

## Introduction

Welcome to TSL API v1.0 documentation. The API is freely available for everyone to use and does not require authentication. The following list describes the queries you can make to our API, and the data returned. In order to minimise overhead and maximise efficiency we provide all data in the form of JavaScript Object Notation (JSON) with the exception of crowdedness data which is provided as a string.

Currently the server is hosted at `stud-tfl.cs.ucl.ac.uk` and all queries should be made by appending the query to the server's address.

At the end of this document we provide a list of Underground station with their corresponding National Location Codes (NLC), Line Codes and Station Codes. This can be used for reference to query our API.

## Disclaimer

Transport data is provided by TfL and Twitter feeds are provided by courtesy of Twitter (REST API v1). TSL is not responsible for any inconsistencies of data provided by TfL and Twitter. We are the owners of the API and we reserve the rights to change access to the API at any time without notice. Although we moderate comments, we are not responsible for any offensive commentaries submitted by other clients of the API.

TSL is a non-profit organisation providing all data free of charge. TSL is not affiliated with TfL, Twitter or any other organization unless explicitly stated.

## Bus Countdown

Bus countdown data is provided in the form of a JSON array. Each bus countdown element is a separate JSON object. The key-value pairs available in each object are:

Route	The route number of the bus
Destination	The destination of the bus
Time	Time in which the bus is expected to arrive

Bus countdown can be requested at

`/bus?stop=#####`

where ##### is the 5 digit bus stop code

An example query:

<http://stud-tfl.cs.ucl.ac.uk/bus?stop=53365>

This query returns the following data:

```
[ {  
  "Route": "490",  
  "Destination": "Heathrow T5",
```

```

        "Time": "6 min"
    },
    {
        "Route": "482",
        "Destination": "Heathrow T5",
        "Time": "17 min"
    },
    {
        "Route": "490",
        "Destination": "Heathrow T5",
        "Time": "21 min"
    },
    {
        "Route": "490",
        "Destination": "Heathrow T5",
        "Time": "29 min"
    }
]

```

## Bus Stop Query

Bus stop location data is provided in the form of a JSON array. Each bus stop element is a separate JSON object. The key-value pairs available in each object are:

stopName	The name of the bus stop
stopCode	The five digit stop code for the bus stop
stopIndicator	The identifying marker letter(s) that are displayed on the bus stop
long	The longitude coordinate for the bus stop
lat	The latitude coordinate for the bus stop

Bus stop locations can be requested at

`/stops?loc=#####,$$$$$$,%%%`

where ##### is the latitude coordinate, \$\$\$\$\$\$ is the longitude coordinate and %%% is the radius in meters.

An example query:

<http://stud-tfl.cs.ucl.ac.uk/stops?loc=51.5239,-0.133101,300>

This query returns the following data:

```

[ {
    "stopName": "Euston Square Station",
    "stopCode": "50975",

```

```

        "stopIndicator": "P",
        "long": "-0.134858",
        "lat": "51.525813"
    },
    {
        "stopName": "University College Hospital",
        "stopCode": "76205",
        "stopIndicator": "Z",
        "long": "-0.13655",
        "lat": "51.523916"
    },
    {
        "stopName": "Torrington Place",
        "stopCode": "73135",
        "stopIndicator": "C",
        "long": "-0.133016",
        "lat": "51.522916"
    },
    {
        "stopName": "Euston Station",
        "stopCode": "51664",
        "stopIndicator": "H",
        "long": "-0.13295",
        "lat": "51.526449"
    }
]

```

## Tube Countdown

Tube countdown data is provided in the form of a single JSON object. The object contains the following fields:

LineName	Specifies line name	
StationName	Specifies station name	
Platform	JSON array of platforms available at station	
	PlatformName	Name of the train platform
	Trains	JSON array of train countdown data
	Destination	Train destination
	TimeTo	Train countdown

Tube countdown can be requested at

/tube?stop=@,\$\$\$

where \$\$\$ is the 3 letter station code and @ is the 1 letter line code

An example query:

