



# Harmonised Traffic Counts dataset API User Guide

## National Freight Data Hub

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# 1. Purpose

This document is a guide for users of the National Freight Data Hub's (NFDH) Harmonised Traffic Counts dataset API. After reading this guide, users should be able to interact with the data and construct queries to return samples of the data to serve their particular use cases.

## 2. Introduction

The Harmonised Traffic Counts dataset reports on the number and type of vehicles travelling past traffic counter stations across Australia in a given duration, over time. Depending on the sophistication of the counter and the provider, counts can be by vehicle classification (using the [Austroads 1-12 classification](#)), a 2 or 4-level grouping of the 12-level classification or a simple count of all traffic.

Counter Type	Counting
<b>01-bin</b>	Single count for all vehicles, regardless of Austroads vehicle classification
<b>02-bin</b>	Counts for Light (class 1 and 2) and Heavy (classes 3 to 12) categories
<b>04-bin</b>	Counts for Short (classes 1 and 2), Rigid (classes 3 to 5), Articulated (classes 6 to 9) and Combination (classes 10 to 12) categories
<b>12-bin</b>	Individual counts for each of the 12 classifications

The data has been sourced from a number of providers, either state authorities or commercial data collection facilitators, who publish open traffic counts. Count observations in the source data can be hourly, by calendar year or financial year – this depends on what each jurisdiction releases.

The National Freight Data Hub has combined, aggregated and harmonised traffic count information from the above listed states into a consistent format. Due to the format of the source data, the information has been presented and made publicly available in the form of monthly, calendar year or financial year aggregated counts for available traffic counter locations in the dataset.

Work is underway to improve the quality and coverage of this dataset, with the aim of harmonising data from more jurisdictions to establish a nationally consistent set of traffic counts information for the Australian road network.

Data is refreshed on a weekly basis.

### 2.1 Input datasets

Data is sourced from publicly available traffic counts published by the following providers.

- Geocounts – hourly counts
  - clientid: nswwim (link: [Transport For NSW Traffic Counts \(geocounts.com\)](#))
  - clientid: vicroads (link: [Traffic Counts \(geocounts.com\)](#))
  - clientid: stategrowth (Note: Geocounts are no longer publishing traffic counts information for Tasmania)
- NSW Road Manager carto service – hourly counts

- clientid: nswrms (link: [DITRDCA Data Catalogue - NSW Traffic Volume Viewer \(infrastructure.gov.au\)](#))
- QLD state government – calendar year counts based on annual average daily traffic counts
  - clientid: qld\_traffic\_census (link: [DITRDCA Data Catalogue - Traffic census for the Queensland state-declared road network \(infrastructure.gov.au\)](#))
- SA state government – financial year counts based on annual average daily traffic counts
  - clientid: sa\_links (link: [Traffic Volumes - Dataset - data.sa.gov.au](#))

## 2.2 Limitations of the NFDH dataset

Please note the following before accessing the data:

1. Due to the nature of the source data, each of the temporal resolution tables have a different level of coverage.
  - Monthly data is only available for NSW, VIC and TAS.
  - Calendar year data is only available for NSW, VIC, TAS and QLD.
  - Financial year data is only available for NSW, VIC, TAS and SA.
2. More granular data has been rolled up and presented in more high-level tables – i.e. the same data for NSW, VIC and TAS is available in all three (monthly, financial year and calendar year) tables.
3. Observations from counters with more detailed vehicle classification breakdown are rolled up and also presented in more high-level aggregates – i.e. observations for a 12-bin classification system have also been rolled up and presented as 04-bin, 02-bin, and 01-bin counts. The 'counter\_type' field in the data can be used to distinguish the sophistication of the traffic counter.
4. The API is updated weekly with newly available counts from the NFDH database, however it should be noted that publication of new observations by data providers may lag by several months.
5. Users should be aware that counts for a given station and counter can be re-published after their initial publication, to allow for error correction. The published data contain the most recent counts.
6. Gaps may exist in the shorter timeseries observations as stations and counters may experience outages. Therefore, it is a possibility that some counts within a temporal window are missing.
7. A station can have multiple traffic counters – please note that counter name is not unique across the board but is unique within station name/id
8. Tasmania have changed their traffic counts provider, so NFDH are no longer receiving count data from Geocounts for Tasmanian stations. Work is underway to incorporate the new data provider to the NFDH data ingest process.

### 3. Dataset structure

The API calls the NFDH's Harmonised Traffic Counts dataset. The table below describes the structure of this harmonised dataset. Users can consult this table as a reference document to better understand the data returned by the API.

Field name	Field description
<b>id</b>	Unique number generated on load into the Department's data management platform.
<b>state</b>	The state/territory which has provided the traffic count observation. This is derived from the 'clientid' field. <ul style="list-style-type: none"><li>• <b>NSW</b></li><li>• <b>VIC</b></li><li>• <b>QLD</b></li><li>• <b>SA</b></li><li>• <b>TAS</b></li></ul>
<b>clientid</b>	This refers to the client name, and is used to distinguish between multiple clients serviced by the same provider (see Section 2.1). <ul style="list-style-type: none"><li>• <b>nswwim</b></li><li>• <b>nswrms</b></li><li>• <b>vicroads</b></li><li>• <b>qld_traffic_census</b></li><li>• <b>sa_links</b></li><li>• <b>stategrowth</b></li></ul>
<b>src_stnname</b>	The publicly-available name of the traffic station from the source system.
<b>src_stnid</b>	The system identifier of the station used for data traversal in the source system – this is the same as src_stnname for all clients except nswrms.
<b>stn_countername</b>	The sensor name or identifier unique to the concentrator station – varies on provider.
<b>ctr_id</b>	A generated unique key for each traffic counter in the NFDH database.

Field name	Field description
<b>roadname</b>	The name of the major road where the station/traffic counter is location.
<b>counter_type</b>	This indicates the level of Austroads vehicle classification breakdown captured by the traffic counter. <ul style="list-style-type: none"> <li>• <b>01-bin</b> – Single count for all vehicles, regardless of Austroads vehicle classification</li> <li>• <b>02-bin</b> – Counts for Light (class 1 and 2) and Heavy (classes 3 to 12) categories</li> <li>• <b>04-bin</b> – Counts for Short (classes 1 and 2), Rigid (classes 3 to 5), Articulated (classes 6 to 9) and Combination (classes 10 to 12) categories</li> <li>• <b>12-bin</b> – Individual counts for each of the 12 classifications</li> </ul>
<b>direction</b>	The direction of travel the traffic counter is capturing (e.g. southbound). Not available for all providers.
<b>source_data</b>	The URL to the provider's public traffic counts website.
<b>temporal_period</b>	The temporal period that the record refers to. <ul style="list-style-type: none"> <li>• In the Monthly API, field values are in the form: "Month YYYY"</li> <li>• In the Calendar Year API, field values are in the form: "YYYY Calendar Year"</li> <li>• In the Financial Year API, field values are in the form: "YYYY-1/YYYY Financial Year"</li> </ul>
<b>temporal_coverage_from</b>	The earliest start date/time of an observation in the defined temporal period, in UTC format (milliseconds).
<b>temporal_coverage_to</b>	The latest end date/time of an observation in the defined temporal period, in UTC format (milliseconds).
<b>bins01_class01to12</b>	The count of total vehicles (Classes 01 to 12) in the defined temporal period. This field will be populated for all records.
<b>bins02_class01to02</b>	The count of total light vehicles (Classes 01 and 02) in the defined temporal period. Note this field will only be populated for counters where counter_type = '02-bin', '04-bin' or '12-bin'.
<b>bins02_class03to12</b>	The count of total heavy vehicles (Classes 03 to 12) in the defined temporal period. Note this field will only be populated for counters where counter_type = '02-bin', '04-bin' or '12-bin'.
<b>bins04_class01to02</b>	The count of total light vehicles (Classes 01 and 02) in the defined temporal period. Note this field will only be populated for counters where counter_type = '04-bin' or '12-bin'.

