

Attributes (in English)

<https://data.stadt-zuerich.ch/dataset/vbz-fahrzeiten-ogd>

Zurich R User Meetup Group

March 4, 2017

Notes and abbreviations

- For consistency, we do not differentiate between bus / tram stops and stations. We always define it as **station**.
- Given **in seconds** means given in seconds after midnight.
- One trip accounts the travel time from the first stop to the terminal stop.
- **VBZ**: Zurich Public Transport / Verkehrsbetriebe Zürich

Attributes

- **linie**: line number / Liniennummer
The VBZ internally used line number (partly not identical to the published line number).
data type: (smallint, 3).
- **richtung**: Direction / Richtung
The direction of a ride. levels: 1 / 2.
data type: (tinyint, 1).
- **betriebsdatum**: Operating date / Betriebsdatum
The date for the event. Working day: 5am to 01:30 am (next day).
data type: (datetime, 8).
- **fahrzeug**: vehicle number / Fahrzeugnummer
The VBZ internally used vehicle number.
data type: (int, 10).
- **kurs**: route number / Kursnummer
The VBZ internally used route number.
data type: (tinyint, 2).
- **seq_von**: sequence of the "from"-station / Sequenz der Haltestelle von
The sequence of the "from"-station of a trip.
data type: (int, 10).
- **halt_diva_von**: station number DIVA "from" / Haltestellennummer DIVA von
The VBZ internally used station number DIVA of the "from"-station.
data type: (int, 10).
- **halt_punkt_diva_von**: number for stopping point "from" / Haltepunktnummer from
The VBZ internally used number for the stopping point "from".
data type: (int, 10).
- **halt_kurz_von1**: short code for "from"-station / Kurzcode Haltestelle from
The VBZ internally used abbreviation for the station number of the "from"-station.
data type: (varchar(8)).

- **datum_von:** date of / Datum von
The date for the event of the “from”-station. Working day: 5am to 01:30 am (next day).
data type: (datetime, 8).
- **soll_an_von:** scheduled arrival time “from” / Sollankunft von
The scheduled arrival time at the “from”-station in seconds.
data type: (int, 10).
- **ist_an_von:** real arrival time “from” / Istankunft von
The real arrival time at the “from”-station in seconds.
data type: (int, 10).
- **soll_ab_von:** scheduled departure time “from” / Sollabfahrt von
The scheduled departure time at the “from”-station in seconds.
data type: (int, 10).
- **ist_ab_von:** real departure time “from” / Istabfahrt von
The real departure time at the “from”-station in seconds.
data type: (int, 10).
- **seq_nach:** sequence of the “to”-station / Sequenz der Haltestelle nach
The sequence of the “to”-station of a trip.
data type: (int, 10).
- **halt_diva_nach:** station number DIVA “to” / Haltestellennummer DIVA nach
The VBZ internally used station number DIVA for the “to”-station.
data type: (int, 10).
- **halt_punkt_diva_nach:** stopping point DIVA “to” / Haltepunktnummer DIVA nach (technisch:)
The VBZ internally used number for the stopping point DIVA of the “to”-station.
data type: (int, 10).
- **halt_kurz_nach1:** short code for “to”-station / Kurzcode Haltestelle nach
The VBZ internally used abbreviation for the station number of the “to”-station.
data type: (varchar(8)).
- **datum_nach:** date to / Datum nach
The date for the event of the “to”-station. Working day: 5am to 01:30am (next day).
data type: (datetime, 8).
- **soll_an_nach:** scheduled arrival time “to” / Sollankunft nach
The scheduled arrival time at the “to”-station in seconds.
data type: (int, 10).
- **ist_an_nach1:** real arrival time “to” / Istankunft nach
The real arrival time at the “to”-station in seconds.
data type: (int, 10).
- **soll_ab_nach:** scheduled departure time “to” / Sollabfahrt nach
The scheduled departure time at the “to”-station in seconds.
data type: (int, 10).