<http://stud-tfl.cs.ucl.ac.uk/tube?stop=P,RSQ>

This query returns the following data (only a fragment of data returned is shown):

```
{
  "LineName": "Piccadilly Line",
  "StationName": "Russell Square",
  "Platform":
    [{
      "PlatformName": "Eastbound - Platform 1",
      "Trains":
        [{
          "Destination": "Cockfosters",
          "TimeTo": "1 min"
        },
        {
          "Destination": "Cockfosters",
          "TimeTo": "3 min"
        },
        {
          "Destination": "Arnos Grove",
          "TimeTo": "7 min"
        },
        {
          "Destination": "Cockfosters",
          "TimeTo": "9 min"
        },
        {
          "Destination": "Cockfosters",
          "TimeTo": "12 min"
        },
        {
          "Destination": "Cockfosters",
          "TimeTo": "16 min"
        },
        {
          "Destination": "Arnos Grove",
          "TimeTo": "19 min"
        }
      ]
    }
  ]
}
```

```

        "Destination": "Cockfosters",
        "TimeTo": "22 min"
      },
      {
        "Destination": "Cockfosters",
        "TimeTo": "24 min"
      },
      {
        "Destination": "Cockfosters",
        "TimeTo": "28 min"
      }
    ]
  },
  ...
}

```

## Line Status

Line status data is provided in the form of a JSON array. Each line element is a separate JSON object. The key-value pairs available in each object are:

_id	The internal MongoDB ID for the line (do not use)
lineID	The TFL ID number for the line
lineName	The name of the line
statusDescription	The current status of each line
statusDetails	Further details on the status of each line. If the status is Good Service, then this will be blank.

Line status can be requested at  
/lines

An example query:

<http://stud-tfl.cs.ucl.ac.uk/lines>

This query returns the following data that has been shortened for display purposes:

```

[ {
  "_id": "5132a740f919b47a0f000005",
  "lineID": "8",
  "lineName": "Hammersmith and City",
  "statusDescription": "Good Service",
  "statusDetails": ""
}

```

```

},
{
  "_id": "5132a740f919b47a0f00000b",
  "lineID": "12",
  "lineName": "Waterloo and City",
  "statusDescription": "Good Service",
  "statusDetails": ""
},
{
  "_id": "5132a740f919b47a0f000003",
  "lineID": "7",
  "lineName": "Circle",
  "statusDescription": "Good Service",
  "statusDetails": ""
},
...
]

```

## Bike Docks

Bike dock data is provided in the form of a JSON array. Each dock element is a separate JSON object. The key-value pairs available in each object are:

id	The TFL ID number for the dock
name	The name of the dock
lat	The latitude coordinate for the bike dock
log	The longitude coordinate for the bike dock
locked	Whether the dock is available for use or not. If false, then it is available. If true, then it is not available.
nbBikes	The number of bikes currently available at the bike dock
nbEmptyDocks	The number of empty docks at the bike dock
dbDocks	The total number of docks at the bike dock
_id	The internal MongoDB ID for the dock (do not use)

Bike dock locations can be requested at  
**/bike?loc=#####,\$\$\$\$\$\$,%%%**

where ##### is the latitude coordinate, \$\$\$\$ is the longitude coordinate and %%% is the radius in meters

An example query:

<http://stud-tfl.cs.ucl.ac.uk/bike?loc=51.5239,-0.133101,150>

This query returns the following data:

```
[ {
  "id": "19",
  "name": "Taviton Street, Bloomsbury",
  "lat": 51.52505093,
  "long": -0.131161087,
  "locked": "false",
  "nbBikes": "18",
  "nbEmptyDocks": "12",
  "dbDocks": "30",
  "_id": "5135e4957d46a55802009f87"
}, {
  "id": "65",
  "name": "Gower Place , Euston",
  "lat": 51.52522753,
  "long": -0.13518856,
  "locked": "false",
  "nbBikes": "11",
  "nbEmptyDocks": "6",
  "dbDocks": "17",
  "_id": "5135e4957d46a55802009fb4"
}]
```

## Crowdedness

Line status data is provided in the form of a string that describes the current crowdedness.

