

SFMTA Taxi APIs Specification

June 10, 2025

The following document outlines the APIs to be used by Payment System Providers and Dispatch Companies to send Taxi Trip and Telemetry data to the SFMTA in order to comply with the San Francisco Transportation Code data requirements.

API Revision History - June 2025

| Version | Date | Editor | Notes |
|---------|-------------------------------|---|---|
| 2.0 | March 4, 2016 | dcorliss | Created |
| 2.1 | March 16 th , 2016 | dcorliss | Added Driver Status in Telemetry |
| 2.2 | April 4, 2016 | dcorliss | Added new data elements into trips |
| 2.3 | April 14, 2016 | dcorliss | Fixed the JSON sample formats for trips and telemetry |
| 2.4 | April 18, 2016 | dcorliss | Timestamp local made to required field in telemetry API |
| 2.5 | December 18, 2018 | kristine.krupp on behalf of Phil Cranna/Samantha Rebolos | 1) Changed “optional” fields to “required”, going forward 2) Taxi company “name” to be used for normal data transmission, replacement month files, and for sending test data (via normal transmission method) |
| 3.0 | March 2020 | SFMTA Data Team, Sean Cunningham, Luke Armbruster | Upgrade to POST AND GET; align (where appropriate) with LA MDS standard; new fields |
| 3.1 | July 2021 | mwang | Add new required data fields |
| 3.2 | June 2022 | SFMTA Data Team, Data Services | Incorporate feedback from dispatch companies; field standardization; incorporate transportation code changes; OAuth2 implementation; add device_id |
| 3.3 | June 2025 | SFMTA Data Team | Add clarification on fares being submitted; add Wheelchair- |

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|--|--|--|--------------------------------------|
| | | | Accessible Vehicle (WAV) trip option |
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Authorization

SFMTA Taxi Services shall be secured using OAuth 2.0 Authentication. New documentation will be provided for details on how to register with SFMTA and request access to the Taxi API Services. To obtain individual token, please email: MiddlewareServices@sfmta.com. Consult the OAuth2 Specification Document for complete details on tokens and authentication.

Request Header

| Attribute | Value | Description |
|---------------|----------------|---|
| Authorization | Bearer <token> | See SFMTA OAuth2 documentation for generating and refreshing token. |

Taxi Trips Updated API Release Version 3.3

Introduction

The Taxi Trip API allows you to post one or more trips to the SFMTA.

For each taxicab activity “trip”, the associated TELEMETRY records are to be sent, also.

Applicable code (source: REGULATION OF MOTOR VEHICLES FOR HIRE [ARTICLE 1100])

(b) **Electronic Taxi Access System.** Each Dispatch Service Permit Holder shall integrate its dispatch system with and implement the Electronic Taxi Access System, and shall electronically transfer all of its Electronic Trip Data to the Electronic Taxi Access System in **real-time** as required by this Section [1105](#) (b).

In addition to the required fields, any valid JSON may be sent, as long as the values are of data type *String* or *Number*.

Request

New content is labeled as “new field”. Changed fields from the API 2.5 version are noted as “formerly: ”.

| Method | URL | Environment |
|--------|---|-------------|
| POST | https://stageservices.sfmta.com/taxi/api/3/TaxiTrips/ | Test |
| POST | https://services.sfmta.com/taxi/api/3/TaxiTrips/ | Production |

Request Header

| Attribute | Value | Description |
|---------------|------------------|---------------------------------|
| Accept | application/json | |
| Content-Type | application/json | |
| Authorization | Bearer <token> | See Authorization Section above |

