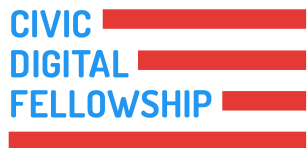


INTERACTIVITY AND ACCESSIBILITY IMPROVEMENTS TO DEVELOPER API DOCS

Communications Directorate

Anthony Calabrese — Digital Marketing Lead



ZHI KENG HE
CUNY Hunter College
Geography

CENSUS DATA API

- The Census Bureau has long rolled out its data to the public and developers via APIs.
- This enabled developers to have built and currently build extensive applications and tools powered by Census Bureau data.
- However learning to use the various Census APIs is a tedious task and can be intimidating for new users.

CURRENT DOCUMENTATION

- Too general as it has a focuses on using the API query directly
 - No examples on building applications
- Guides are in PDF formats
- Content not searchable and easily found

Developers

About this Section

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Updates

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Request a KEY

 **Census Data API User Guide**

UPDATED: JUNE 26, 2017
CAROLE D. BREAKSTONE AND TAMMY S. ANDERSON



Download Census Data API User Guide
[PDF - 1.0 MB]

Overview

What is the API

Available Data

Query Components

Query Examples

Help & Contact Us

Query Examples

Procedures: How Do You Build A Query?

Following are some examples that give a detailed breakdown of the components of the URL needed for building a query on a dataset.

EXPAND ALL | COLLAPSE ALL

1. Example: Population Estimates

Let's begin with a query for the resident population totals per state in the dataset, *Vintage 2014 Population Estimates: US, State, and PR Total Population and Components of Change*. You will find this dataset listed on the Census Data API Datasets page:
api.census.gov/data.html

Related Information

[Interactive Maps](#)

[DATA TOOL](#)

[Census Business Builder \(CBB\)](#)

You May Be Interested In

RELATED TOPICS

[Data](#)

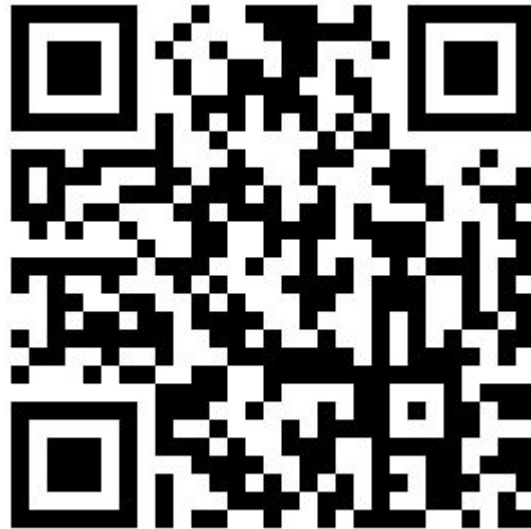
AROUND THE BUREAU

[Data Tools and Apps](#)

MOST POPULAR

[Emergency Preparedness](#)

