## Taxi Rank API



# Transport Open Data

## 1 Taxi Ranking API

This API provides static, real-time and historical data about selected taxi ranks in NSW.

Taxi Rank Info API provides static data relating to taxi rank location, address and it's operating hours. Realtime API provides near real-time taxi/passenger information about the rank in 15 mins interval blocks. Historical API provides historical taxi/passenger information in 15 mins intervals for a specified rank and day.

This data will be transformed and consolidated to standardised JSON format and published in Open Data. External users and applications use this information to provide real time taxi rank occupancy, information, waiting time and availability.

#### **Terms and Conditions**

Transport for NSW provides access to Taxi Ranking 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
- The real-time API will restart at 4am daily. Each site will be unavailable for approx. 30-60 seconds while it restarts
- 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

#### **Taxi Ranking API**

Open Data provides below APIs for Taxi Ranking:

- **Static Feed** Provides details of CCTV installed and secure ranks across NSW, location details (Latitude/Longitude) and hours of operation.
- **Real-time Feed** Provides near-real-time taxi/passenger information at a particular taxi rank
- **Historical Feed** Provides historical taxi information of taxis/passengers in 15mins blocks for a specified rank and day

Field Name	Data Type	Field Description
Rank_id	string	Unique ID for each Taxi Rank across NSW
TSN	string	Transport TSN (Transit Stop Network) ID. Example: 2144234
Comments	string	Provide details of the nearest Train station or interchange facility. Example: Auburn Station, South Pde, Stand A
Status	string	Provides information if that rank is 'Active' or 'Out of hours'
		Some taxi ranks operate only at particular times of the day
rank_capacity	string	Percentage indicator about taxis at a rank
taxis_at_rank	string	Total Taxi's waiting in rank
passengers_at_rank	string	Total passengers waiting at Taxi Rank, provided in Low/Med/High bands
passenger_wait_time_mins	timestamp	Provides waiting time information for passengers based on the following calculation.
		When there are Taxis at rank then the waiting time is 0 but when there are no Taxis at rank the wait time is more than 15mins.
last_updated_UTC	timestamp	Date and time of last update in UTC - Coordinated Universal Time

#### **Real-time parking API**

#### **Real Time Sample feed**

```
{
       "ranks_realtime": [
              {
                      "rank_id": "P2P0003",
                      "tsn": "275077",
                      "comments": "Penrith Station, Stand C",
                      "status": "ACTIVE",
                      "rank_capacity": "100%",
                      "taxis at rank": "8",
                      "passengers_at_rank": "Low",
                      "passenger_wait_time_mins": "0",
                      "last_updated_UTC": "2024-07-30T04:33:13.060Z"
              },
              {
                      "rank_id": "P2P0011",
                      "tsn": "N/A",
                      "comments": "Campbelltown Train Station",
                      "status": "RANK_CLOSED",
                      "rank_capacity": "N/A",
                      "taxis_at_rank": "N/A",
                      "passengers_at_rank": "N/A",
                      "passenger_wait_time_mins": "N/A",
                      "last_updated_UTC": "N/A"
              },
              {
                      "rank_id": "P2P0020",
                      "tsn": "214810",
                      "comments": "Blacktown Station",
                      "status": "RANK_CLOSED",
                      "rank_capacity": "N/A",
                      "taxis_at_rank": "N/A",
                      "passengers_at_rank": "N/A",
                      "passenger_wait_time_mins": "N/A",
                      "last_updated_UTC": "N/A"
              },}
```

## Static parking API

Field Name	Data Type	Field Description
Rank_id	string	Unique ID for each Taxi Rank across NSW
Rank_name	string	Unique name given to each rank
TSN	string	Transport TSN (Transit Stop Network) ID. Example: 2144234
Comments	string	Provide details of the nearest Train station or interchange facility. Example: Auburn Station, South Pde, Stand A
Address1	string	Address information of each taxi rank
Address2	string	Address information of each taxi rank
City	string	City information. Eg. Sydney/Blacktown
Postcode	string	Post code of the taxi rank location
State	string	State details
LGA	string	Local Government Area details
Operating Hours	string	Provides details of operation hours for each rank. Some taxi ranks operate only at particular times of the day
Longitude	number	Taxi location longitude information
Latitude	number	Taxi location latitude information
Bays	number	Indicates how many taxis can use this rank at any one time