Crowdedness can be requested at

`/crowd?stop=###,$$$$`

where ### is the 3 digit national location code (NLC) for the station and \$\$\$ is the time in 24-hour international/military time format (e.g. 0000 for midnight)

An example query:

<http://stud-tfl.cs.ucl.ac.uk/crowd?stop=625,1256>

This query returns the following data:

"CROWDED"

## Weather

Weather data is provided in the form of a single JSON object with the following key-value pairs:

Temperature	The current temperature in Celcius
WeatherDesc	A text description of the current weather
IconURL	A direct link to the icon of the current weather

Weather can be requested at

/weather?loc=#####,\$\$\$\$\$\$

where ##### is the latitude coordinate and \$\$\$\$\$\$ is the longitude coordinate.

An example query:

<http://stud-tfl.cs.ucl.ac.uk/weather?loc=51.5239,-0.133101>

This query returns the following data that has been modified slightly for display purposes:

```
{
  "Temperature": "5",
  "WeatherDesc": "Partly Cloudy",
  "IconURL": "http://goo.gl/ZqXeM"
}
```

## Tube Line Ratings

Tube ratings can be both posted to and retrieved from the API. Ratings are refreshed daily at 1:10AM local UK time. Furthermore user ratings are refreshed three times a day so that re-rating can be implemented on the client side accordingly at 12:10PM, 7:10PM and 1:10AM local UK time.

Line ratings can be retrieved in two forms: overall ratings and ratings per user.

Overall ratings are provided in the form of a JSON array. The key-value pairs available in each object are:

0	Number of "0" ratings
1	Number of "1" ratings
2	Number of "2" ratings
3	Number of "0" ratings
4	Number of "3" ratings
5	Number of "4" ratings
_id	The internal MongoDB ID for the line (do not use)
line	Name of the Tube line



Overall ratings are available at:  
`/getratings?fetchall`

An example query:

<http://stud-tfl.cs.ucl.ac.uk/lines>

An example fragment of data returned:

```
[
  {
    0: 0,
    1: 1,
    2: 0,
    3: 0,
    4: 0,
    5: 0,
    "_id": "5137407debd89e15c3affcfb",
    "line": "Piccadilly"
  },
  ...
]
```

Ratings per user are provided in the form of a single JSON object. We store them as they are provided, therefore it is up to the client to choose whether they want to encrypt or hash the username. We recommend the use of SHA-1 hashing if the usernames are not displayed in your application or RSA encryption otherwise. The key-value pairs available in the object are:

Bakerloo	Line rating integer
Central	Line rating integer
Circle	Line rating integer
DLR	Line rating integer
District	Line rating integer
Hammersmith_and_City	Line rating integer
Jubilee	Line rating integer
Metropolitan	Line rating integer
Northern	Line rating integer
Overground	Line rating integer
Piccadilly	Line rating integer

Victoria	Line rating integer
Waterloo_and_city	Line rating integer
_id	The internal MongoDB ID for the line (do not use)
userName	User name of the user who provided the rating

Ratings per user can be requested at:

`/getratings?fetchforuser=*username*`

where `*username*` is the username for which ratings are requested.

An example query:

<http://stud-tfl.cs.ucl.ac.uk/getratings?fetchforuser=example>

This query returns the following data:

```
{
  "Bakerloo": null,
  "Central": null,
  "Circle": null,
  "DLR": null,
  "District": null,
  "Hammersmith_and_City": null,
  "Jubilee": null,
  "Metropolitan": null,
  "Northern": null,
  "Overground": null,
  "Piccadilly": 1,
  "Victoria": null,
  "Waterloo_and_City": null,
  "_id": "5149d5a157921c980e00000f",
  "userName": "example"
}
```

We allow clients to submit ratings to our API as well. This can be done by appending the rating to the following URL:

`/postratings?foruser=*username*,Piccadilly=#`

where `*username*` is the username of the user providing the rating and `#` is a rating integer in the range 0-5.

