

## E-Scooter OD Data

|               |                     |
|---------------|---------------------|
| Start Date    | 2022-01-01 00:00:00 |
| End Date      | 2023-06-30 23:59:59 |
| N. of Entries | 1001094             |

### Origin

This data is collected by the Municipality with the Service Providers authorization, to monitor and manage the policies that are put in place for the use and operation of soft mobility in Porto City.

The data is received by a software component part of the [MDS platform](#). Data is structured according to the MDS data structures. However, for this exercise and for the safekeeping of personal data, the available dataset is already in an Origin/Destin format.

### Transformations

Personal data has been removed.

### Data Dictionary

| Name               | Description   | Type     | Default | Example                              |
|--------------------|---|----------|---------|--------------------------------------|
| trip_id            | unique identifier of the current trip of the device   | uuid     | null    | 0001f5e6-6adc-5c50-8f3b-02eb05490ae2 |
| recorded_origin    | datetime of origin record   | datetime | null    | 2022-08-23 02:32                     |
| event_types_origin | type of origin event :<br>{trip_start, located, provider_drop_off, trip_enter_jurisdiction} | array    | null    | ['trip_start']                       |

|                    |  |          |      |                                   |
|--------------------|--|----------|------|-----------------------------------|
| recorded_destin    | datetime of destin record  | datetime | null | 2022-08-23 02:46                  |
| event_types_destin | type of destin event :<br>{trip_end, battery_low,<br>comms_lost,<br>decommissioned,<br>maintenance, missing,<br>unspecified,<br>trip_leave_jurisdiction} | array    | null | ['trip_end']                      |
| month              | month of the trip  | bigint   | null | 8                                 |
| year               | year of the trip   | bigint   | null | 2022                              |
| hour_start         | hour that the trip started   | bigint   | null | 1                                 |
| hour_end           | hour that the trip ended   | bigint   | null | 1                                 |
| day                | day of the trip  | bigint   | null | 23                                |
| string_day         | day of the week  | varchar  | null | Tuesday                           |
| type_day           | type of day:<br>{Weekday, Weekend}   | varchar  | null | Weekday                           |
| geometry_origin    | location of the origin point   | point    | null | (-8.6247472763,<br>41.1572380066) |
| geometry_destin    | location of the destin point   | point    | null | (-8.6251897812,<br>41.1666870117) |
| distance_km        | travelled distance in<br>km  | double   | null | 1.0513356950585453                |
| duration_min       | travelled time in min  | double   | null | 13.7                              |
| origin_park        | origin shared point  | tuple    | null | ('Avenida da<br>Boavista', 83.0)  |

|             |                     |       |      |   |
|-------------|---------------------|-------|------|---|
| destin_park | destin shared point | tuple | null | ('Praça do Exército Libertador', 202.0) |
|-------------|---------------------|-------|------|---|

## Info

- Origin Event Types:
  - trip\_start
  - battery\_charged
  - provider\_drop\_off
  - located - device was missing but now has been located
  - trip\_enter\_jurisdiction - device entered area of jurisdiction
- Destin Event Types:
  - trip\_end
  - battery\_low
  - comms\_lost - device cannot communicate
  - decommissioned - taken out of circulation
  - maintenance
  - missing - device cannot be found
  - trip\_leave\_jurisdiction - device left area of jurisdiction
  - unspecified - other