Payload: { "trips": [] }, an array of objects with the following structure

| Field | Description | Required | Type |
|--|--|----------|--|
| provider_id (new field) | UUID ("Universal User ID" that is associated with the provider). | Y | String |
| taxi_company_id (new field) | UUID ("Universal User ID" that is associated with the taxi company). | Y | String |
| vehicle_id (changed field) | VIN (Vehicle Identification Number) of the taxicab. | Y | String |
| vehicle_placard_number (new field) | The number painted on the taxicab. AKA: Medallion ID | Y | String A four-digit number such as 1824, 0091, 5003 |
| license_plate (new field) | License plate number of the taxicab. | Y | String |
| trip_id (formerly: TripNumber) | The id from the taxi company or payment provider to be used for troubleshooting purposes. Could be number that is on transaction receipt for from provider's data base. Not to be generated by any on-board taxicab equipment or software. | Y | String |
| device_id (new field) | Identifier indicating the unique device on the vehicle (e.g. hard or soft meter) that transmitted the data. | Y | String |
| hail_type (formerly: TripType) | How the trip was ordered: street hail, dispatched, names of approved mobile apps. | Y | String Values allowed: (Traditional) - "street", - "dispatch", - "curbstand"; (Mobile App) - "yo_taxi_app", - "flywheel_app", - "arro_app", - "curb_app"; (3rd Party Originator) |

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| | | | <ul style="list-style-type: none"> - "flywheel_uber", - "yo_taxi_uber", - "arro_uber", - "curb_uber" (3 rd Party WAV) <ul style="list-style-type: none"> - "flywheel_uber_wav", - "yo_taxi_uber_wav", - "arro_uber_wav", - "curb_uber_wav" |
| operator_id (formerly: Driver_ID) | The driver's license number. Must be in valid CA DMV format. Out of state "driver's licenses" will not be accepted. | Y | String |
| start_time_milliseconds (Formerly: Start_Time_Local) | The date and time when the meter was engaged, in integer milliseconds since Unix epoch. | Y | Number |
| end_time_milliseconds (Formerly: End_Time_Local) | The date and time when the meter was disengaged, in integer milliseconds since Unix epoch. | Y | Number |
| pickup_location_address | The address of the pickup location, including street address, city, state, zip. | Y | String |
| pickup_location_latitude | The geo latitude of the pickup location. | Y | Number 5 digits of precision Example: 37.77636 |
| pickup_location_longitude | The geo longitude of the pickup location. | Y | Number 5 digits of precision Example: -123.77636 |
| dropoff_location_address | The address of the pickup location, including street address, city, state, zip. | Y | String (text) |
| dropoff_location_latitude | The geo latitude of the drop-off location. | Y | Number 5 digits of precision Example: 37.77636 |
| dropoff_location_longitude | The geo longitude of the drop-off location. | Y | Number 5 digits of precision Example: -123.77636 |

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|---|--|---|--|
| passenger_count | The number of passengers. | Y | Number |
| is_wheelchair_transported | A flag indicating whether a wheelchair was transported. | Y | String Values allowed: - "T" (True) - "F" (False) |
| total_fare (new field) | Total fare that customer paid for the trip, including all tolls, tips, fees, extras, flag drop, and meter amount | Y | Number |
| meter_fare (new field) | Cost to the customer for the trip, as reported by the meter (excluding tips, fees, tolls, extra amounts). For upfront priced trips, insert what meter rate would be. | Y | Number |
| upfront_pricing (new field) | Rate agreed upon by customer that should not change based on the meter, (excluding tips, fees, tolls, extra amounts). | N | Number. Leave NULL if not applicable. |
| promo_rate (new field) | Promotional rate charged to customer . | N | Number. Ex. Yellow has \$35 SFO flat rate promotion. Leave it NULL if not applicable. |
| fare_type (new possible values) | Indicator of which rate was charged. Options are Meter Fare (time, distance, flag drop), Upfront Pricing, Promo Rate. | Y | String Values allowed: - meter_fare - upfront_pricing - promo_rate |
| tolls | Sum of any and all tolls charged for the trip, such as bridge tolls. | N | Number. Leave NULL if not applicable. |
| rate_code_id (new field) | Indicator of what multiplier was applied to calculate the fare. (1) Meter Fare: based on meter; (2) Flat Rate per person in Shared Rides; (3) Out-of- | Y | String Values allowed: - meter_fare - shared - out_of_town |

