

<http://opendata.minneapolismn.gov/datasets/snow-emergency-yardville-tags-2018>

**Snow Emergency Tows DataSets**

<http://opendata.minneapolismn.gov/datasets/snow-emergency-howe-tows-2018>

<http://opendata.minneapolismn.gov/datasets/snow-emergency-xerxes-tows-2018>

<http://opendata.minneapolismn.gov/datasets/snow-emergency-yardville-tows-2018>

**Data Preparation**

1. Identify common data elements between all Tags datasets
2. Identify common data elements between all Tows datasets

**Database Scripts**

<https://drive.google.com/open?id=1J3EbIzEZzqGUYMiw14nrvATGkrpLOX0z>

**ETL Specification Document**

https://docs.google.com/spreadsheets/d/13kLtQtBaSTt4XsmvHxi8NtDKfY\_-nTPq6HrONzfwxnc/edit#gid=1923868870

**ETL Framework**

**Base ETLs**

**Extract**

1. Read Tags csv files into dataframes
2. Read Tows csv files into dataframes

**Transform**

1. Rename columns in dataframe
2. Drop unnecessary columns in dataframe
3. Transform text for service date to **date** dataype
4. Round latitude and longitude to 3 decimal places.

**Load**

1. Load each tag dataframe in a MySQL table
2. Load each tow dataframe in a MySQL table

**Database level ETLs**

1. Combine Tags dataframes into a single table using UNION.
2. Combine Tows dataframes into a single table using UNION.
3. Create views with AGGREGATE clause.
4. Create views with WHERE clause.