The Civic Platform Transportation API

### The Civic Platform Transportation API

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The Civic Platform Transportation API Lataset Overview

## **Dataset Overview**

#### passenger-census

- Ridership data
- Covers March 2001 through February 2018
- Lists totals of ons and offs for each stop by service key
  - Totals over six months
  - ▶ W = weekday
  - ► S = Saturday
  - ▶ U = Sunday

#### trimet-stop-events

- Raw data samples of all vehicle data every five seconds!
- Large about 10 gigabytes per month!
- TriMet gave us five months of data:
  - ► September 2017
  - October 2017
  - November 2017
  - November 2017
  - April 2018
  - ► May 2018
- Only a subset hosted in the API

#### origin-destination

- Census Bureau data on commuting
- Covers 2002 through 2015
- Covers entire Portland Vancouver metro area
- Very detailed only a subset is hosted in the API

#### Other datasets in the Transportation Systems API

- ▶ PUDL: locations of traffic sensors for the Portland Urban Data Lake (PUDL)
- biketown: public data dump from Biketown
- multnomah-county-permits: permit data from Multnomah county outside city limits
- odot-crash-data: crashes in Portland from 2004 2014
- safety-hotline: calls / texts / emails to the safety hotline

# Browsing the API

#### "Swagger UI"

- ▶ Browse to http://service.civicpdx.org/transportation-systems/
- Scroll down

## Swagger UI home page

PUDL	> 284
biketown	>
multnomah-county-permits	>
odot-crash-data	>
origin-destination	>
passenger-census	>
safety-hotline	>
sandbox	>
trimet-stop-events	>

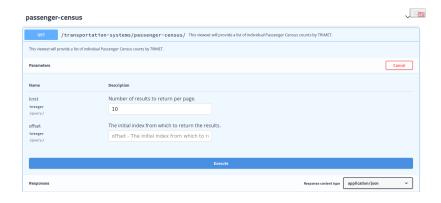
### Click on passenger-census to expand



### Click on the first GET to expand



### Click on Try it out and enter 1 for limit



#### Click on Execute and scroll down to response body

```
"next": "http://service.civicpdx.org/transportation-systems/passenger-census/?limit=10&offset=10",
"previous": null,
"results": {
 "type": "FeatureCollection",
 "features": [
     "1d": 499600.
     "type": "Feature".
     "geometry": {
       "type": "Point",
       "coordinates": |
         -122.53780401445013,
         45.509916142766684
       "summary_beg1n_date": "2002-03-03",
       "route_number": 71,
       "direction": 1.
       "service key": "U",
       "stop_seq": 6675,
       "location_id": 9496,
```

The Civic Platform Transportation API Browsing the API

Click on Download and save as response.txt

# Passenger Census Data

#### **GIS**

#### **Properties**

```
"properties": {
  "summary_begin_date": "2002-03-03",
  "route number": 71,
  "direction": 1.
  "service key": "U",
  "stop seq": 6675,
  "location_id": 9496,
  "public location description": "SE 122nd & Mill",
  "ons": 2.
  "offs": 4,
  "x coord": 7679750.6398098,
  "y_coord": 678590.38676998,
  "census block": "410510082023001"
```

## TriMet Stop Events Data

The Civic Platform Transportation API  $\ \ \ \$  TriMet Stop Events Data

## **TBD**

The Civic Platform Transportation API Crigin-Destination Data

## Origin-Destination Data

#### Source

- Census Bureau Longitudinal Employer-Household Dynamics (LEHD)
  - https://lehd.ces.census.gov
- ► LEHD Origin-Destination Employment Statistics (LODES)
  - https://lehd.ces.census.gov/data/#lodes
- ► LODES 7.3 Technical Documentation
  - https://lehd.ces.census.gov/data/lodes/LODES7/ LODESTechDoc7.3.pdf

The Civic Platform Transportation API Crigin-Destination Data

## More TBD