# Location Intelligence Suite API Reference Guide

Revision 02

**NOTICE**

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# About This Guide

## Introduction

This guide describes the Connectbase Application Program Interface (API) Location Intelligence Suite. This API is used to collect census data.

## Accessing the Portal

Using any standard web browser, you can access the Connectbase API portal by entering the following URL: *https://developer.connectbase.com*.

- If this is your first time visiting the site, click *Sign up* to register as a new API user.
- If you are already a registered user, *Sign in* using your API login and password.

## Related Documentation

Refer to the following documents for detailed information about each of the supported Connectbase API products:

- *Address Autocomplete API Reference Guide*
- *Address Validation API Reference Guide*
- *Advanced CPQ API Reference Guide*
- *Building Competitive Rating API Reference Guide*
- *Connectbase Developer Portal Overview Guide*
- *Connected World Availability API Reference Guide*
- *Connected World Account API Reference Guide*
- *Connected World Building API Reference Guide*
- *Connected World Building Lists API Reference Guide*
- *Connected World Contacts API Reference Guide*
- *Connected World Distributions API Reference Guide*
- *CPQ API Reference Guide*
- *CPQ Components Management API Reference Guide*
- *Demand Engine API Reference Guide*
- *Geocode API Reference Guide*
- *International Processor API Reference Guide*
- *Network Intelligence API Reference Guide*
- *Network Path API Reference Guide*
- *NNI Management API Reference Guide*
- *Rate Card Management API Reference Guide*
- *Route Management API Reference Guide*
- *Tenant API Reference Guide*

## Acronym List

This document uses the following acronyms.

| Acronym | Description |
| --- | --- |
| API | Application Program Interface |
| HTTP | Hyper Text Transfer Protocol |
| JSON | JavaScript Object Notation |
| N/A | Not applicable |
| URL | Uniform Resource Locator |
| USPS | United States Postal Service |

## Customer Support Desk (CSD) Portal

If you require technical assistance or wish to report an issue to the Connectbase Support team, please log into the Connectbase Customer Support Desk Portal at *https://support.connectbase.com* and submit a support ticket.

If you face issues in logging in to Connectbase Customer Support Desk Portal, email at *portalsupport@connectbase.com* or contact your CSM to report the issue. We will add your domain to provide access for your organization.

# About Location Intelligence Suite API

## API Rate Limit

Location Intelligence API has a rate limit of 180 calls per minute.

## About Census Blocks

According to Wikipedia, a census block is the smallest geographic unit used by the United States Census Bureau for tabulation of 100-percent data (data collected from all houses, rather than a sample of houses). The number of blocks in the United States, including Puerto Rico, for the 2010 Census was 11,155,486.[1]

Census blocks are grouped into block groups, which are grouped into census tracts. There are on average about 39 blocks per block group. Blocks typically have a four-digit number; the first number indicates which block group the block is in. For example, census block 3019 would be in block group 3.[2]
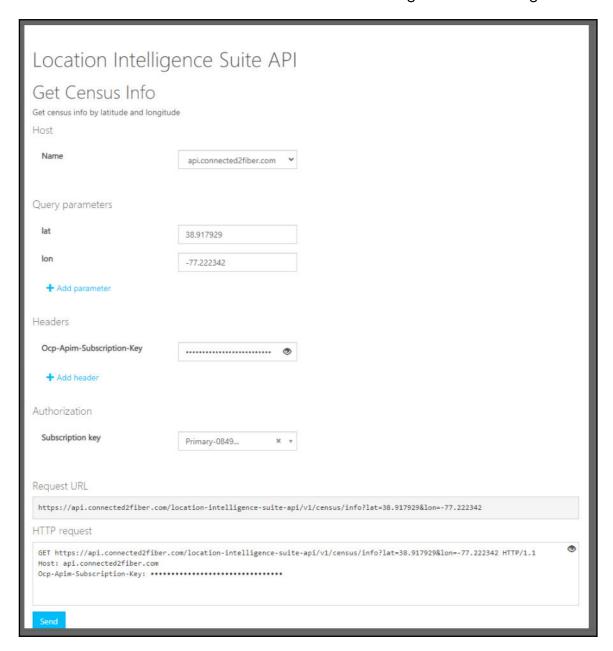
Blocks are typically bounded by roads and highways, town/city/county/state boundaries, creeks, and rivers, etc. In cities, a census block may correspond to a city block, but in rural areas where there are fewer roads, blocks may be delimited by other features such as political boundaries, rivers, and other natural features, as well as parks and similar facilities, etc. The population of a census block varies greatly. As of the 2010 census, there were 4,871,270 blocks with a reported population of zero,[3] while a block that is entirely occupied by an apartment complex might have several hundred inhabitants.