DEMO



INTERACTIVE

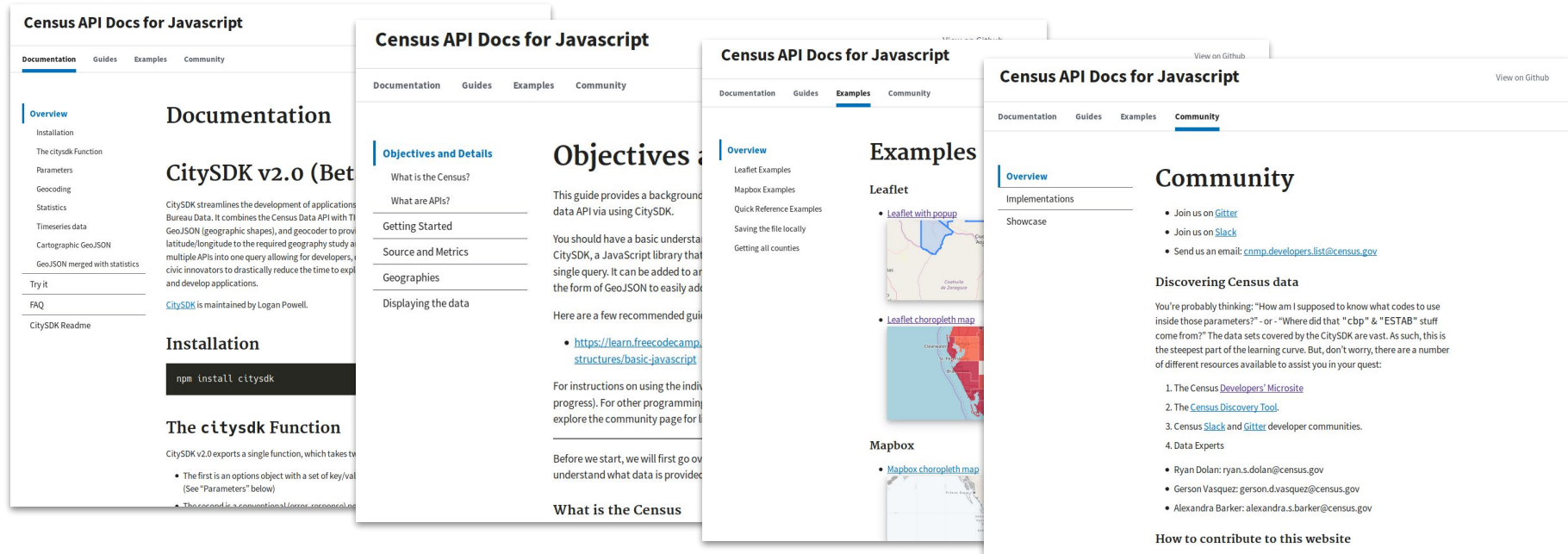
- Built using CitySDK, a javascript library for the Census Data API, which can be used on any platform with a web browser or NodeJS
- Examples and guides for new users of Census Data to learn from with code snippets and walkthroughs.

The collage consists of four screenshots from the CitySDK documentation website:

- Top-left:** A screenshot of the 'Example' section. It shows a table with the title 'Total Population in United States' and a single row of data: '325,719,178'. Below the table, there is a section titled 'Tables' with a list of tables.
- Top-right:** A screenshot of the 'Vintage and Geography' section. It contains a code snippet for querying data, showing a JSON object with 'vintage' and 'geohierarchy' fields.
- Bottom-left:** A screenshot of the 'Query and add data' section. It shows a code snippet for querying data, including a map of the United States.
- Bottom-right:** A screenshot of the 'Try it' section. It shows a map of California with a highlighted area, and a code snippet for querying data.

CONSISTENT DESIGN

(Built with US Web Design System)



ACCESSIBLE

Overview

Implementations

Showcase

Community

- Join us on [Gitter](#)
- Join us on [Slack](#)
- Send us an email: cnmp.developers.list@census.gov

Discovering Census data

You're probably thinking: "How am I supposed to know what codes to use inside those parameters?" - or - "Where did that "cbp" & "ESTAB" stuff come from?" The data sets covered by the CitySDK are vast. As such, this is the steepest part of the learning curve. But, don't worry, there are a number of different resources available to assist you in your quest:

1. The Census [Developers' Microsite](#)
2. The [Census Discovery Tool](#).
3. Census [Slack](#) and [Gitter](#) developer communities.
4. Data Experts

- Ryan Dolan: ryan.s.dolan@census.gov
- Gerson Vasquez: gerson.d.vasquez@census.gov
- Alexandra Barker: alexandra.s.barker@census.gov

How to contribute to this website

If you would like to add features and content, report an issue, or suggest changes submit a pull request on [Github](#).

This website was built using U.S. Web Design System's Jekyll theme. [uswds](#).

Overview

Try it

FAQ

CitySDK Readme

Frequently asked questions

What does the Census Bureau do?

The Census Bureau's surveys provide a wide range of information on the population and economy of the nation. The data is used by local, state, and federal governments to determine the distribution of representation, and make planning decisions about community services and funding. It is also used by many other organizations and businesses to inform their decisions.