Field name	Field description
<b>bins04_class03to05</b>	The count of total rigid vehicles (Classes 03 to 05) in the defined temporal period. Note this field will only be populated for counters where counter_type = '04-bin' or '12-bin'.
<b>bins04_class06to09</b>	The count of total articulated vehicles (Classes 06 to 09) in the defined temporal period. Note this field will only be populated for counters where counter_type = '04-bin' or '12-bin'.
<b>bins04_class10to12</b>	The count of total road train vehicles (Classes 10 to 12) in the defined temporal period. Note this field will only be populated for counters where counter_type = '04-bin' or '12-bin'.
<b>bins12_class01</b>	The count of total Class 01 vehicles in the defined temporal period. Note this field will only be populated for counters where counter_type = '12-bin'.
<b>bins12_class02</b>	The count of total Class 02 vehicles in the defined temporal period. Note this field will only be populated for counters where counter_type = '12-bin'.
<b>bins12_class03</b>	The count of total Class 03 vehicles in the defined temporal period. Note this field will only be populated for counters where counter_type = '12-bin'.
<b>bins12_class04</b>	The count of total Class 04 vehicles in the defined temporal period. Note this field will only be populated for counters where counter_type = '12-bin'.
<b>bins12_class05</b>	The count of total Class 05 vehicles in the defined temporal period. Note this field will only be populated for counters where counter_type = '12-bin'.
<b>bins12_class06</b>	The count of total Class 06 vehicles in the defined temporal period. Note this field will only be populated for counters where counter_type = '12-bin'.
<b>bins12_class07</b>	The count of total Class 07 vehicles in the defined temporal period. Note this field will only be populated for counters where counter_type = '12-bin'.
<b>bins12_class08</b>	The count of total Class 08 vehicles in the defined temporal period. Note this field will only be populated for counters where counter_type = '12-bin'.
<b>bins12_class09</b>	The count of total Class 09 vehicles in the defined temporal period. Note this field will only be populated for counters where counter_type = '12-bin'.

Field name	Field description
<b>bins12_class10</b>	The count of total Class 10 vehicles in the defined temporal period. Note this field will only be populated for counters where counter_type = '12-bin'.
<b>bins12_class11</b>	The count of total Class 11 vehicles in the defined temporal period. Note this field will only be populated for counters where counter_type = '12-bin'.
<b>bins12_class12</b>	The count of total Class 12 vehicles in the defined temporal period. Note this field will only be populated for counters where counter_type = '12-bin'.
<b>last_updated</b>	Date/time the record was last updated, in UTC format (milliseconds).
<b>esri_oid</b>	Unique identifier of the record in NFDH's ArcGIS database – this identifier may not persist across ingests of the data
<b>point</b>	Geospatial location of the traffic counter – this field returns X and Y coordinates corresponding to longitude and latitude respectively

## 4. Accessing and querying the dataset

The Harmonised Traffic Counts dataset can be accessed and queried through the Department's ArcGIS web service using the following URLs. Separate feature layers have been created for the different temporal resolution tables, to streamline the query process for users:

- Monthly data: [https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised\\_Traffic\\_Counts/FeatureServer/0/query?](https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/0/query?)
- Calendar year data: [https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised\\_Traffic\\_Counts/FeatureServer/1/query?](https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/1/query?)
- Financial year data: [https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised\\_Traffic\\_Counts/FeatureServer/2/query?](https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/2/query?)

The data can be queried either by constructing a URL with specified parameters or through the dialog box interface. See section 5 for more detail.

# 5. Constructing queries

## 5.1 Base URLs

- Monthly data: [https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised\\_Traffic\\_Counts/FeatureServer/0/query?](https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/0/query?)
- Calendar year data: [https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised\\_Traffic\\_Counts/FeatureServer/1/query?](https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/1/query?)
- Financial year data: [https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised\\_Traffic\\_Counts/FeatureServer/2/query?](https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/2/query?)

In order to construct a query URL to return only the records that meet our specified criteria, we can append specific parameters to the base URL we are interested in. However, in order to do so, we need to understand what each potential parameter in the URL represents and what values it can take.

Please note:

- Parameters can be specified in any order
- Parameters are case sensitive
- Field names (in the dataset) are **not** case sensitive – e.g. the following will all give the same output:
  - *temporal\_period = 'January 2023'*
  - *Temporal\_Period = 'January 2023'*
  - *TEMPORAL\_PERIOD = 'January 2023'*
- Field values **are** case sensitive – e.g.
  - *temporal\_period = 'January 2023'* will give the correct output, but *temporal\_period = 'january 2023'* will **not**.
  - Fields defined by NFDH have tried to retain consistent capitalisation of field names and values for ease of use, and apply regular checks to avoid duplication of similar field values.

## 5.2 Parameter definitions and example queries

The following parameters can be used to filter the query responses:

<a href="#">where</a>	<a href="#">objectIds</a>	<a href="#">time</a>	<a href="#">geometry</a>	<a href="#">geometryType</a>	<a href="#">inSR</a>
<a href="#">spatialRel</a>	<a href="#">distance</a>	<a href="#">units</a>	<a href="#">relationParam</a>	<a href="#">outFields</a>	<a href="#">returnGeometry</a>
<a href="#">maxAllowableOffset</a>	<a href="#">geometryPrecision</a>	<a href="#">outSR</a>	<a href="#">havingClause</a>	<a href="#">gdbVersion</a>	<a href="#">historicMoment</a>



<a href="#">returnDistinctValues</a>	<a href="#">returnIdsOnly</a>	<a href="#">returnCountOnly</a>	<a href="#">returnExtentOnly</a>	<a href="#">orderByFields</a>	<a href="#">groupByFieldsForStatistics</a>
<a href="#">outStatistics</a>	<a href="#">returnZ</a>	<a href="#">returnM</a>	<a href="#">multipatchOption</a>	<a href="#">resultOffset</a>	<a href="#">resultRecordCount</a>
<a href="#">returnTrueCurves</a>	<a href="#">returnCentroid</a>	<a href="#">sqlFormat</a>	<a href="#">resultType</a>	<a href="#">datumTransformation</a>	<a href="#">f</a>

Use the above links to view parameter definitions and example queries in the below table:

Parameter	Details	Example query URLs
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where

A `WHERE` clause for the query filter, can be used on all fields in the dataset. Operations supported:

```
( '<=' | '>=' | '<' | '>' | '=' | '<>' | LIKE )  
(AND | OR)
```

Example:

- `where=counter_type = '04-bin' AND state = 'VIC'`
- `where= temporal_coverage_from >= DATE '2023-01-01'`

Note that the `Query` will always return date values in UTC. However, if we want to filter on particular date-time fields, we will need to specify them in local time. There are two ways this can be done, by `DATE` and `TIMESTAMP` date functions. Each type of date-time query must include a date-time function to ensure the query is treated properly. The syntax is as follows:

- `<DateField> = DATE 'YYYY-MM-DD'` (this is equivalent to `TIMESTAMP 'YYYY-MM-DD 00:00:00'` – only exact matches will be returned)
- `<DateField> = TIMESTAMP 'YYYY-MM-DD HH:MI:SS'`

Please note when querying `<DateField> = DATE 'YYYY-MM-DD'` this will not necessarily return all records on the specified day. To specify all records on a day (or for another time period) it is recommended to use `'<'` and `'>'` to specify a range.

