TIP Validations

|  |  |
| --- | --- |
| **Start Date** | 2022-01-01 00:00:00 |
| **End Date** | 2023-06-30 23:59:59 |

# Origin

# The data is collected by the entity who manages the strategy for inter-modality within the metropolitan area of Porto. These datasets aggregate validations within the railway network, as well as validations within the road network, for the different operators arriving in the city of Porto.

# Transformations

# No transformations done.

# Further information

# In Porto, users of transit systems such as buses, trains and the metro need to validate their tickets when entering the transit system, **but not when they exit**. If the commute uses two transit modes, or two lines of the same mode (e.g. two metro lines), users need to validate their tickets two times at the entry points of each mode/line. For this reason, the files only contain one station or stop, which is where the user entered the vehicle/system.

There are no physical barriers stopping people from entering without validating a ticket.

There are two types of files:

* “Validações Ferrov” contains all validations of rail systems. These include regional and suburban trains, and Porto’s metro system.
* “Validações Rodov” contains all validations of road systems – buses.

Public transit systems in Porto use the “Andante” system which works in zones (see zone map [here](https://linhandante.com/comprar/andante-azul/zonas/)). Both types of files below contain the zone of the entry stop/station. You can see more information on how the ticketing system uses the zone in the [FAQ of the Andante system](https://linhandante.com/perguntas-frequentes/) (specifically question 23).

# Data Dictionary

* **Validações Ferrov**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Description** | **Type** | **Default** | **Example** |
| Ano | Validation year | int | null | 2022 |
| Mês | Validation month | int | null | 1 |
| Dia | Validation day | int | null | 3 |
| Hora | Validation hour | int | null | 16 |
| Operador | Responsible Company | array | null | Metro do Porto |
| Est/Op | Entry Station Name | array | null | Casa da Música |
| Zona | Defined zone ID | array | null | PRT1 |
| Validações | Number of Validations for this date, hour , operator and station | Int | null | 1 |

* **Validações Rodov**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Description** | **Type** | **Default** | **Example** |
| Ano | Validation year | int | null | 2022 |
| Mês | Validation month | int | null | 1 |
| Dia | Validation day | int | null | 3 |
| Hora | Validation hour | int | null | 16 |
| Operador | Responsible Company | array | null | STCP |
| Linha\_ao\_Publico | BUS number | Int | null | 903 |
| Sentido | Direction | Int | null | 1 |
| Paragem | Entry Stop name | Array | null | AV.ALIADOS |
| Zona | Defined zone ID | Array | Null | PRT1 |
| Validações | Number of Validations for this date, hour , operator and stop | Int | null | 1 |