## Comments

Comments about individual Tube stations can be both posted to and retrieved from the API. We store them as they are provided therefore it is up to the client to choose whether they want to encrypt or hash the username. We recommend the use of SHA-1 hashing if the usernames are not displayed in your application or RSA encryption otherwise. Comments are refreshed

manually based on their number and timestamp. We reserve the right to delete comments without notice.

Comments are retrieved based on a Tube Station. One can query for all comments at an individual station or only the ones for an individual user.

All comments per station are returned as a JSON array. The first object contains a reply from the server. The server returns

```
{
    "reply": "OK"
}
```

as the first object if comments exist. In this situation, the following JSON objects are always comments. The key-value pairs available in an object are:

userName	User name of the user who provided the comment
stationCode	3 digit NLC code for the station
comment	Textual representation of the comment. URL-encoded (has to be both encoded and decoded on the client side)
created_at	Date of creation of the comment (ISO time stamp)
_id	The internal MongoDB ID for the line (do not use)

If there are no comments at a particular station the following reply is returned as the only object in the array:

```
{
    "reply": "No comments for station"
}
```

All comments per station can be requested at:

/getcomments?fetchallforstation=###

where ### is the 3 digit NLC code for the station

An example query:

<http://stud-tfl.cs.ucl.ac.uk/getcomments?fetchallforstation=625>

The query returns the following data (example):

```
[
    {
        "reply": "OK"
    },
    {
        "userName": "f4f63e32d2a140719f77e6f80780b7063e4a01af",
        "stationCode": "625",
    }
]
```

```

        "comment":
        "very+crowded+today%2C+avoid+St+all+cost%21%21%21",
        "created_at": "2013-03-18T13:42:12.194Z",
        "_id": "514719b457921c980e000002"
    },
    {
        "userName": "example",
        "stationCode": "625",
        "comment": "ok",
        "created_at": "2013-03-20T16:13:55.681Z",
        "_id": "5149e04357921c980e000011"
    }
]

```

Comments per station for a particular user follow exactly the same format, the only difference being that only comments for a single user name are returned.

Comments per station for an individual user can be requested at:

`/getcomments?fetchforuser=*username*,atstation=###`

where `*username*` is the username for which comments are requested and `###` is the 3 digit NLC code for the station

We allow clients to submit comments to our API as well. Once a rating is submitted, a JSON array with a single JSON object is returned to confirm that a comment has been accepted. This is in the following format:

```

[
    {
        "reply": "OK"
    }
]

```

Comments can be submitted by appending the rating to the following URL:

`/postcomment?forstation=###,user=*username*,comment=*comment*`

where `###` is the 3 digit NLC code for the station, `*username*` is the username of the user who posted the comment and `*comment*` is the comment text (this requires URL encoding).

## Twitter Feeds

The API allows clients to retrieve Twitter feeds about individual Tube Lines and individual Tube stations. The API returns a maximum of 10 Tweets currently. We reserve the right to increase the number of Tweets returned with no previous notice.

In both cases the data is returned in the form of a JSON array. The key-value pairs available in each object are:

created_at	Tweet creation date
from_user	Twitter username of the person who submitted the Tweet
text	Tweet text ( <b>not</b> URL encoded)

Tweets per station can be requested at:

`/gettwitter?fetchforstation=*stationname*`

where `*stationname*` is the string station name. This should **not** contain the word "station". The string should be URL encoded. For example, for Russel Square Station the following string should be used: `Russel%20Square`.

Tweets per line can be requested at:

`/gettwitter?fetchforline=*linename*`

where `*linename*` is the string line name. This should **not** contain the word "line". The string should be URL encoded. For example, for Hammersmith and City line the following string should be used: `Hammersmith%20and%20City`.

