

# On-Street Parking API

## 1 On-Street Parking API

This API provides real time kerb occupancy for Campbelltown council in Sydney. Notification will be sent at regular intervals each time parking becomes vacant/occupied, this data will be transformed and consolidated to standardised format and published in Open Data. External users and applications use this information to provide real time parking occupancy.

Below diagram shows the flow of data from kerbside sensors to user applications:



## Terms and Conditions

Transport for NSW provides access to On-Street Parking API on the following terms:

- The data is provided by outsource systems, which is outside the control of TfNSW.
- There will be a delay of up to 40-50 secs to allow for sensor processing time.
- This API specification may be changed in the future to provision for other councils as they become available.
- Data may be reset at any time to handle errors caused by power outages or any other issues that might cause operations issues.

## 2 Data Structure

### High Level Data Explanation

#### Council (campus) information

A feed listing all the councils (campuses) where data is available will be returned if there is no campus ID provided in the request.

Field Name	Data Type	Field Description
Campus_id	string	Unique ID for each council (campus).
Campus_name	string	Council name (refer to Section 3: Campus Locations for list of councils currently supported).

#### Real-time parking occupancy

Field Name	Data Type	Field Description
Campus_id	string	Unique ID for each council (campus).
Campus	string	Council name.
Place	string	Identifies a parking structure, surface lot or on street parking area. Note: Not all providers are providing this information.
Identified_area	string	Provides information of parking bays and equipment used to cover the area.
Space	String	Unique ID for each parking bay
Vehicle_type	string	Details of vehicle parked in bay (Car, Van etc)
Bay_type	string	Provides details about parking bay (1/2P, disabled, , taxi, mail zone etc)
Detection_update_Time	timestamp	Timestamp details when bay status is changed (free to occupied or occupied to free).
Occupancy_indicator	string	Expected values are vacant, occupied & Unknown.

## Car Park API

Field Name	Data Type	Field Description
		Note: Status will be unknown when sensor is down due to maintenance or outage
Point_coordinate	array	Provides coordinate details as below: <ul style="list-style-type: none"><li>• X - Provides latitude details to identify parking bay</li><li>• Y - Provides longitude details to identify parking bay</li></ul>

Sample feed

```
[
{"campus_id": "1",
  "campus": "Campbelltown",
  "place": "1Queen-Chambers",
  "identified_area": "NSW_Cam2-30:C6:F7:15:47:58",
  "space": "Bay-45-1queen-chamber",
  "vehicle_type": "car",
  "bay_type": "1P",
  "detection_update_time": "2023-12-06T14:15:51.577000+10:05",
  "occupancy_indicator": "occupied",
  "point_coordinate": {"x": 150.81645648033884, "y": -34.06416300522389}
},
{"campus_id": "1",
  "campus": "Campbelltown",
  "place": "2Railway",
  "identified_area": "NSW_DSK034-44:17:93:8A:07:64",
  "space": "Bay-67-2Railway",
  "vehicle_type": "van",
  "bay_type": "1/2P",
  "detection_update_time": "2023-12-06T13:29:02.469000+10:05",
  "occupancy_indicator": "occupied",
  "point_coordinate": {"x": 150.81524338596688, "y": -34.065172595839265}
},
{"campus_id": "1",
  "campus": "Campbelltown",
  "place": "4Patrick",
  "identified_area": "NSW_DSK104-30:C6:F7:15:47:DC",
  "space": "Bay-73-4Patrick",
  "vehicle_type": "",
  "bay_type": "1P",
  "detection_update_time": "2023-12-06T14:15:26.074000+10:05",
  "occupancy_indicator": "vacant",
  "point_coordinate": {"x": 150.81431022568844, "y": -34.0659071656741}
},
]
```

```
{
  "campus_id": "1",
  "campus": "Campbelltown",
  "place": "4Patrick",
  "identified_area": "NSW_DSK104-30:C6:F7:15:47:DC",
  "space": "Bay-74-4Patrick",
  "vehicle_type": "",
  "bay_type": "1P",
  "detection_update_time": "2023-12-06T14:15:26.074000+10:05",
  "occupancy_indicator": "vacant",
  "point_coordinate": {"x": 150.81423278432334, "y": -34.06584062973603}
},
{"campus_id": "1",
  "campus": "Campbelltown",
  "place": "1Queen-Chambers",
  "identified_area": "NSW_Cam2-30:C6:F7:15:47:58",
  "space": "Bay-46-1queen-chamber",
  "vehicle_type": "car",
  "bay_type": "1P",
  "detection_update_time": "2023-12-06T16:14:54",
  "occupancy_indicator": "occupied",
  "point_coordinate": {"x": "150.81648698711962", "y": "-34.06412931185002"}
},
{"campus_id": "1",
  "campus": "Campbelltown",
  "place": "1Queen-Chambers",
  "identified_area": "NSW_DSK039-30:C6:F7:15:47:40",
  "space": "Bay-8-1queen-chamber",
  "vehicle_type": "car",
  "bay_type": "1P",
  "detection_update_time": "2023-12-06T15:44:30",
  "occupancy_indicator": "occupied",
  "point_coordinate": {"x": "150.81640043409058", "y": "-34.06422280430394" }
}
]
```

### 3 Campus Locations

Table below shows details of councils providing kerbside parking information:

Campus ID	Campus Details	Number of Spots	Update Frequency
1	Campbelltown	119	60s

Notes:

- The number of spots provided in the table are for quick reference. Do not hard code these figures as they may change from time to time.
- There are works expected at some council's which may intermittently impact the real time parking availability.

### 4 References

APDS data standards are included to ensure a common language is used when providing data to applications, refer to document below:



21-06-08 APDS  
Overview 4.0 Final.pdf