Census blocks covering the entire country were introduced with the 1990 census. Before that, back to the 1940 census, only selected areas were divided into blocks.

# Location Intelligence Suite API

## Get Census Info

Issue this call to retrieve census block information using latitude and longitude search.



| Requirements and Special Considerations |
|---|
| lat (latitude) and lon (longitude) are required request parameters. |

| Request URL |
|---|
| https://api.connected2fiber.com/location-intelligence-suite-api/v1/census/info?lat=38.<br>https://api.connected2fiber.com/location-intelligence-suite-api/v1/census/info? |

| Request parameters | Characteristic | Description/Requirements |
|---|---|---|
| lat (required) | string | The angular distance of a place north or south of the earth's equator, or of a celestial object north or south of the celestial equator, usually expressed in degrees and minutes. - -90 to +90 - Default coordinate system is WGS1984. |
| lon (required) | string | The angular distance of a place east or west of the meridian at Greenwich, England, or west of the standard meridian of a celestial object, usually expressed in degrees and minutes. -180 to +180 - Default coordinate system is WGS1984. |

| Request headers | Characteristic | Description/Requirements |
|---|---|---|
| Ocp-Apim-Subscription-Key | string | The subscription key that provides access to this API, which can be found in your Profile. |

### Success Response Example

```
"census_block": "510594802051010",
"state_fips_code": "51",
"county_fips_code": "059",
"census_tract_id": "480205",
"census_block_code": "Block 1010",
"county_name": "Fairfax County",
"cbsa_name": "Washington-Arlington-Alexandria, DC-VA-MD-WV Metro Area",
"population_density": 963,
"median_household_income": 78148
```

## Response Attributes and Data Types

| Response Attribute | Attribute Description | Data Type |
|---|---|---|
| census_block | A Census Block FIPS code has 15 digits and is structured as follows: AABBBCCCCCCDEEE A = State (2 digit FIPS code) B = County (3 digit FIPS code) C = Tract (6 digit FIPS code) D = Block Group (1 digit FIPS code) E = Block (3 digit FIPS code). | int |
| state_fips_code | Numeric and two-letter alphabetic codes defined in U.S. Federal Information Processing Standard Publication ("FIPS PUB") 5-2 to identify U.S. states and certain other associated areas. The standard superseded FIPS PUB 5-1 on May 28, 1987, and was superseded on September 2, 2008, by ANSI standard INCITS 38:2009. | int |
| county_fips_code | 3-digit county code that is added to the end of the corresponding 2-digit state code, for example, 059. | int |

| Response Attribute | Attribute Description | Data Type |
|---|---|---|
| census_tract_id | A census tract has a basic census tract identifier composed of no more than four digits and may have a two-digit decimal suffix, for example. 480205. | int |
| census_block_code | A wall-to-wall coverage across the entire territory of the United States, Puerto Rico, and the Island Areas. Numbered uniquely with a four-digit census block number ranging from 0000 to 9999 nesting within each census tract, which nest within state and county. The first digit of the census block number identifies the block group, for example, Block 1010. | int |
| county_name | The name of the county, for example Fairfax County. | string |
| cbsa_name | The name given to identity the Core-based statistical area, for example, "Washington-Arlington-Alexandria, DC-VA-MD-WV Metro Area". | string |
| population_density | A measurement of population per unit land area | int |
| median_household_income | Identifies the median household income for the defined area. | int |

**Error Response Example**

```
400
Bad Request
{
"message": "lat must be larger than or equal to -90"
}
```

# Revision History

| Revision | Date | Description |
|---|---|---|
| 00 | November 21, 2022 | This is the initial release of this document |
| 01 | September 25, 2023 | New publication of the document with minor editorial updates. |
| 02 | December 17, 2024 | Added API rate limit in "Location Intelligence Suite API" section. |