An example query:

<http://stud-tfl.cs.ucl.ac.uk/gettwitter?fetchforstation=Euston>

The query returns the following data (example mock fragment of data returned):

```
[
  {
    "created_at": "Wed, 20 Mar 2013 17:14:31 +0000",
    "from_user": "example",
    "text": "example Twitter status feed"
  },
  ...
]
```

## Underground Station List

The following list provides all available Underground stations and their various identifiers. Line names stand for the following:

**D** – District Line  
**C** – Central Line  
**M** – Metropolitan Line  
**P** – Piccadilly Line  
**H** – Hammersmith and City and Circle Lines  
**W** – Waterloo and City Line  
**N** – Northern Line  
**J** – Jubilee Line

**B – Bakerloo Line**

**V- Victoria**

NLC	Station Name	St. Code	Line1	Line2	Line3	Line4	Line5
500	Acton Town	ACT	D	P	*	*	*
502	Aldgate	ALD	H	M	*	*	*
503	Aldgate East	ALE	D	H	*	*	*
505	Alperton	ALP	P	*	*	*	*
506	Amersham	AME	M	*	*	*	*
507	Angel	ANG	N	*	*	*	*
508	Archway	ARC	N	*	*	*	*
509	Arnos Grove	AGR	P	*	*	*	*
510	Arsenal	ARL	P	*	*	*	*
511	Baker Street	BST	B	H	J	M	*
512	Balham	BAL	N	*	*	*	*
513	Bank	BNK	C	N	W	*	*
513	Monument	MON	D	H	*	*	*
501	Barbican	BAR	H	M	*	*	*
514	Barking	BKG	D	H	*	*	*
515	Barkingside	BDE	C	*	*	*	*
516	Barons Court	BCT	D	P	*	*	*
517	Bayswater	*	*	*	*	*	*
518	Becontree	BEC	D	*	*	*	*
519	Belsize Park	BPK	N	*	*	*	*
787	Bermondsey	BER	J	*	*	*	*
520	Bethnal Green	BNG	C	*	*	*	*
521	Blackfriars	BLF	D	H	*	*	*
522	Blackhorse Road	BHR	V	*	*	*	*
524	Bond Street	BDS	C	J	*	*	*
525	Borough	BOR	N	*	*	*	*
526	Boston Manor	BOS	P	*	*	*	*
527	Bounds Green	BGR	P	*	*	*	*
528	Bow Road	BWR	D	H	*	*	*
529	Brent Cross	BTX	N	*	*	*	*
778	Brixton	BRX	V	*	*	*	*
530	Bromley-by-Bow	BBB	D	H	*	*	*
531	Buckhurst Hill	BHL	C	*	*	*	*
532	Burnt Oak	BUR	N	*	*	*	*
534	Caledonian Road	CRD	P	*	*	*	*
535	Camden Town	CTN	N	*	*	*	*
788	Canada Water	CWR	J	*	*	*	*
852	Canary Wharf	CWF	J	*	*	*	*
884	Canning Town	CNT	J	*	*	*	*
536	Cannon Street	CST	D	H	*	*	*
537	Canons Park	CPK	J	*	*	*	*
539	Chalfont & Latimer	CLF	M	*	*	*	*
540	Chalk Farm	CHF	N	*	*	*	*
541	Chancery Lane	CYL	C	*	*	*	*