`temporal_coverage_from`, `temporal_coverage_to` and `last_updated` are the date-time fields in the dataset. Example queries:

- `where= temporal_coverage_from >= DATE '2020-07-01'`
- `where= last_updated >= DATE '2023-01-01'`

- Monthly:  
[https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised\\_Traffic\\_Counts/FeatureServer/0/query?where=temporal\\_coverage\\_from >= DATE '2020-01-01' and state = 'VIC' and counter\\_type = '12-bin'&outFields=\\*&f=pjson](https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/0/query?where=temporal_coverage_from >= DATE '2020-01-01' and state = 'VIC' and counter_type = '12-bin'&outFields=*&f=pjson)
- Calendar year:  
[https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised\\_Traffic\\_Counts/FeatureServer/1/query?where=roadname LIKE '%Newell%'&outFields=counter\\_type&returnDistinctValues=true&f=pjson](https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/1/query?where=roadname LIKE '%Newell%'&outFields=counter_type&returnDistinctValues=true&f=pjson)
- Financial year:  
[https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised\\_Traffic\\_Counts/FeatureServer/2/query?where=counter\\_type = '04-bin'&outFields=ctr\\_id,src\\_stnname,clientid,src\\_stn\\_countername&returnDistinctValues=true&f=pjson](https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/2/query?where=counter_type = '04-bin'&outFields=ctr_id,src_stnname,clientid,src_stn_countername&returnDistinctValues=true&f=pjson)

Parameter	Details	Example query URLs
	<ul style="list-style-type: none"><li>where= temporal_coverage_from &gt;= DATE '2021-01-01' AND temporal_coverage_to &lt;= DATE '2021-04-01'</li></ul>	
	<a href="#">Back to parameter list</a>	

Parameter	Details	Example query URLs
objectIds	<p>The object IDs of this layer or table to be queried.</p> <p>Syntax: objectIds=&lt;objectId1&gt;, &lt;objectId2&gt;</p> <p>Example: objectIds=37, 462</p> <p><a href="#">Back to parameter list</a></p>	<ul style="list-style-type: none"> <li>• Monthly: <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/0/query?objectIds=37,462&amp;outFields=*&amp;f=pjson">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/0/query?objectIds=37,462&amp;outFields=*&amp;f=pjson</a></li> <li>• Calendar year: <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/1/query?objectIds=37,462&amp;outFields=*&amp;f=pjson">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/1/query?objectIds=37,462&amp;outFields=*&amp;f=pjson</a></li> <li>• Financial year: <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/2/query?objectIds=37,462&amp;outFields=*&amp;f=pjson">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/2/query?objectIds=37,462&amp;outFields=*&amp;f=pjson</a></li> </ul>
time	<p>The time instant or the time extent to query. Suggest leaving this blank, as the Feature Layer is not time-enabled.</p> <p><a href="#">Back to parameter list</a></p>	

Parameter	Details	Example query URLs
geometry	<p>The geometry to apply as the spatial filter. This can be used when users wish to return all records located within an envelope/close to a particular point location etc. and works with the geometryType parameter. The geometry of envelopes and points can be specified with a simple comma-separated syntax.</p> <p>Syntax:</p> <ul style="list-style-type: none"> <li>Envelope simple syntax:  <code>geometryType=esriGeometryEnvelope&amp;geometry=&lt;xmin&gt;,&lt;ymin&gt;,&lt;xmax&gt;,&lt;ymax&gt;</code></li> <li>Point simple syntax:  <code>geometryType=esriGeometryPoint&amp;geometry=&lt;x&gt;,&lt;y&gt;</code></li> </ul> <p><a href="#">Back to parameter list</a></p>	<ul style="list-style-type: none"> <li>Monthly:  <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hos ted/Harmonised Traffic Counts/FeatureServer/0/query?geometry=146.696881,-41.107713,147.470333,-41.841627&amp;geometryType=esriGeometryEnvelope&amp;returnCountOnly=true&amp;f=pjson">https://spatial.infrastructure.gov.au/server/rest/services/Hos ted/Harmonised Traffic Counts/FeatureServer/0/query?geometry=146.696881,-41.107713,147.470333,-41.841627&amp;geometryType=esriGeometryEnvelope&amp;returnCountOnly=true&amp;f=pjson</a></li> <li>Calendar year:  <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hos ted/Harmonised Traffic Counts/FeatureServer/1/query?geometry=146.696881,-41.107713,147.470333,-41.841627&amp;geometryType=esriGeometryEnvelope&amp;returnCountOnly=true&amp;f=pjson">https://spatial.infrastructure.gov.au/server/rest/services/Hos ted/Harmonised Traffic Counts/FeatureServer/1/query?geometry=146.696881,-41.107713,147.470333,-41.841627&amp;geometryType=esriGeometryEnvelope&amp;returnCountOnly=true&amp;f=pjson</a></li> <li>Financial year:  <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hos ted/Harmonised Traffic Counts/FeatureServer/2/query?geometry=146.696881,-41.107713,147.470333,-41.841627&amp;geometryType=esriGeometryEnvelope&amp;returnCountOnly=true&amp;f=pjson">https://spatial.infrastructure.gov.au/server/rest/services/Hos ted/Harmonised Traffic Counts/FeatureServer/2/query?geometry=146.696881,-41.107713,147.470333,-41.841627&amp;geometryType=esriGeometryEnvelope&amp;returnCountOnly=true&amp;f=pjson</a></li> </ul>

Parameter	Details	Example query URLs
geometryType	<p>The type of geometry specified by the <code>geometry</code> parameter. The geometry type can be an envelope, a point, a line, or a polygon. The default geometry type is an envelope.</p> <p><b>Values:</b> <code>esriGeometryPoint</code>   <code>esriGeometryMultipoint</code>   <code>esriGeometryPolyline</code>   <code>esriGeometryPolygon</code>   <code>esriGeometryEnvelope</code></p> <p><a href="#">Back to parameter list</a></p>	<ul style="list-style-type: none"> <li>• Monthly: <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/0/query?geometry=146.696881,-41.107713,147.470333,-41.841627&amp;geometryType=esriGeometryEnvelope&amp;returnCountOnly=true&amp;f=pjson">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/0/query?geometry=146.696881,-41.107713,147.470333,-41.841627&amp;geometryType=esriGeometryEnvelope&amp;returnCountOnly=true&amp;f=pjson</a></li> <li>• Calendar year: <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/1/query?geometry=146.696881,-41.107713,147.470333,-41.841627&amp;geometryType=esriGeometryEnvelope&amp;returnCountOnly=true&amp;f=pjson">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/1/query?geometry=146.696881,-41.107713,147.470333,-41.841627&amp;geometryType=esriGeometryEnvelope&amp;returnCountOnly=true&amp;f=pjson</a></li> <li>• Financial year: <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/2/query?geometry=146.696881,-41.107713,147.470333,-41.841627&amp;geometryType=esriGeometryEnvelope&amp;returnCountOnly=true&amp;f=pjson">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/2/query?geometry=146.696881,-41.107713,147.470333,-41.841627&amp;geometryType=esriGeometryEnvelope&amp;returnCountOnly=true&amp;f=pjson</a></li> </ul>
inSR	<p>The spatial reference of the input geometry. If the <code>inSR</code> is not specified, the geometry is assumed to be the same as the native layer spatial reference (EPSG4326).</p> <p><a href="#">Back to parameter list</a></p>	