The data is available to the public via [Data.census.gov](#), and for developers via an [API](#).

Why is some data not available at smaller geographic levels or for certain groups of populations or industries?

When numbers or specific populations are response are low for an area, statistical summaries are not released ... E.g. ACS 1 year has data down to the block group (check) for current areas. While decennial census has census tract level.

It is an important process done to protect the privacy of individual respondents and reduce the number of estimates with unacceptable levels of statistical reliability. (sample sizes are low)

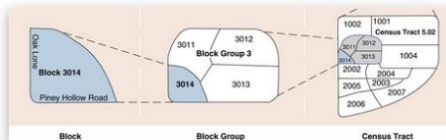
Read more about it here: [ACS Data Suppression](#)

Geographies

Querying with Geography

The last dimension is the geographic entity. You may have noticed the "geoHierarchy": {states: "*" } object used in the previous section to get data for all the states. Census data is provided in many other familiar aggregated geographies such as county, ZIP codes, school and congressional districts.

Additionally it is also provided in census specific geographies such as tracts, block groups, blocks, metropolitan and tribal areas. These can provide a much finer scales but only available in certain data products or regions.

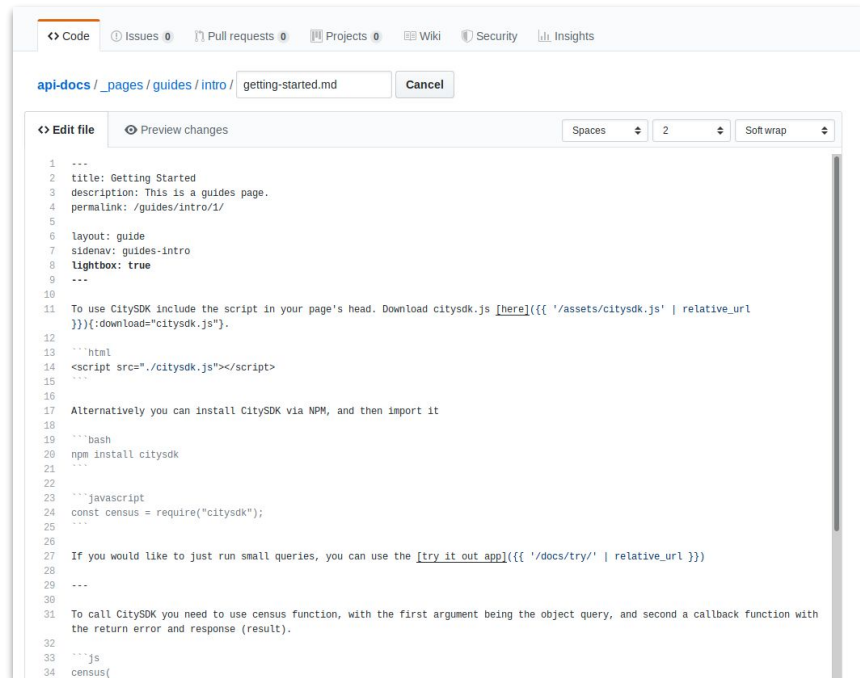


[View all the various Census Geographies using TIGERweb](#)

Census API: Datasets in data/2017/acs/acs5 and its descendants

Title	Description	Year	Dataset Name	Geography	Variable List	Group List	Tag List	Examples	Developer Documentation
ACS 5-Year Detailed Tables	The American Community Survey (ACS) is an ongoing survey that provides data every year - giving communities the current information they need to plan investments and services. The ACS covers a broad range of topics about social, economic, demographic, and housing characteristics of the U.S. population. Summary files include the following geographies: nation, all states (including DC and Puerto Rico), all metropolitan areas, all congressional districts (114th congress), all counties, all places, and all tracts and block groups. Summary files contain the most detailed cross-tabulations, many of which are published down to block groups. The data are population and housing counts. There are over 64,000 variables in this dataset.	2017	acs-acs5	Block Group	variables	groups	tags	examples	documentation