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| | Town Trips: metered rate *150% for trip that goes 15 miles or more outside of boundaries; (4) Deduction for Time While Disabled: no charge for time while vehicle is disabled; (5) Establishment of Upfront Fare Pilot Program; (6) Promo Rate is any rate less than the other rates. | | - disabled - upfront_pricing - promo_rate |
| sfo_exit_fee (new field) | Fee paid by customer to exit or enter SFO. | N | Number Leave it NULL if not applicable. |
| flag_drop_amount (new field) | Amount from the meter that results from “flag drop” | Y | Number |
| other_fees (formerly: Fees) | Amount of any fees charged to the customer. Includes baggage fees, cleaning fee. Excludes sfo_exit_fee. | N | Number Leave NULL if not applicable. |
| tip | Amount of tip paid by the customer. | Y | Number Enter 0 if no tip (do not leave NULL) |
| extra_amount (new field) | Extra amounts charged to the customer. SFMTA does not collect this field at this time. For future use. | N | Number Leave NULL if not applicable. |
| payment_type (changed field) | How the trip was paid. Credit Card is using the in-taxi payment equipment. Third Party-Originated trips use Mobile. | Y | String Values allowed: - cash - credit_card - mobile - voucher - paratransit - no_payment - test (use to send test data through) |
| trip_duration_milliseconds (formerly: MeterTripTime) | Trip time as reported in integer milliseconds. | Y | Number |
| trip_distance_meters (formerly: TripDistance) | The trip distance reported in meters, rounded to the nearest whole meter. | Y | Number |

| | | | |
|--|---|---|--------|
| fare_time_milliseconds (new field) | The fare time reported in integer milliseconds. This time accumulates when vehicle travels over 12MPH. | Y | Number |
| wait_time_milliseconds (new field) | The wait time reported in integer milliseconds. This time accumulates when vehicle travels under 12MPH. | Y | Number |
| publication_time (new field) | Publication time (in integer milliseconds since Unix epoch) is the time that provider posts to SFMTA | Y | Number |

Request Example

```
{
  "trips": [ {
    "provider_id": " e714f168-ce56-4b41-81b7-0b6a4bd26128",
    "taxi_company_id": " 07a25fe6-d0be-11e8-a8d5-f2801f1b9fd1",
    "vehicle_id": "19XFB4F39EE200589",
    "vehicle_placard_number": "1811",
    "license_plate": "KP20091",
    "trip_id": " c848a5c0-2904-4f96-954a-77cfddcfed4b",
    "device_id": "15505",
    "hail_type": "street",
    "operator_id": "B5471749",
    "start_time_milliseconds": 1622609585000,
    "end_time_milliseconds": 1622609945000,
    "pickup_location_address": "123 Main Street, San Francisco, CA, 94102",
    "pickup_location_latitude": 37.56565,
    "pickup_location_longitude": -123.56565,
    "dropoff_location_address": "1 S Van Ness Ave, San Francisco, CA, 94102",
    "dropoff_location_latitude": 37.56565,
    "dropoff_location_longitude": -123.56565,
    "passenger_count": 2,
    "is_wheelchair_transported": "F",
    "total_fare": 23.50,
    "meter_fare": 15.00,
    "upfront_pricing": ,
    "promo_rate": ,
    "fare_type": "meter_fare",
    "tolls": 2.00,
    "rate_code_id": "meter_fare",
    "sfo_exit_fee": ,
    "flag_drop_amount": 3.50,
  } ]
}
```



```

"other_fees": ,
"tip": 3.00,
"extra_amount": ,
"payment_type": "credit_card",
"trip_duration_milliseconds": 12500,
"trip_distance_meters": 5000,
"fare_time_milliseconds": 12500,
"wait_time_milliseconds": 0,
"publication_time": 1622609945000
  }
}

```

Response

Request message is either accepted which is indicated by a HTTP Code 202.

