# **Data Collection**

# **Datasets:**

Dublin City Council Data:

[Data.gov.ie](https://data.gov.ie/)

Note: Files are too large to contain in PDF, stored on Google Drive and locally:

### **Traffic Flow Data:**

Jan - Jun 2022:<https://data.gov.ie/dataset/traffic-flow-data-jan-to-june-2022-sdcc1>

Jun - Dec 2022:<https://data.gov.ie/dataset/traffic-flow-data-june-to-december-2022-sdcc>

Jan - Dec 2023:<https://data.gov.ie/dataset/traffic-flow-data-jan-to-june-2023-sdcc>

SDCC Names:<https://data.gov.ie/dataset/traffic-data-site-names-sdcc>

ArcGIS HUB Dataset:

<https://data-sdublincoco.opendata.arcgis.com/datasets/sdublincoco::traffic-flow-data-jan-to-june-2022-sdcc/explore>

GEOJSON Viewer:<https://geojson.io/#map=6.15/53.39/-8.198>

**Data:**

* It is recommended that this dataset is read in conjunction with the ‘Traffic Data Site Names SDCC’ dataset
  + A detailed description of each column heading can be referenced below;scn: Site Serial numberregion: A group of Nodes that are operated under SCOOT control at the same common cycle time
  + Normally these will be nodes between which co-ordination is desirable.
  + Some of the nodes may be double cycling at half of the region cycle time.system: SCOOT STC UTC (UTC-MX)locn: Locationssite: Site numbersday: Days of the week Monday to Sunday. Abbreviations; MO,TU,WE,TH,FR,SA,SU.date: Reflects correct actual Date of when data was collected.start\_time: NOTE - Please ignore the date displayed in this column
* The actual data collection date is correctly displayed in the 'date' column
* intervals.flow: A representation of demand (flow) for each link built up over several minutes by the SCOOT model
* SCOOT has two profiles:
  + (1) Short – Raw data representing the actual values over the previous few minutes
    1. Long – A smoothed average of values over a longer periodSCOOT will choose to use the appropriate profile depending on a number of factors.flow\_pc: Same as above ref PC SCOOTcong: Congestion is directly measured from the detector
* If the detector is placed beyond the normal end of queue in the street it is rarely covered by stationary traffic, except of course when congestion occurs. If any detector shows standing traffic for the whole of an interval this is recorded
  + The number of intervals of congestion in any cycle is also recorded.
* The percentage congestion is calculated from:No of congested intervals x 4 x 100 cycle time in seconds
  + This percentage of congestion is available to view and more importantly for the optimisers to take into account.cong\_pc: Same as above ref PC SCOOTdsat: The ratio of the demand flow to the maximum possible discharge flow, i.e. it is the ratio of the demand to the discharge rate (Saturation Occupancy) multiplied by the duration of the effective green time. The Split optimiser will try to minimise the maximum degree of saturation on links approaching the node
* Object\_ID must just be the row identifier, represents an object?

### **Traffic Congestion Saturation Flow:**

2018:<https://data.gov.ie/dataset/traffic-congestion-saturation-flow-data-2018-sdcc>

2019:<https://data.gov.ie/dataset/traffic-congestion-saturation-flow-data-2019-sdcc>

**Same data types as above**

### **Traffic Volumes from SCATS:**

Jan - Jun 2020:<https://data.gov.ie/dataset/dcc-scats-detector-volume-jan-jun-2020>

Traffic volumes data across Dublin City from the SCATS traffic management system. The Sydney Coordinated Adaptive Traffic System (SCATS) is an intelligent transportation system used to manage timing of signal phases at traffic signals. SCATS uses sensors at each traffic signal to detect vehicle presence in each lane and pedestrians waiting to cross at the local site. The vehicle sensors are generally inductive loops installed within the road.

Information provided:

1. End Time: time that one hour count period finishes.
2. Region: location of the detector site (e.g. North City, West City, etc).
3. Site: this can be matched with the SCATS Sites file to show location
4. Detector: the detectors/ sensors at each site are numbered
5. Sum volume: total traffic volumes in preceding hour
6. sAvg volume: average traffic volumes per 5 minute interval in preceding hour
7. All Dates Traffic Volumes Data

This file contains daily totals of traffic flow at each site location.

* SCATS Site Location Data