718	Charing Cross	CHX	B	N	*	*	*
543	Chesham	*	*	*	*	*	*
544	Chigwell	CHG	C	*	*	*	*
545	Chiswick Park	CHP	D	*	*	*	*
546	Chorleywood	CWD	M	*	*	*	*
547	Clapham Common	CPC	N	*	*	*	*
548	Clapham North	CPN	N	*	*	*	*
549	Clapham South	CPS	N	*	*	*	*
550	Cockfosters	CFS	P	*	*	*	*
551	Colindale	COL	N	*	*	*	*
552	Colliers Wood	CLW	M	N	*	*	*
553	Covent Garden	COV	P	*	*	*	*
554	Croxley	CRX	M	*	*	*	*
555	Dagenham East	DGE	D	*	*	*	*
556	Dagenham Heathway	DGH	D	*	*	*	*
557	Debden	DEB	C	*	*	*	*
558	Dollis Hill	DHL	J	*	*	*	*
560	Ealing Broadway	EBY	C	D	*	*	*
561	Ealing Common	ECM	D	P	*	*	*
562	Earl's Court	ECT	D	P	*	*	*
563	East Acton	EAC	C	*	*	*	*
565	East Finchley	EFY	N	*	*	*	*
566	East Ham	EHM	D	H	*	*	*
567	East Putney	EPY	D	*	*	*	*
564	Eastcote	ETE	M	P	*	*	*
568	Edgware	EDG	N	*	*	*	*
774	Edgware Road (Bak)	ERB	B	*	*	*	*
569	Edgware Road (Cir)	ERD	D	H	*	*	*
570	Elephant & Castle	ELE	B	N	*	*	*
571	Elm Park	EPK	D	*	*	*	*
542	Embankment	EMB	B	D	H	N	*
572	Epping	EPP	C	*	*	*	*
574	Euston	EUS	N	V	*	*	*
575	Euston Square	ESQ	H	M	*	*	*
576	Fairlop	FLP	C	*	*	*	*
577	Farringdon	FAR	H	M	*	*	*
578	Finchley Central	FYC	N	*	*	*	*
579	Finchley Road	FRD	J	M	*	*	*
580	Finsbury Park	FPK	P	V	*	*	*
581	Fulham Broadway	FBY	D	*	*	*	*
582	Gants Hill	GHL	C	*	*	*	*
583	Gloucester Road	GRD	D	H	P	*	*
584	Golders Green	GGR	N	*	*	*	*
585	Goldhawk Road	*	*	*	*	*	*
586	Goodge Street	GST	N	*	*	*	*
587	Grange Hill	GRH	C	*	*	*	*
588	Great Portland Street	GPS	H	M	*	*	*
590	Green Park	GPK	J	P	V	*	*

589	Greenford	GFD	C	*	*	*	*
591	Gunnersbury	GUN	D	*	*	*	*
592	Hainault	HAI	C	*	*	*	*
593	Hammersmith (Dis)	HMD	D	P	*	*	*
773	Hammersmith (H&C)	HMS	H	*	*	*	*
594	Hampstead	HMP	N	*	*	*	*
595	Hanger Lane	HLN	C	*	*	*	*
596	Harlesden	HSD	B	*	*	*	*
597	Harrow & Wealdstone	HAW	B	*	*	*	*
598	Harrow-on-the-Hill	HOH	M	*	*	*	*
779	Hatton Cross	HTX	P	*	*	*	*
780	Heathrow Terminals 123	HRC	P	*	*	*	*
781	Heathrow Terminal 4	HRF	P	*	*	*	*
783	Heathrow Terminal 5	HRV	P	*	*	*	*
601	Hendon Central	HND	N	*	*	*	*
602	High Barnet	HBT	N	*	*	*	*
605	High Street Kensington	HST	D	H	*	*	*
603	Highbury & Islington	HBV	V	*	*	*	*
604	Highgate	HIG	N	*	*	*	*
606	Hillingdon	HDN	M	P	*	*	*
607	Holborn	HOL	C	P	*	*	*
608	Holland Park	HPK	C	*	*	*	*
609	Holloway Road	HRD	P	*	*	*	*
610	Hornchurch	HCH	D	*	*	*	*
611	Hounslow Central	HNC	P	*	*	*	*
612	Hounslow East	HNE	P	*	*	*	*
613	Hounslow West	HNW	P	*	*	*	*
614	Hyde Park Corner	HPC	P	*	*	*	*
615	Ickenham	ICK	M	P	*	*	*
616	Kennington	KEN	N	*	*	*	*
617	Kensal Green	KGN	B	*	*	*	*
618	Kensington (Olympia)	OLY	D	*	*	*	*
619	Kentish Town	KTN	N	*	*	*	*
620	Kenton	KNT	B	*	*	*	*
621	Kew Gardens	KEW	D	*	*	*	*
622	Kilburn	KIL	J	*	*	*	*
623	Kilburn Park	KPK	B	*	*	*	*
625	King's Cross St. Pancras	KXX	H	M	N	P	V
624	Kingsbury	KBY	J	*	*	*	*
626	Knightsbridge	KNB	P	*	*	*	*
627	Ladbroke Grove	*	*	*	*	*	*
628	Lambeth North	LAM	B	*	*	*	*
629	Lancaster Gate	LAN	C	*	*	*	*
630	Latimer Road	*	*	*	*	*	*
631	Leicester Square	LSQ	N	P	*	*	*
632	Leyton	LEY	C	*	*	*	*
633	Leytonstone	LYS	C	*	*	*	*