Parameter	Details	Example query URLs
spatialRel	<p>The spatial relationship to be applied to the input geometry while performing the query. The supported spatial relationships include intersects, contains, envelope intersects, within, and so on. The default spatial relationship is intersects (<code>esriSpatialRelIntersects</code>).</p> <p><b>Values:</b> <code>esriSpatialRelIntersects</code>   <code>esriSpatialRelContains</code>   <code>esriSpatialRelCrosses</code>   <code>esriSpatialRelEnvelopeIntersects</code>   <code>esriSpatialRelIndexIntersects</code>   <code>esriSpatialRelOverlaps</code>   <code>esriSpatialRelTouches</code>   <code>esriSpatialRelWithin</code></p> <p><a href="#">Back to parameter list</a></p>	<ul style="list-style-type: none"> <li>• Monthly: <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/0/query?geometry=146.696881,-41.107713,147.470333,-41.841627&amp;geometryType=esriGeometryEnvelope&amp;spatialRel=esriSpatialRelIntersects&amp;distance=10&amp;units=esriSRUnit_Kilometer&amp;returnCountOnly=true&amp;f=pjson">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/0/query?geometry=146.696881,-41.107713,147.470333,-41.841627&amp;geometryType=esriGeometryEnvelope&amp;spatialRel=esriSpatialRelIntersects&amp;distance=10&amp;units=esriSRUnit_Kilometer&amp;returnCountOnly=true&amp;f=pjson</a></li> <li>• Calendar year: <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/1/query?geometry=146.696881,-41.107713,147.470333,-41.841627&amp;geometryType=esriGeometryEnvelope&amp;spatialRel=esriSpatialRelIntersects&amp;distance=10&amp;units=esriSRUnit_Kilometer&amp;returnCountOnly=true&amp;f=pjson">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/1/query?geometry=146.696881,-41.107713,147.470333,-41.841627&amp;geometryType=esriGeometryEnvelope&amp;spatialRel=esriSpatialRelIntersects&amp;distance=10&amp;units=esriSRUnit_Kilometer&amp;returnCountOnly=true&amp;f=pjson</a></li> <li>• Financial year: <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/2/query?geometry=146.696881,-41.107713,147.470333,-41.841627&amp;geometryType=esriGeometryEnvelope&amp;spatialRel=esriSpatialRelIntersects&amp;distance=10&amp;units=esriSRUnit_Kilometer&amp;returnCountOnly=true&amp;f=pjson">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/2/query?geometry=146.696881,-41.107713,147.470333,-41.841627&amp;geometryType=esriGeometryEnvelope&amp;spatialRel=esriSpatialRelIntersects&amp;distance=10&amp;units=esriSRUnit_Kilometer&amp;returnCountOnly=true&amp;f=pjson</a></li> </ul>



Parameter	Details	Example query URLs
distance	<p>The buffer distance for the input geometries. The distance unit is specified by <code>units</code>. For example, if the distance is 100, the query geometry is a point, <code>units</code> is set to <code>meters</code>, and all points within 100 meters of the point are returned. The geodesic buffer is created based on the datum of the output spatial reference if it exists. If there is no output spatial reference, the input geometry spatial reference is used. Otherwise, the native layer spatial reference is used to generate the geometry buffer used in the query. This is not recommended as the native spatial reference system (WGS84) uses decimal degrees as the unit (not metres) which may return unexpected results.</p> <p><a href="#">Back to parameter list</a></p>	<ul style="list-style-type: none"> <li>• Monthly:  <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/0/query?geometry=146.696881,-41.107713,147.470333,-41.841627&amp;geometryType=esriGeometryEnvelope&amp;spatialRel=esriSpatialRelIntersects&amp;distance=10&amp;units=esriSRUnit_Kilometer&amp;returnCountOnly=true&amp;f=pjson">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/0/query?geometry=146.696881,-41.107713,147.470333,-41.841627&amp;geometryType=esriGeometryEnvelope&amp;spatialRel=esriSpatialRelIntersects&amp;distance=10&amp;units=esriSRUnit_Kilometer&amp;returnCountOnly=true&amp;f=pjson</a> </li> <li>• Calendar year:  <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/1/query?geometry=146.696881,-41.107713,147.470333,-41.841627&amp;geometryType=esriGeometryEnvelope&amp;spatialRel=esriSpatialRelIntersects&amp;distance=10&amp;units=esriSRUnit_Kilometer&amp;returnCountOnly=true&amp;f=pjson">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/1/query?geometry=146.696881,-41.107713,147.470333,-41.841627&amp;geometryType=esriGeometryEnvelope&amp;spatialRel=esriSpatialRelIntersects&amp;distance=10&amp;units=esriSRUnit_Kilometer&amp;returnCountOnly=true&amp;f=pjson</a> </li> <li>• Financial year:  <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/2/query?geometry=146.696881,-41.107713,147.470333,-41.841627&amp;geometryType=esriGeometryEnvelope&amp;spatialRel=esriSpatialRelIntersects&amp;distance=10&amp;units=esriSRUnit_Kilometer&amp;returnCountOnly=true&amp;f=pjson">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/2/query?geometry=146.696881,-41.107713,147.470333,-41.841627&amp;geometryType=esriGeometryEnvelope&amp;spatialRel=esriSpatialRelIntersects&amp;distance=10&amp;units=esriSRUnit_Kilometer&amp;returnCountOnly=true&amp;f=pjson</a> </li> </ul>

Parameter	Details	Example query URLs
units	<p>The unit for calculating the buffer distance. If <code>unit</code> is not specified, the default will be <code>esriSRUnit_Foot</code></p> <p><b>Values:</b> <code>esriSRUnit_Meter esriSRUnit_StatuteMile esriSRUnit_Foot esriSRUnit_Kilometer esriSRUnit_NauticalMile esriSRUnit_USNauticalMile</code></p> <p><a href="#">Back to parameter list</a></p>	<ul style="list-style-type: none"> <li>• Monthly:  <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/0/query?geometry=146.696881,-41.107713,147.470333,-41.841627&amp;geometryType=esriGeometryEnvelope&amp;spatialRel=esriSpatialRelIntersects&amp;distance=10&amp;units=esriSRUnit_Kilometer&amp;returnCountOnly=true&amp;f=pjson">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/0/query?geometry=146.696881,-41.107713,147.470333,-41.841627&amp;geometryType=esriGeometryEnvelope&amp;spatialRel=esriSpatialRelIntersects&amp;distance=10&amp;units=esriSRUnit_Kilometer&amp;returnCountOnly=true&amp;f=pjson</a> </li> <li>• Calendar year:  <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/1/query?geometry=146.696881,-41.107713,147.470333,-41.841627&amp;geometryType=esriGeometryEnvelope&amp;spatialRel=esriSpatialRelIntersects&amp;distance=10&amp;units=esriSRUnit_Kilometer&amp;returnCountOnly=true&amp;f=pjson">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/1/query?geometry=146.696881,-41.107713,147.470333,-41.841627&amp;geometryType=esriGeometryEnvelope&amp;spatialRel=esriSpatialRelIntersects&amp;distance=10&amp;units=esriSRUnit_Kilometer&amp;returnCountOnly=true&amp;f=pjson</a> </li> <li>• Financial year:  <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/2/query?geometry=146.696881,-41.107713,147.470333,-41.841627&amp;geometryType=esriGeometryEnvelope&amp;spatialRel=esriSpatialRelIntersects&amp;distance=10&amp;units=esriSRUnit_Kilometer&amp;returnCountOnly=true&amp;f=pjson">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/2/query?geometry=146.696881,-41.107713,147.470333,-41.841627&amp;geometryType=esriGeometryEnvelope&amp;spatialRel=esriSpatialRelIntersects&amp;distance=10&amp;units=esriSRUnit_Kilometer&amp;returnCountOnly=true&amp;f=pjson</a> </li> </ul>

Parameter	Details	Example query URLs
relationParam	<p>The spatial relate function that can be applied while performing the query operation. An example for this spatial relate function is "FFFTT***". For more information on this spatial relate function, see the documentation for the <a href="#">spatial relate function</a>.</p> <p><a href="#">Back to parameter list</a></p>	