If the request is not accepted, a non-200 response code will be returned.

Telemetry API 3.3

Introduction

The Telemetry API allows you to send one or more vehicle location data to the SFMTA's data warehouse. In addition to the required fields, any valid JSON may be sent, as long as the values are of data type *String* or *Number*.

Request

| Method | URL | Environment |
|--------|---|-------------|
| POST | https://stageservices.sfmta.com/taxi/api/3/Telemetries/ | Test |
| POST | https://services.sfmta.com/taxi/api/3/Telemetries/ | Production |

Request Header

| Attribute | Value | Description |
|---------------|------------------|---------------------------------|
| Accept | application/json | |
| Content-Type | application/json | |
| Authorization | Bearer <token> | See Authorization section above |

Payload: { "telemetry": [] }, an array of objects with the following structure

| Field | Description | Required | Type |
|-------|-------------|----------|------|
|-------|-------------|----------|------|

| | | | |
|---|--|---|---|
| provider_id (new field) | UUID ("Universal User ID" that is associated with the provider). | Y | String |
| taxi_company_id (new field) | UUID ("Universal User ID" that is associated with the taxi company). | Y | String |
| vehicle_id (changed field) | VIN (Vehicle Identification Number) of the taxicab. | Y | String |
| vehicle_placard_number (new field) | The number painted on the taxicab. AKA: Medallion ID | Y | String A four-digit number such as 1824, 0091, 5003. |
| operator_id (formerly: DriverLicense) | The driver's license number. Must be in valid CA DMV format. Out of state driver's licenses will not be accepted. | Y | String |
| trip_id (new field) | The id from the taxi company or payment provider to be used for troubleshooting purposes. Could be number that is on transaction receipt for from provider's data base. Not to be generated by any on-board taxicab equipment or software. Only for telemetry events where the vehicle status is hired. | N | String Leave NULL if not applicable. |
| device_id (new field) | Identifier indicating the unique device on the vehicle (hard or soft meter) that transmitted the data. | Y | String |
| driver_status | Indicates if this taxicab telemetry event represents the start of a driver shift, continuation of current shift, or end of shift. | Y | Number Values allowed: - 1 (Starting Shift) - 2 (On Shift) - 3 (Ending Shift) |
| latitude | The geographic latitude of the current location of the taxicab trip. | Y | Number 5 digits of precision Example: 37.77636 |
| longitude | The geographic longitude of the current location of the taxicab trip. | Y | Number 5 digits of precision Example: -122.4353 |

| | | | |
|---|--|---|---|
| vehicle_status | The taxicab status | Y | Number Values allowed: - 1 (Off Duty) - 2 (Available) - 3 (Hired) |
| event_time_milliseconds (formerly: TimeStampLocal) | Date and time vehicle reported this location, in integer milliseconds since Unix epoch. | Y | Number |
| publication_time (new field) | Publication time (in integer milliseconds since Unix epoch) is the time that provider posts to SFMTA | Y | Number |

Request Example

```
{
  "telemetry" : [ {
    "provider_id" : " e714f168-ce56-4b41-81b7-0b6a4bd26128",
    "taxi_company_id" : " 07a25fe6-d0be-11e8-a8d5-f2801f1b9fd1",
    "vehicle_id" : "19XFB4F39EE200589",
    "vehicle_placard_number" : "1811",
    "operator_id" : "B5471749",
    "trip_id": "848a5c0-2904-4f96-954a-77cfddcfed4b",
    "device_id": "15505",
    "driver_status" : 2,
    "latitude" : 37.5656564,
    "longitude" : -123.5655667,
    "vehicle_status" : 3,
    "event_time_milliseconds" : 1622609945000,
    "publication_time": 1622609945000
  } ]
}
```

Response

Request message is either accepted which is indicated by a HTTP Code 202.

If the request is not accepted, a non-200 response code will be returned.