- **ist_ab_nach**: real departure time "to" / Istabfahrt nach
The real departure time at the "to"-station in seconds.
data type: (int, 10).
- **fahrt_id**: trip ID / Fahrt ID
The VBZ internally used trip ID per day of operation. One trip accounts the travel time from the first stop to the terminal stop.
data type: (bigint, 19).
- **fahrweg_id**: route ID / Fahrweg ID
The VBZ internally used foreign key for the "Fahrwegstamm" table.
data type: (bigint, 19).
- **fw_no**: route number / Fahrwegnummer
The VBZ internally used route number.
data type: (smallint, 5).
- **fw_typ**: route type / Fahrwegtyp
The VBZ internally used route type.
data type: (tinyint, 1).
- **fw_kurz**: short code for route / Fahrweg Kurzcode
The VBZ internally used abbreviation for route.
data type: (varchar(6)).
- **fw_lang**: route labelling / Fahrwegbezeichnung
The VBZ internally used route labelling.
data type: (varchar(40)).
- **umlauf_von**: circulation number / Umlaufnummer
The VBZ internally used ID for a circulation of trips per day of operation. In other words, all the trips that are made by the one vehicle during the time from leaving the depot until returning to the depot have the same circulation number.
data type: (bigint, 19).
- **halt_id_von**: station ID "from" / Halt ID von
The VBZ internally used foreign key for the "Haltestellenstamm" table (halt_id). Assignment of the "from"-station.
data type: (bigint, 19).
- **halt_id_nach**: station ID "to" / Halt ID nach
The VBZ internally used foreign key for the "Haltestellenstamm" table (halt_id). Assignment of the "to"-station.
data type: (bigint, 19).
- **halt_punkt_id_von**: stopping point ID "from" / Haltepunkt ID von
The VBZ internally used foreign key for the "Haltepunktstamm" table (halt_punkt_id). Assignment of the "from"-station.
data type: (bigint, 19).
- **halt_punkt_id_nach**: stopping point ID "to" / Haltepunkt ID nach
The VBZ internally used foreign key for the "Haltepunktstamm" table (halt_punkt_id). Assignment of the "to"-station.
data type: (bigint, 19).
- **halt_punkt_id**: stopping point ID / Haltepunkt ID
Key field station.
data type: (bigint, 19).

- **halt_punkt_diva:** stopping point number DIVA / Haltepunktnummer DIVA
The VBZ internally used stopping point number (redundant in Fahrzeiten_SOLL_IST). Values: 0 – 99.
data type: (int, 2).
- **halt_id:** station ID / Haltestelle ID (technisch:)
Key field station ID.
data type: (bigint, 19).
- **GPS_Latitude:** y-coordinate / Y-Koordinate
The y-coordinate (geographic latitude) of the station in WGS84.
data type: (int, 10).
- **GPS_Longitude:** x-coordinate / X-Koordinate
The x-coordinate (geographic longitude) of the station in WGS84.
data type: (int, 10).
- **GPS_Bearing:** compass' direction / Kompassrichtung
The compass' direction of the station.
data type: (int, 10).
- **halt_punkt_ist_aktiv:** status of the station / Haltepunktstatus
Status of the station active / inactive. levels: true / false.
data type: (boolean: bit, 1).
- **halt_id1:** station ID / Haltestelle ID
Key variable of "Haltestelle" table
data type: (bigint, 19).
- **halt_diva:** station number DIVA / Haltestellennummer DIVA
The VBZ internally used station number DIVA.
data type: (int, 10).
- **halt_kurz:** short code for station / Haltestelle Kurzcode
The VBZ internally used abbreviation for the station number.
data type: (varchar(8)).
- **halt_lang:** station description / Haltestelle Beschreibung
Description of the station.
data type: (varchar(40)).
- **halt_ist_aktiv:** station status / Haltestellenstatus
Station active / inactive. levels: true / false.
data type: (boolean: bit, 1).