Parameter	Details	Example query URLs
outFields	<p>The list of fields to be included in the returned result set. This list is a comma delimited list of field names. You can also specify the wildcard "*" as the value of this parameter. In this case, the query results include all the field values.</p> <p><a href="#">Back to parameter list</a></p>	<ul style="list-style-type: none"> <li>Monthly: <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/0/query?where=counter_type='01-bin'&amp;outFields=id,state,clientid,src_stnname,src_stnid,stn_countersname,ctr_id,roadname,counter_type,direction,source_data,temporal_period,temporal_coverage_from,temporal_coverage_to,bins01_class01to12,last_updated,esri_oid&amp;f=pjson">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/0/query?where=counter_type='01-bin'&amp;outFields=id,state,clientid,src_stnname,src_stnid,stn_countersname,ctr_id,roadname,counter_type,direction,source_data,temporal_period,temporal_coverage_from,temporal_coverage_to,bins01_class01to12,last_updated,esri_oid&amp;f=pjson</a></li> <li>Calendar year: <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/1/query?where=counter_type='01-bin'&amp;outFields=id,state,clientid,src_stnname,src_stnid,stn_countersname,ctr_id,roadname,counter_type,direction,source_data,temporal_period,temporal_coverage_from,temporal_coverage_to,bins01_class01to12,last_updated,esri_oid&amp;f=pjson">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/1/query?where=counter_type='01-bin'&amp;outFields=id,state,clientid,src_stnname,src_stnid,stn_countersname,ctr_id,roadname,counter_type,direction,source_data,temporal_period,temporal_coverage_from,temporal_coverage_to,bins01_class01to12,last_updated,esri_oid&amp;f=pjson</a></li> <li>Financial year: <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/2/query?where=counter_type='01-bin'&amp;outFields=id,state,clientid,src_stnname,src_stnid,stn_countersname,ctr_id,roadname,counter_type,direction,source_data,temporal_period,temporal_coverage_from,temporal_coverage_to,bins01_class01to12,last_updated,esri_oid&amp;f=pjson">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/2/query?where=counter_type='01-bin'&amp;outFields=id,state,clientid,src_stnname,src_stnid,stn_countersname,ctr_id,roadname,counter_type,direction,source_data,temporal_period,temporal_coverage_from,temporal_coverage_to,bins01_class01to12,last_updated,esri_oid&amp;f=pjson</a></li> </ul>

Parameter	Details	Example query URLs
returnGeometry	<p>If <code>true</code>, the result includes the geometry associated with each feature returned. The default is <code>true</code>.</p> <p>Values: <code>true</code>   <code>false</code></p> <p><a href="#">Back to parameter list</a></p>	<ul style="list-style-type: none"> <li>Monthly:  <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/0/query?geometry=146.696881,-41.107713,147.470333,-41.841627&amp;geometryType=esriGeometryEnvelope&amp;spatialRel=esriSpatialRelIntersects&amp;distance=10&amp;units=esriSRUnit_Kilometer&amp;outFields=*&amp;returnGeometry=false&amp;resultType=standard">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/0/query?geometry=146.696881,-41.107713,147.470333,-41.841627&amp;geometryType=esriGeometryEnvelope&amp;spatialRel=esriSpatialRelIntersects&amp;distance=10&amp;units=esriSRUnit_Kilometer&amp;outFields=*&amp;returnGeometry=false&amp;resultType=standard</a> </li> <li>Calendar year:  <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/1/query?geometry=146.696881,-41.107713,147.470333,-41.841627&amp;geometryType=esriGeometryEnvelope&amp;spatialRel=esriSpatialRelIntersects&amp;distance=10&amp;units=esriSRUnit_Kilometer&amp;outFields=*&amp;returnGeometry=false&amp;resultType=standard">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/1/query?geometry=146.696881,-41.107713,147.470333,-41.841627&amp;geometryType=esriGeometryEnvelope&amp;spatialRel=esriSpatialRelIntersects&amp;distance=10&amp;units=esriSRUnit_Kilometer&amp;outFields=*&amp;returnGeometry=false&amp;resultType=standard</a> </li> <li>Financial year:  <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/2/query?geometry=146.696881,-41.107713,147.470333,-41.841627&amp;geometryType=esriGeometryEnvelope&amp;spatialRel=esriSpatialRelIntersects&amp;distance=10&amp;units=esriSRUnit_Kilometer&amp;outFields=*&amp;returnGeometry=false&amp;resultType=standard">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/2/query?geometry=146.696881,-41.107713,147.470333,-41.841627&amp;geometryType=esriGeometryEnvelope&amp;spatialRel=esriSpatialRelIntersects&amp;distance=10&amp;units=esriSRUnit_Kilometer&amp;outFields=*&amp;returnGeometry=false&amp;resultType=standard</a> </li> </ul>

Parameter	Details	Example query URLs
maxAllowableOffset	<p>This option can be used to specify the <code>maxAllowableOffset</code> to be used for generalizing geometries returned by the query operation. The <code>maxAllowableOffset</code> is in the units of <code>outSR</code>. If <code>outSR</code> is not specified, <code>maxAllowableOffset</code> is assumed to be in the unit of the spatial reference of the map (EPSG4326).</p> <p><a href="#">Back to parameter list</a></p>	<ul style="list-style-type: none"> <li>• Monthly:  <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/0/query?geometry=146.696881,-41.107713,147.470333,-41.841627&amp;geometryType=esriGeometryEnvelope&amp;spatialRel=esriSpatialRelIntersects&amp;distance=10&amp;units=esriSRUnit_Kilometer&amp;maxAllowableOffset=2&amp;resultType=standard">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/0/query?geometry=146.696881,-41.107713,147.470333,-41.841627&amp;geometryType=esriGeometryEnvelope&amp;spatialRel=esriSpatialRelIntersects&amp;distance=10&amp;units=esriSRUnit_Kilometer&amp;maxAllowableOffset=2&amp;resultType=standard</a> </li> <li>• Calendar year:  <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/1/query?geometry=146.696881,-41.107713,147.470333,-41.841627&amp;geometryType=esriGeometryEnvelope&amp;spatialRel=esriSpatialRelIntersects&amp;distance=10&amp;units=esriSRUnit_Kilometer&amp;maxAllowableOffset=0.02&amp;resultType=standard">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/1/query?geometry=146.696881,-41.107713,147.470333,-41.841627&amp;geometryType=esriGeometryEnvelope&amp;spatialRel=esriSpatialRelIntersects&amp;distance=10&amp;units=esriSRUnit_Kilometer&amp;maxAllowableOffset=0.02&amp;resultType=standard</a> </li> <li>• Financial year:  <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/2/query?geometry=146.696881,-41.107713,147.470333,-41.841627&amp;geometryType=esriGeometryEnvelope&amp;spatialRel=esriSpatialRelIntersects&amp;distance=10&amp;units=esriSRUnit_Kilometer&amp;maxAllowableOffset=0.2&amp;resultType=standard">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/2/query?geometry=146.696881,-41.107713,147.470333,-41.841627&amp;geometryType=esriGeometryEnvelope&amp;spatialRel=esriSpatialRelIntersects&amp;distance=10&amp;units=esriSRUnit_Kilometer&amp;maxAllowableOffset=0.2&amp;resultType=standard</a> </li> </ul>

Parameter	Details	Example query URLs
geometryPrecision	<p>This option can be used to specify the number of decimal places in the response geometries returned by the Query operation. This applies to X and Y values only (not m or z-values).</p> <p><a href="#">Back to parameter list</a></p>	<ul style="list-style-type: none"> <li>• Monthly: <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/0/query?where=state='VIC'&amp;temporal_period='June 2021'&amp;outFields=*&amp;geometryPrecision=3&amp;f=pjson">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/0/query?where=state='VIC' and temporal_period='June 2021'&amp;outFields=*&amp;geometryPrecision=3&amp;f=pjson</a></li> <li>• Calendar year: <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/1/query?where=state='QLD'&amp;temporal_period='2018 Calendar Year'&amp;outFields=*&amp;geometryPrecision=3&amp;f=pjson">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/1/query?where=state='QLD' and temporal_period='2018 Calendar Year'&amp;outFields=*&amp;geometryPrecision=3&amp;f=pjson</a></li> <li>• Financial year: <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/2/query?where=state='SA'&amp;temporal_period='2019/2020 Financial Year'&amp;outFields=*&amp;geometryPrecision=3&amp;f=pjson">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/2/query?where=state='SA' and temporal_period='2019/2020 Financial Year'&amp;outFields=*&amp;geometryPrecision=3&amp;f=pjson</a></li> </ul>
outSR	<p>The spatial reference of the returned geometry. If the <code>outSR</code> is not specified, the geometry is assumed to be the same as the native layer spatial reference (EPSG4326).</p> <p><a href="#">Back to parameter list</a></p>	