#### Static Sample feed

```
{
       "ranks_info": [
               {
                      "rank_id": "P2P0003",
                      "rank_name": "P2P0003 - Jane St Penrith",
                      "tsn": "275077",
                      "comments": "Penrith Station, Stand C",
                      "address1": "Jane St, Penrith station",
                      "address2": "None",
                      "city": "Penrith",
                      "postcode": "2750",
                      "state": "New South Wales",
                      "Iga": "Penrith",
                      "operating_hours": {
                              "SUNDAY": [
                                     {
                                             "to": 24,
                                             "from": 0
                                     }
                              ],
                              "HOLIDAY": [
                                     {
                                             "to": 24,
                                             "from": 0
                                     }
                              ],
                              "SATURDAY": [
                                     {
                                             "to": 24,
                                             "from": 0
                                     }
                              ],
                              "WEEK_DAY": [
                                     {
```

```
"to": 24,
                             "from": 0
                      }
              ]
       },
       "longitude": 150.695648,
       "latitude": -33.750413,
       "bays": 2
},
{
       "rank_id": "P2P0011",
       "rank_name": "P2P0011 - Hurley St, Campbelltown Station",
       "tsn": "N/A",
       "comments": "Campbelltown Train Station",
       "address1": "Hurley St, Campbelltown Station",
       "address2": "None",
       "city": "Campbelltown",
       "postcode": "None",
       "state": "New South Wales",
       "Iga": "Campbelltown",
       "operating_hours": {
               "SUNDAY": [
                      {
                             "to": 24,
                             "from": 0
                      }
              ],
               "HOLIDAY": [
                      {
                             "to": 24,
                             "from": 0
                      }
               ],
               "SATURDAY": [
                      {
```

"to": 24,		
"from": 0		
}		
],		
"WEEK_DAY": [		
{		
"to": 24,		
"from": 0		
}		
]		
},		
"longitude": 150.809106,		
"latitude": -34.066918,		
"bays": 4		
}		
}		

## Historical parking API

Field Name	Data Type	Field Description
Rank_id	string	Unique ID for each Taxi Rank across NSW
TSN	string	Transport TSN (Transit Stop Network) ID. Example: 2144234
Comments	string	Provide details of the nearest Train station or interchange facility. Example: Auburn Station, South Pde, Stand A
Total_bays	string	Indicates how many taxis can use this rank at any one time
Start_time	string	Start time of the historical information in 15 min time block
End_time	string	End time of the historical Information in 15 min time block
Class	string	<ul><li>Indicates whether historical data is given for:</li><li>taxi</li></ul>

Field Name	Data Type	Field Description
		<ul> <li>passenger</li> <li>wat - wheelchair accessible taxi</li> <li>Note: Wheelchair information is not available in the real time API as details on whether a taxi is wheelchair accessible or not can only be determined after data is collated. Not during real time.</li> </ul>
From_previous_count	string	Number of taxi's from the 15 min prior <b>OR</b> Number of passengers from the 15 min prior in Low, Medium, High <b>OR</b> Number of wat from the 15 min prior
Total	string	Total number of taxi's in the current 15 min time interval plus From_previous_count <b>OR</b> Total number of passengers from the 15 min prior in Low, Medium, High plus From_previous_count <b>OR</b> Total number of wat in the current 15 min time interval plus From_previous_count
New_arrivals	string	Number of taxi's in current 15 min time interval <b>OR</b> Number of passengers in current 15 min time interval in Low, Medium, High <b>OR</b> Number of wat in current 15 min time interval
Average_wait	number	Average wait time in seconds

#### **Real Time Sample feed**

```
{
       "rank_history": [
               {
                       "rank_id": "P2P0003",
                       "tsn": "275077",
                       "comments": "Penrith Station, Stand C",
                       "total_bays": "2",
                       "start_time": "2024-06-24T23:45:00.000Z",
                       "end_time": "2024-06-25T00:00:00.000Z",
                       "class": "wat",
                       "from_previous_count": "0",
                       "total": "1",
                       "new_arrivals": "1",
                       "average_wait": "1007"
               },
               {
                       "rank_id": "P2P0003",
                       "tsn": "275077",
                       "comments": "Penrith Station, Stand C",
                       "total_bays": "2",
                       "start_time": "2024-06-24T23:45:00.000Z",
                       "end_time": "2024-06-25T00:00:00.000Z",
                       "class": "taxi",
                       "from_previous_count": "4",
                       "total": "10",
                       "new_arrivals": "6",
                       "average_wait": "830"
               },
               {
                       "rank_id": "P2P0003",
                       "tsn": "275077",
                       "comments": "Penrith Station, Stand C",
                       "total_bays": "2",
                       "start_time": "2024-06-24T23:45:00.000Z",
```

}

```
"end_time": "2024-06-25T00:00:00.000Z",
       "class": "passenger",
       "from_previous_count": "Low",
       "total": "Medium",
       "new_arrivals": "Medium",
       "average_wait": "0"
},
{
       "rank_id": "P2P0003",
       "tsn": "275077",
       "comments": "Penrith Station, Stand C",
       "total_bays": "2",
       "start_time": "2024-06-24T23:30:00.000Z",
       "end_time": "2024-06-24T23:45:00.000Z",
       "class": "wat",
       "from_previous_count": "0",
       "total": "0",
       "new_arrivals": "0",
       "average_wait": "0"
}
```