634	Liverpool Street	LST	C	H	M	*	*
635	London Bridge	LON	J	N	*	*	*
636	Loughton	LTN	C	*	*	*	*
637	Maida Vale	MDV	B	*	*	*	*
638	Manor House	MNR	P	*	*	*	*
639	Mansion House	MAN	D	H	*	*	*
640	Marble Arch	MAR	C	*	*	*	*
641	Marylebone	MYB	B	*	*	*	*
642	Mile End	MLE	C	D	H	*	*
643	Mill Hill East	MHE	N	*	*	*	*
646	Moor Park	MPK	M	*	*	*	*
645	Moorgate	MGT	H	M	N	*	*
647	Morden	MOR	N	*	*	*	*
648	Mornington Crescent	MCR	N	*	*	*	*
649	Neasden	NEA	J	*	*	*	*
650	Newbury Park	NEP	C	*	*	*	*
653	North Acton	NAC	C	*	*	*	*
654	North Ealing	NEL	P	*	*	*	*
789	North Greenwich	NGW	J	*	*	*	*
656	North Harrow	NHR	M	*	*	*	*
659	North Wembley	NWM	B	*	*	*	*
655	Northfields	NFD	P	*	*	*	*
657	Northolt	NHT	C	*	*	*	*
660	Northwick Park	NWP	M	*	*	*	*
661	Northwood	NWD	M	*	*	*	*
662	Northwood Hills	MWH	M	*	*	*	*
663	Notting Hill Gate	NHG	C	*	*	*	*
664	Oakwood	OAK	P	*	*	*	*
665	Old Street	OLD	N	*	*	*	*
667	Osterley	OST	P	*	*	*	*
668	Oval	OVL	N	*	*	*	*
669	Oxford Circus	OXC	B	C	V	*	*
670	Paddington	PAD	B	H	*	*	*
671	Park Royal	PRY	P	*	*	*	*
672	Parsons Green	PGR	D	*	*	*	*
673	Perivale	PER	C	*	*	*	*
674	Piccadilly Circus	PIC	B	P	*	*	*
776	Pimlico	PIM	V	*	*	*	*
675	Pinner	PIN	M	*	*	*	*
676	Plaistow	PLW	D	H	*	*	*
677	Preston Road	*	*	*	*	*	*
678	Putney Bridge	PUT	D	*	*	*	*
680	Queen's Park	QPK	B	*	*	*	*
679	Queensbury	QBY	J	*	*	*	*
681	Queensway	QWY	C	*	*	*	*
682	Ravenscourt Park	RCP	D	*	*	*	*
683	Rayners Lane	RLN	M	P	*	*	*
684	Redbridge	RED	C	*	*	*	*