Parameter	Details	Example query URLs
havingClause	<p>This option is a condition used with <code>outStatistics</code> that limits the query result to groups which satisfy the aggregation function used. The <code>havingClause</code> parameter is used with the <code>groupBy</code> and <code>outStatistics</code> parameters and allows you to filter results from <code>outStatistics</code>.</p> <p>Values: AVG   COUNT   SUM   STDDEV   MIN   MAX   VAR</p> <p><a href="#">Back to parameter list</a></p>	
gdbVersion	<p>The geodatabase version to query. Suggest leaving this blank to query the most recent version of the database.</p> <p><a href="#">Back to parameter list</a></p>	
historicMoment	<p>This is the historic moment to query. Suggest leaving this blank to query the most recent version of the database.</p> <p><a href="#">Back to parameter list</a></p>	



Parameter	Details	Example query URLs
returnDistinctValues	<p>If <code>true</code>, it returns distinct values based on the fields specified in <code>outFields</code>. In other words, this removes duplicate values.</p> <p>Users should be aware that the geometry field is considered, so set <code>returnGeometry</code> to <code>false</code> when <code>returnDistinctValues</code> is <code>true</code> to ensure reliable results are returned, unless you also want to query for distinct locations.</p> <p>Values: <code>true false</code></p> <p><a href="#">Back to parameter list</a></p>	<ul style="list-style-type: none"> <li>Monthly: <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/0/query?where=state='TAS'&amp;counter_type='04-bin'&amp;outFields=ctr_id,state,counter_type,src_stnname&amp;returnDistinctValues=true&amp;f=pjson">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/0/query?where=state='TAS' and counter_type = '04-bin'&amp;outFields=ctr_id, state, counter_type, src_stnname&amp;returnDistinctValues=true&amp;f=pjson</a></li> <li>Calendar year: <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/1/query?where=state='QLD'&amp;counter_type='04-bin'&amp;outFields=ctr_id,state,counter_type,src_stnname&amp;returnDistinctValues=true&amp;f=pjson">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/1/query?where=state = 'QLD' and counter_type = '04-bin'&amp;outFields=ctr_id, state, counter_type, src_stnname&amp;returnDistinctValues=true&amp;f=pjson</a></li> <li>Financial year: <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/2/query?where=state='SA'&amp;counter_type='04-bin'&amp;outFields=ctr_id,state,counter_type,src_stnname&amp;returnDistinctValues=true&amp;f=pjson">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/2/query?where=state = 'SA' and counter_type = '04-bin'&amp;outFields=ctr_id, state, counter_type, src_stnname&amp;returnDistinctValues=true&amp;f=pjson</a></li> </ul>

Parameter	Details	Example query URLs
returnIdsOnly	<p>If <code>true</code>, the response only includes an array of object IDs. Otherwise, the response is a feature set. The default is <code>false</code>.</p> <p>While there is a limit to the number of features included in the feature set response, there is no limit to the number of object IDs returned in the ID array response. Clients can exploit this to get all the query conforming object IDs by specifying <code>returnIdsOnly=true</code> and subsequently requesting feature sets for subsets of object IDs.</p> <p>Values: <code>true</code>   <code>false</code></p> <p><a href="#">Back to parameter list</a></p>	<ul style="list-style-type: none"> <li>• Monthly: <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/0/query?where=state='TAS'&amp;counter_type='04-bin'&amp;returnIdsOnly=true">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/0/query?where=state='TAS' and counter_type='04-bin'&amp;returnIdsOnly=true</a></li> <li>• Calendar year: <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/1/query?where=state='TAS'&amp;counter_type='04-bin'&amp;returnIdsOnly=true">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/1/query?where=state='TAS' and counter_type='04-bin'&amp;returnIdsOnly=true</a></li> <li>• Financial year: <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/2/query?where=state='TAS'&amp;counter_type='04-bin'&amp;returnIdsOnly=true">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/2/query?where=state='TAS' and counter_type='04-bin'&amp;returnIdsOnly=true</a></li> </ul>

Parameter	Details	Example query URLs
returnCountOnly	<p>If <code>true</code>, the response only includes the count (number of features/records) that would be returned by a query. Otherwise, the response is a feature set. The default is <code>false</code>. This option supersedes the <code>returnIdsOnly</code> parameter.</p> <p>If <code>returnCountOnly = true</code>, the response will return both the count and the extent. This parameter can be used with <code>returnDistinctValues</code> to return the count of distinct values of subfields.</p> <p>Values: <code>true</code>   <code>false</code></p> <p><a href="#">Back to parameter list</a></p>	<ul style="list-style-type: none"> <li>Monthly: <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/0/query?where=state='TAS'&amp;returnCountOnly=true&amp;returnExtentOnly=true">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/0/query?where=state='TAS'&amp;returnCountOnly=true&amp;returnExtentOnly=true</a></li> <li>Calendar year: <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/1/query?where=state='QLD'&amp;returnCountOnly=true&amp;returnExtentOnly=true">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/1/query?where=state='QLD'&amp;returnCountOnly=true&amp;returnExtentOnly=true</a></li> <li>Financial year: <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/2/query?where=state='SA'&amp;returnCountOnly=true&amp;returnExtentOnly=true">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/2/query?where=state='SA'&amp;returnCountOnly=true&amp;returnExtentOnly=true</a></li> </ul>

Parameter	Details	Example query URLs
returnExtentOnly	<p>If <code>true</code>, the response only includes the extent of the features that would be returned by the query.</p> <p>If <code>returnCountOnly=true</code>, the response will return both the count and the extent. The default is <code>false</code>.</p> <p>Values: <code>true</code>   <code>false</code></p> <p><a href="#">Back to parameter list</a></p>	<ul style="list-style-type: none"> <li>Monthly: <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/0/query?where=state='TAS'&amp;returnCountOnly=true&amp;returnExtentOnly=true">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/0/query?where=state='TAS'&amp;returnCountOnly=true&amp;returnExtentOnly=true</a></li> <li>Calendar year: <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/1/query?where=state='QLD'&amp;returnCountOnly=true&amp;returnExtentOnly=true">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/1/query?where=state='QLD'&amp;returnCountOnly=true&amp;returnExtentOnly=true</a></li> <li>Financial year: <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/2/query?where=state='SA'&amp;returnCountOnly=true&amp;returnExtentOnly=true">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/2/query?where=state='SA'&amp;returnCountOnly=true&amp;returnExtentOnly=true</a></li> </ul>

Parameter	Details	Example query URLs
orderByFields	<p>One or more field names on which the features/records need to be ordered. Use <code>ASC</code> or <code>DESC</code> for ascending or descending, respectively, following every field to control the ordering. <code>orderByFields</code> defaults to <code>ASC</code> (ascending order) if <code>&lt;ORDER&gt;</code> is unspecified.</p> <p><a href="#">Back to parameter list</a></p>	<ul style="list-style-type: none"> <li>Monthly:            <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/0/query?where=state='TAS'&amp;outFields=*&amp;orderByFields=temporal_coverage_from,src_stnname,ctr_id&amp;resultOffset=200&amp;resultRecordCount=100&amp;f=pjson">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/0/query?where=state='TAS'&amp;outFields=*&amp;orderByFields=temporal_coverage_from,src_stnname,ctr_id&amp;resultOffset=200&amp;resultRecordCount=100&amp;f=pjson</a> </li> <li>Calendar year:            <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/1/query?where=state='TAS'&amp;outFields=*&amp;orderByFields=temporal_coverage_from,src_stnname,ctr_id&amp;resultOffset=200&amp;resultRecordCount=100&amp;f=pjson">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/1/query?where=state='TAS'&amp;outFields=*&amp;orderByFields=temporal_coverage_from,src_stnname,ctr_id&amp;resultOffset=200&amp;resultRecordCount=100&amp;f=pjson</a> </li> <li>Financial year:            <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/2/query?where=state='TAS'&amp;outFields=*&amp;orderByFields=temporal_coverage_from,src_stnname,ctr_id&amp;resultOffset=200&amp;resultRecordCount=100&amp;f=pjson">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/2/query?where=state='TAS'&amp;outFields=*&amp;orderByFields=temporal_coverage_from,src_stnname,ctr_id&amp;resultOffset=200&amp;resultRecordCount=100&amp;f=pjson</a> </li> </ul>

groupByFieldsForStatistics

One or more field names on which the values need to be grouped for calculating the statistics. `groupByFieldsForStatistics` is valid only when the `outStatistics` parameter is used.

