# **Dublin Bikes: [1]**

Two kinds of data are delivered by the platform:

- **Static** data provides stable information like station position, number of bike stands, payment terminal availability, etc.
- **Dynamic** data provides station state, number of available bikes, number of free bike stands, etc.

#### API key:

b87a4a1d8ffe286392ea70d9047502400c6f3d94

#### Static data:

Static data doesn't require an API key. For equal accessibility to dynamic data, you must use a personal API key. Gives the list of all the places in the city.

Also available as static data in CSV format which can be found at

https://developer.jcdecaux.com/#/opendata/vls?page=static&contract=Paris

### Request:

https://api.jcdecaux.com/vls/v1/stations?contract={contract\_name}&apiKey={api\_key}

### Example:

https://api.jcdecaux.com/vls/v1/stations?contract=Dublin&apiKey=b87a4a1d8ffe 286392ea70d9047502400c6f3d94

```
"number": 123,
  "contract_name" : "Paris",
  "name": "stations name",
  "address": "address of the station",
  "position": {
      "lat": 48.862993,
      "lng": 2.344294
},
  "banking": true,
  "bonus": false,
  "status": "OPEN",
  "bike_stands": 20,
  "available_bike_stands": 15,
  "available_bikes": 5,
  "last_update": <timestamp>
}
```

### **Dynamic data:**

The current availability can be retrieved from by requesting with a station number.

## Example:

https://api.jcdecaux.com/vls/v1/stations/42?contract=Dublin&apiKey=b87a4a1d8ffe286392ea70d9047502400c6f3d94

```
"number": 42,
    "name": "SMITHFIELD NORTH",
    "address": "Smithfield North",
    "position": {
        "lat": 53.349562,
        "lng": -6.278198
    },
    "banking": true,
    "bonus": false,
    "status": "OPEN",
    "contract_name": "Dublin",
    "bike_stands": 30,
    "available_bike_stands": 15,
    "available_bikes": 15,
    "last_update": 1517514019000
}
```

# **Dublin weather[2]**

## https://developer.weatherunlocked.com/signup

User: jabezsam

Password: team2@Pass

## Pricing:

Packages \$ per month	Free \$0	SSL Starter \$14	Developer \$30	Pro \$150	Advanced \$380	Enterprise \$1500
Calls per Minute	75	100	300	1,000	10,000	500,000
Calls per Day	25,000	50,000	300,000	Unlimited*	Unlimited*	Unlimited*
Current Weather API	~	~	~	~	~	~
8 days /3-hour	~	~	~	~	~	~
15-days/daily	-	-	-	~	~	~
Bulk Download	-	-	-	-	~	~
Subscribe Now	Start	Start	Start	Start	Start	Start
Availability	95.0%	98.0%	99.5%	99.8%	99.9%	99.9%
SSL	-	~	~	~	~	~
Weather API data updates	Every hour	Every 30 mins	Every 15 mins	Every 15 mins	Every 15 mins	Every 15 mins
Tech support	Community Forum	Email 1-day	Email 12-hr	Email,live chat	Email,live chat and Phone	Dedicated 24/7

App id: fc1ddbef

Key: d7795fe11e4c67725d5882807523b50c

(Details are in the dashboard)

## Example:

http://api.weatherunlocked.com/api/current/53.39164352416992,-6.366779804229736?app\_id=fc1ddbef&app\_key=d7795fe11e4c67725d5882807523b50c

```
{
      "lat": 53.43,
      "lon": -6.25,
"alt_m": 68,
      "alt_ft": 223.1,
      "wx_desc": "Partly cloudy",
      "wx_code": 1,
"wx_icon": "PartlyCloudyNight.gif",
      "temp_c": 4,
"temp_f": 39.2,
"feelslike_c": -0.85,
"feelslike_f": 30.46,
"humid_pct": 70,
      "windspd_mph": 16.16,
      "windspd_kmh": 26,
      "windspd_kts": 14.04,
"windspd_ms": 7.22,
"winddir_deg": 320,
"winddir_compass": "NW",
      "cloudtotal_pct": 50,
      "vis_km": 10,
      "vis_mi": 6.21,
      "vis_desc": null,
      "slp_mb": 1014.9,
"slp_in": 30.05,
      "dewpoint_c": -0.95,
"dewpoint_f": 30.29
}
```