685	Regent's Park	RPK	B	*	*	*	*
686	Richmond	RMD	D	*	*	*	*
687	Rickmansworth	RKY	M	*	*	*	*
688	Roding Valley	ROD	C	*	*	*	*
690	Royal Oak	*	*	*	*	*	*
691	Ruislip	RUI	M	P	*	*	*
692	Ruislip Gardens	RUG	C	*	*	*	*
693	Ruislip Manor	RUM	M	P	*	*	*
694	Russell Square	RSQ	P	*	*	*	*
698	Seven Sisters	SVS	V	*	*	*	*
700	Shepherd's Bush (Cen)	SBC	C	*	*	*	*
775	Shepherd's Bush (H&C)	*	*	*	*	*	*
702	Sloane Square	SSQ	D	H	*	*	*
703	Snaresbrook	SNB	C	*	*	*	*
704	South Ealing	SEL	P	*	*	*	*
707	South Harrow	SHR	P	*	*	*	*
708	South Kensington	SKN	D	H	P	*	*
709	South Kenton	SKT	B	*	*	*	*
710	South Ruislip	SRP	C	*	*	*	*
711	South Wimbledon	SWM	N	*	*	*	*
712	South Woodford	SWF	C	*	*	*	*
705	Southfields	SFS	D	*	*	*	*
706	Southgate	SGT	P	*	*	*	*
784	Southwark	SWK	J	*	*	*	*
695	St. James's Park	SJP	D	H	*	*	*
696	St. John's Wood	SJW	J	*	*	*	*
697	St. Paul's	STP	C	*	*	*	*
713	Stamford Brook	STB	D	*	*	*	*
714	Stanmore	STA	J	*	*	*	*
715	Stepney Green	STG	D	H	*	*	*
716	Stockwell	STK	N	V	*	*	*
717	Stonebridge Park	SPK	B	*	*	*	*
719	Stratford	SFD	C	J	*	*	*
720	Sudbury Hill	SHL	P	*	*	*	*
721	Sudbury Town	STN	P	*	*	*	*
723	Swiss Cottage	SWC	J	*	*	*	*
724	Temple	TEM	D	H	*	*	*
725	Theydon Bois	THB	C	*	*	*	*
726	Tooting Bec	TBE	N	*	*	*	*
727	Tooting Broadway	TBY	N	*	*	*	*
728	Tottenham Court Road	TCR	C	N	*	*	*
729	Tottenham Hale	TTH	V	*	*	*	*
730	Totteridge & Whetstone	TOT	N	*	*	*	*
731	Tower Hill	THL	D	H	*	*	*
733	Tufnell Park	TPK	N	*	*	*	*
734	Turnham Green	TGR	D	P	*	*	*
735	Turnpike Lane	TPL	P	*	*	*	*
736	Upminster	UPM	D	*	*	*	*

737	Upminster Bridge	UPB	D	*	*	*	*
738	Upney	UPY	D	*	*	*	*
739	Upton Park	UPK	D	H	*	*	*
740	Uxbridge	UXB	M	P	*	*	*
777	Vauxhall	VUX	V	*	*	*	*
741	Victoria	VIC	D	H	V	*	*
742	Walthamstow Central	WAL	V	*	*	*	*
743	Wanstead	WAN	C	*	*	*	*
745	Warren Street	WST	N	V	*	*	*
746	Warwick Avenue	WAR	B	*	*	*	*
747	Waterloo	WLO	B	J	N	W	*
748	Watford	WAT	M	*	*	*	*
751	Wembley Central	WEM	B	*	*	*	*
752	Wembley Park	WPK	J	M	*	*	*
753	West Acton	WAC	C	*	*	*	*
755	West Brompton	WBT	D	*	*	*	*
756	West Finchley	WFY	N	*	*	*	*
757	West Ham	WHM	H	J	*	*	*
758	West Hampstead	WHD	J	*	*	*	*
759	West Harrow	WHR	M	*	*	*	*
760	West Kensington	WKN	D	*	*	*	*
762	West Ruislip	WRP	C	*	*	*	*
754	Westbourne Park	*	*	*	*	*	*
761	Westminster	WMS	D	H	J	*	*
764	White City	WCT	C	*	*	*	*
763	Whitechapel	WCL	D	H	*	*	*
765	Willesden Green	WLG	J	*	*	*	*
766	Willesden Junction	WJN	B	*	*	*	*
767	Wimbledon	WDN	D	*	*	*	*
768	Wimbledon Park	WMP	D	*	*	*	*
770	Wood Green	WGN	P	*	*	*	*
599	Wood Lane	*	*	*	*	*	*
769	Woodford	WFD	C	*	*	*	*
771	Woodside Park	WSP	N	*	*	*	*