Syntax:

`groupByFieldsForStatistics= type, category`

[Back to parameter list](#)

- Monthly:  
[https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised\\_Traffic\\_Counts/FeatureServer/0/query?outFields=\\*&orderByFields=dateRecordsLastUpdated&groupByFieldsForStatistics=state&outStatistics=%5B{"statisticType":"count","onStatisticField":"state","outStatisticFieldName":"numberTotalRecords"}, {"statisticType":"max","onStatisticField":"last\\_updated","outStatisticFieldName":"dateRecordsLastUpdated"}%5D&f=pjson](https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/0/query?outFields=*&orderByFields=dateRecordsLastUpdated&groupByFieldsForStatistics=state&outStatistics=%5B{)
- Calendar year:  
[https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised\\_Traffic\\_Counts/FeatureServer/1/query?outFields=\\*&orderByFields=dateRecordsLastUpdated&groupByFieldsForStatistics=state&outStatistics=%5B{"statisticType":"count","onStatisticField":"state","outStatisticFieldName":"numberTotalRecords"}, {"statisticType":"max","onStatisticField":"last\\_updated","outStatisticFieldName":"dateRecordsLastUpdated"}%5D&f=pjson](https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/1/query?outFields=*&orderByFields=dateRecordsLastUpdated&groupByFieldsForStatistics=state&outStatistics=%5B{)
- Financial year:  
[https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised\\_Traffic\\_Counts/FeatureServer/2/query?outFields=\\*&orderByFields=dateRecordsLastUpdated&groupByFieldsForStatistics=state&outStatistics=%5B{"statisticType":"count","onStatisticField":"state","outStatisticFieldName":"numberTotalRecords"}, {"statisticType":"max","onStatisticField":"last\\_updated","outStatisticFieldName":"dateRecordsLastUpdated"}%5D&f=pjson](https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/2/query?outFields=*&orderByFields=dateRecordsLastUpdated&groupByFieldsForStatistics=state&outStatistics=%5B{)

outStatistics

The definitions for one or more field-based statistics to be calculated. When using `outStatistics`, the only other parameters that can be used are `groupByFieldsForStatistics`, `orderByFields`, `time`, and `where`.

**Note:**

If `outStatisticFieldName` is empty or missing, the map server assigns a field name to the returned statistic field. A valid field name can only contain alphanumeric characters and an underscore. If the `outStatisticFieldName` is a reserved keyword of the underlying DBMS, the operation can fail. Try specifying an alternative `outStatisticFieldName`.

**Syntax:**

```
[
  {
    "statisticType": "<count | sum | min | max | avg | stddev |
var>",
    "onStatisticField": "Field1",
    "outStatisticFieldName": "Out_Field_Name1"
  },
  {
    "statisticType": "<count | sum | min | max | avg | stddev |
var>",
    "onStatisticField": "Field2",
    "outStatisticFieldName": "Out_Field_Name2"
  }
]
```

- Monthly:  
[https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised\\_Traffic\\_Counts/FeatureServer/0/query?outFields=\\*&orderByFields=dateRecordsLastUpdated&groupByFieldsForStatistics=state&outStatistics=%5B{"statisticType":"count","onStatisticField":"state","outStatisticFieldName":"numberTotalRecords"}, {"statisticType":"max","onStatisticField":"last\\_updated","outStatisticFieldName":"dateRecordsLastUpdated"}%5D&f=pjson](https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/0/query?outFields=*&orderByFields=dateRecordsLastUpdated&groupByFieldsForStatistics=state&outStatistics=%5B{)
- Calendar year:  
[https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised\\_Traffic\\_Counts/FeatureServer/1/query?outFields=\\*&orderByFields=dateRecordsLastUpdated&groupByFieldsForStatistics=state&outStatistics=%5B{"statisticType":"count","onStatisticField":"state","outStatisticFieldName":"numberTotalRecords"}, {"statisticType":"max","onStatisticField":"last\\_updated","outStatisticFieldName":"dateRecordsLastUpdated"}%5D&f=pjson](https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/1/query?outFields=*&orderByFields=dateRecordsLastUpdated&groupByFieldsForStatistics=state&outStatistics=%5B{)
- Financial year:  
[https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised\\_Traffic\\_Counts/FeatureServer/2/query?outFields=\\*&orderByFields=dateRecordsLastUpdated&groupByFieldsForStatistics=state&outStatistics=%5B{"statisticType":"count","onStatisticField":"state","outStatisticFieldName":"numberTotalRecords"}, {"statisticType":"max","onStatisticField":"last\\_updated","outStatisticFieldName":"dateRecordsLastUpdated"}%5D&f=pjson](https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/2/query?outFields=*&orderByFields=dateRecordsLastUpdated&groupByFieldsForStatistics=state&outStatistics=%5B{)

Parameter	Details	Example query URLs
	<p>Example syntax to obtain the total number of records and the date of the earliest record captured for each state in the dataset:</p> <pre data-bbox="477 405 1234 584">[{"statisticType":"count","onStatisticField":"state","outStatisticFieldName":"numberTotalRecords"}, {"statisticType":"max","onStatisticField":"last_updated","outStatisticFieldName":"dateRecordsLastUpdated"}]</pre> <p><a href="#">Back to parameter list</a></p>	<p>NOTE: The square brackets '[' and ']' need to be changed to '%5B' and '%5D' in the URL query.</p>



Parameter	Details	Example query URLs
returnZ	<p>If <code>true</code>, Z values are included in the results if the features have Z values. Otherwise, Z values are not returned. The default is <code>false</code>. This parameter only applies if <code>returnGeometry</code> is <code>true</code>, and the layer's <code>hasZ</code> property is <code>true</code>.</p> <p><a href="#">Back to parameter list</a></p>	
returnM	<p>If <code>true</code>, M values are included in the results if the features have M values. Otherwise, M values are not returned. The default is <code>false</code>. This parameter only applies if <code>returnGeometry</code> is <code>true</code>, and the layer's <code>hasM</code> property is <code>true</code>.</p> <p><a href="#">Back to parameter list</a></p>	
multipatchOption	<p>This option dictates how the geometry of a multipatch feature will be returned. This parameter only applies if the layer's <code>geometryType</code> property is <code>esriGeometryMultiPatch</code>. The default is <code>xyFootprint</code>. You do not need to specify this parameter.</p> <p>Values: <code>xyFootprint</code>   <code>stripMaterials</code>   <code>embedMaterials</code>   <code>externalizeTextures</code></p> <p><a href="#">Back to parameter list</a></p>	

Parameter	Details	Example query URLs
resultOffset	<p>This option can be used for fetching query results by skipping the specified number of records and starting from the next record (that is, <code>resultOffset + 1</code>th). The default is 0. You can use this option to fetch records that are beyond <code>maxRecordCount</code>.</p> <p><a href="#">Back to parameter list</a></p>	<ul style="list-style-type: none"> <li>Monthly:  <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/0/query?where=state='TAS'&amp;outFields=*&amp;orderByFields=temporal_coverage_from,src_stnname,ctr_id&amp;resultOffset=200&amp;resultRecordCount=100">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/0/query?where=state='TAS'&amp;outFields=*&amp;orderByFields=temporal_coverage_from,src_stnname,ctr_id&amp;resultOffset=200&amp;resultRecordCount=100</a> </li> <li>Calendar year:  <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/1/query?where=state='TAS'&amp;outFields=*&amp;orderByFields=temporal_coverage_from,src_stnname,ctr_id&amp;resultOffset=200&amp;resultRecordCount=100">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/1/query?where=state='TAS'&amp;outFields=*&amp;orderByFields=temporal_coverage_from,src_stnname,ctr_id&amp;resultOffset=200&amp;resultRecordCount=100</a> </li> <li>Financial year:  <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/2/query?where=state='TAS'&amp;outFields=*&amp;orderByFields=temporal_coverage_from,src_stnname,ctr_id&amp;resultOffset=200&amp;resultRecordCount=100">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/2/query?where=state='TAS'&amp;outFields=*&amp;orderByFields=temporal_coverage_from,src_stnname,ctr_id&amp;resultOffset=200&amp;resultRecordCount=100</a> </li> </ul>