CONTRIBUTE ON GITHUB

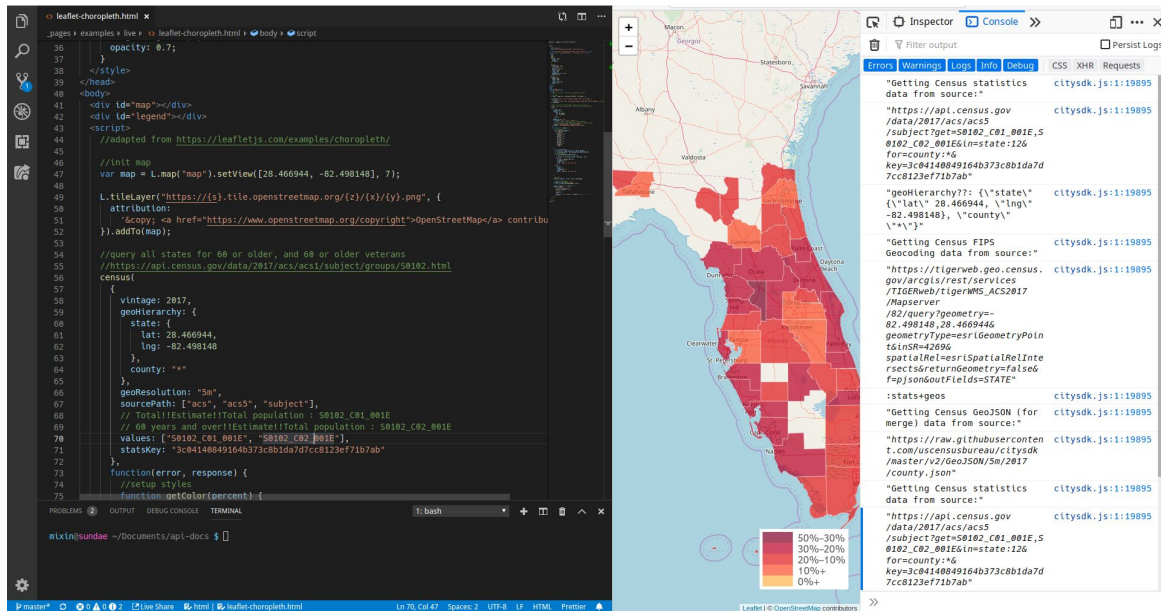


The screenshot shows the GitHub web interface for editing a file. At the top, there are tabs for Code, Issues, Pull requests, Projects, Wiki, Security, and Insights. Below these, the file path is shown as 'api-docs / _pages / guides / intro / getting-started.md'. The main area is split into 'Edit file' and 'Preview changes' tabs. The 'Edit file' tab is active, showing a code editor with line numbers 1 through 34. The code is a markdown file for a 'Getting Started' guide. It includes a title, description, permalink, layout, sidebar navigation, and a lightbox setting. It also contains instructions on how to use CitySDK, including a code block for installing CitySDK via npm and a code block for using the CitySDK API. The code is as follows:

```
1 ---
2 title: Getting Started
3 description: This is a guides page.
4 permalink: /guides/intro/1/
5
6 layout: guide
7 sidenav: guides-intro
8 lightbox: true
9 ---
10
11 To use CitySDK include the script in your page's head. Download citysdk.js [here]({{ 'assets/citysdk.js' | relative_url
12 }}){:download="citysdk.js"}.
13
14 <html
15 <script src="./citysdk.js"></script>
16
17 Alternatively you can install CitySDK via NPM, and then import it
18
19 ``bash
20 npm install citysdk
21
22 ``javascript
23 const census = require("citysdk");
24
25
26
27 If you would like to just run small queries, you can use the [try it out app]({{ 'docs/try/' | relative_url }})
28
29 ---
30
31 To call CitySDK you need to use census function, with the first argument being the object query, and second a callback function with
32 the return error and response (result).
33
34 ``js
35 census({
```

Easily edit or add content with markdown

BUILD FASTER



Enables new users (internal and public) to build visualizations and applications or do analysis with less snags