## **Dublin Bus/rail/luas[3]:**

The detailed document for reference can be found here – <a href="https://docs.google.com/viewerng/viewer?url=http://data.dublinked.ie/dataset/c9df9a0b-d17a-40ff-a5d4-01da0cf08617/resource/4b9f2c4f-6bf5-4958-a43a-f12dab04cf61/download/rtpirestapispecification.pdf">https://data.dublinked.ie/dataset/c9df9a0b-d17a-40ff-a5d4-01da0cf08617/resource/4b9f2c4f-6bf5-4958-a43a-f12dab04cf61/download/rtpirestapispecification.pdf</a>

#### No auth token

To find the next bus in a bus stop:

https://data.dublinked.ie/cgibin/rtpi/realtimebusinformation?stopid=7&routeid=40d&format=json

```
"errorcode": "0",
"errormessage": "",
"numberofresults": 3,
"stopid": "7",
"timestamp": "02/02/2018 18:27:52",
"results": [
        "arrivaldatetime": "02/02/2018 18:32:04",
        "duetime": "4",
        "departuredatetime": "02/02/2018 18:32:04",
        "departureduetime": "4",
        "scheduledarrivaldatetime": "02/02/2018 18:32:00",
        "scheduleddeparturedatetime": "02/02/2018 18:32:00",
        "destination": "Tyrrelstown",
        "destinationlocalized": "Baile an Tirialaigh",
        "origin": "Parnell Street"
        "originlocalized": "Parnell Street",
        "direction": "Outbound",
        "operator": "bac",
        "additionalinformation": "",
        "lowfloorstatus": "no",
        "route": "40D",
        "sourcetimestamp": "02/02/2018 17:33:41",
        "monitored": "true"
```

## Google Map API [4]

The directions api is what we want

**API key**: AlzaSyBx0EJeTFDFhj3zCiV-kKou0mKqSarSnm0 (Can create one for each google account)

## **Usage limits:**

https://developers.google.com/maps/documentation/directions/usage-limits

### Standard Usage Limits

Users of the standard API:

- 2,500 free directions requests per day, calculated as the sum of client-side and server-side queries.
- Up to 23 waypoints allowed in each request, whether client-side or serverside queries.
- 50 requests per second, calculated as the sum of client-side and serverside queries.

Enable pay-as-you-go billing to unlock higher quotas:

\$0.50 USD / 1000 additional requests, up to 100,000 daily.

**ENABLE BILLING** 

## The detailed documentation is at:

https://developers.google.com/maps/documentation/directions/intro?authus er=1#TravelModes

## Source and destination with mode:

https://developers.google.com/maps/documentation/directions/intro?authus er=1#TravelModes

#### Example:

https://maps.googleapis.com/maps/api/directions/json?origin=Toronto&destination=Montreal&mode=bicycling&key=AlzaSyBx0EJeTFDFhj3zCiV-kKou0mKqSarSnm0

## <u>Combination of gps-coordinates, destination address and mode:</u>

https://maps.googleapis.com/maps/api/directions/json?origin=53.341952,-6.251720&destination=4+Curragh+Hall+Crescent,+Tyrrelstown,+4&&mode=bicycling&key=AlzaSyBx 0EJeTFDFhj3zCiV-kKou0mKqSarSnm0

### the origin can be place id also

origin=place\_id: ChlJ3S-JXmauEmsRUclaWtf4MzE

#### ## END ##

## **References:**

- [1] <a href="https://developer.jcdecaux.com/#/opendata/vls?page=getstarted&contract=Paris">https://developer.jcdecaux.com/#/opendata/vls?page=getstarted&contract=Paris</a>
- [2] <a href="https://developer.weatherunlocked.com/documentation/localweather">https://developer.weatherunlocked.com/documentation/localweatherunlocked.com/documentation/loca
- [3] <a href="https://data.gov.ie/dataset/real-time-passenger-information-rtpi-for-dublin-bus-bus-eireann-luas-and-irish-rail/resource/4b9f2c4f-6bf5-4958-a43a-f12dab04cf61">https://data.gov.ie/dataset/real-time-passenger-information-rtpi-for-dublin-bus-bus-eireann-luas-and-irish-rail/resource/4b9f2c4f-6bf5-4958-a43a-f12dab04cf61</a>
- [4] https://developers.google.com/maps/documentation/directions/?authuser=1