Parameter	Details	Example query URLs
resultRecordCount	<p>This option can be used for fetching query results up to the <code>resultRecordCount</code> specified. When <code>resultOffset</code> is specified but this parameter is not, the map service defaults it to <code>maxRecordCount</code> (2000). The maximum value for this parameter is the value of the layer's <code>maxRecordCount</code> property. The minimum value entered for this parameter cannot be below 1.</p> <p><a href="#">Back to parameter list</a></p>	<ul style="list-style-type: none"> <li>Monthly: <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/0/query?where=state='VIC'&amp;outFields=*&amp;orderByFields=temporal_coverage_from,src_stnname,ctr_id&amp;resultRecordCount=100">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/0/query?where=state='VIC'&amp;outFields=*&amp;orderByFields=temporal_coverage_from,src_stnname,ctr_id&amp;resultRecordCount=100</a></li> <li>Calendar year: <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/1/query?where=state='VIC'&amp;outFields=*&amp;orderByFields=temporal_coverage_from,src_stnname,ctr_id&amp;resultRecordCount=100">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/1/query?where=state='VIC'&amp;outFields=*&amp;orderByFields=temporal_coverage_from,src_stnname,ctr_id&amp;resultRecordCount=100</a></li> <li>Financial year: <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/2/query?where=state='VIC'&amp;outFields=*&amp;orderByFields=temporal_coverage_from,src_stnname,ctr_id&amp;resultRecordCount=100">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/2/query?where=state='VIC'&amp;outFields=*&amp;orderByFields=temporal_coverage_from,src_stnname,ctr_id&amp;resultRecordCount=100</a></li> </ul>
returnTrueCurves	<p>When set to <code>true</code>, returns true curves in output geometries. When set to <code>false</code>, curves are converted to densified polylines or polygons. The default is <code>false</code>.</p> <p>Values: <code>true</code>   <code>false</code></p> <p><a href="#">Back to parameter list</a></p>	

Parameter	Details	Example query URLs
returnCentroid	<p>Used to return the geometry centroid associated with each feature returned. If <code>true</code>, the result includes the geometry centroid. The default is <code>false</code>. Currently, this parameter is not supported for polygon data and is ignored for <code>count</code> and <code>objectID</code> queries. This parameter is only supported on layer-level queries.</p> <p>Values: <code>true</code>   <code>false</code></p> <p><a href="#">Back to parameter list</a></p>	
sqlFormat	<p>The <code>sqlFormat</code> parameter can be either standard SQL92 standard or it can use the native SQL of the underlying data store <code>native</code>. This parameter should always be set to <code>None</code>. You can leave this blank.</p> <p>Values: <code>none</code>   <code>standard</code>   <code>native</code></p> <p><a href="#">Back to parameter list</a></p>	

Parameter	Details	Example query URLs
resultType	<p>The <code>resultType</code> parameter can be used to control the number of features returned by the query operation. The <code>tile</code> value is used when the client is using a virtual tiling scheme when querying features, which works similarly to tiles in a tiled map service layer. The <code>standard</code> value is used with a non-tiled query where the client will send only one query for the full extent.</p> <p>Pagination queries also support <code>resultType</code> query parameter. If the <code>resultType</code> is specified and the <code>resultRecordCount</code> is not specified with the <code>resultOffset</code>, the server will determine the <code>maxRecordCount</code> relevant to the <code>resultType</code> query parameter. The client can supply the <code>resultRecordCount</code> parameter in the request. This cannot be greater than the <code>standard/tile maxRecordCount</code> value if <code>resultType</code> is used.</p> <p>The limits are as follows:</p> <ul style="list-style-type: none"> <li>when <code>resultType = none</code>, the maximum number of results that can be returned is 2,000</li> <li>when <code>resultType = standard</code>, the maximum number of results that can be returned is 16,000</li> <li>when <code>resultType = tile</code>, the maximum number of results that can be returned is 4,000</li> </ul> <p>Values: <code>none   standard   tile</code></p> <p><a href="#">Back to parameter list</a></p>	<ul style="list-style-type: none"> <li>Monthly: <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/0/query?where=1=1&amp;outFields=*&amp;resultType=standard&amp;f=pjson">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/0/query?where=1=1&amp;outFields=*&amp;resultType=standard&amp;f=pjson</a></li> <li>Calendar year: <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/1/query?where=1=1&amp;outFields=*&amp;resultType=tile&amp;f=pjson">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/1/query?where=1=1&amp;outFields=*&amp;resultType=tile&amp;f=pjson</a></li> <li>Financial year: <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/2/query?where=1=1&amp;outFields=*&amp;resultType=none&amp;f=pjson">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/2/query?where=1=1&amp;outFields=*&amp;resultType=none&amp;f=pjson</a></li> </ul>

Parameter	Details	Example query URLs
datumTransformation	<p>This parameter applies a datum transformation while projecting geometries in the results when <code>outSR</code> is different than the layer's spatial reference. You can leave this blank.</p> <p><a href="#">Back to parameter list</a></p>	
f	<p>The response format. The default response format is <code>html</code>.</p> <p>Values: <code>html   json   geojson   pbf</code></p> <p><a href="#">Back to parameter list</a></p>	<ul style="list-style-type: none"> <li>• Monthly: <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/0/query?where=state='NSW'&amp;outFields=*&amp;f=pjson">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/0/query?where=state='NSW'&amp;outFields=*&amp;f=pjson</a></li> <li>• Calendar year: <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/1/query?where=state='NSW'&amp;outFields=*&amp;f=pjson">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/1/query?where=state='NSW'&amp;outFields=*&amp;f=pjson</a></li> <li>• Financial year: <a href="https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/2/query?where=state='NSW'&amp;outFields=*&amp;f=pjson">https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/2/query?where=state='NSW'&amp;outFields=*&amp;f=pjson</a></li> </ul>

## 6. Limitations

### 6.1 Record count

Only the first 2,000 results are returned when running a default query. The actual number of total records which match the query parameters may be more than 2,000.

To display more than 2,000 records we can specify the resultType parameter:

- When resultType = standard, this will return 16,000 records
  - NOTE: Running this takes longer, and depending on how many attributes you want to return is prone to crashing the webpage.
- When resultType = none, this will return the MaxRecordCount of 2,000 records
- When resultType = tile, this will return 4,000 records

It should be noted that none of these options will allow a user to display all records (for any layer), as there are considerably more than 16,000 records in the dataset.

If a larger number of records are required to be outputted, users can also make use of the resultOffset parameter. For example, running the following queries in succession will allow the most recently captured 32,000 monthly records for NSW to be obtained:

1. [https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised\\_Traffic\\_Counts/FeatureServer/0/query?where=state = 'NSW'&outFields=\\*&orderByFields=last\\_updated&resultType=standard&f=pjson](https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/0/query?where=state='NSW'&outFields=*&orderByFields=last_updated&resultType=standard&f=pjson)
2. [https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised\\_Traffic\\_Counts/FeatureServer/0/query?where=state = 'NSW'&outFields=\\*&orderByFields=last\\_updated&resultOffset=16000&resultType=standard&f=pjson](https://spatial.infrastructure.gov.au/server/rest/services/Hosted/Harmonised_Traffic_Counts/FeatureServer/0/query?where=state='NSW'&outFields=*&orderByFields=last_updated&resultOffset=16000&resultType=standard&f=pjson)

### 6.2 Output formats

ArcGIS REST API only supports the following formats for the Harmonised Traffic Counts dataset:

- HTML
- PBF
- JSON
- GeoJSON