

CITY SDK

CitySDK Overview

Jeff Meisel

Presidential Innovation Fellow

US Census Bureau

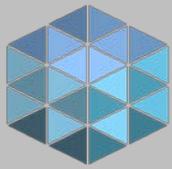


Accessibility





Healthy Food Options



CITY SDK

Case Study: Purshable

PURSHABLE ABOUT BROWSE LIST

BROWSE LIST FAVORITE

AVAILABLE ITEMS

- Apples, 1lb
- Oranges, 1lb
- Grapes, 1lb
- Pineapple, 1lb
- Grapes
- Apples

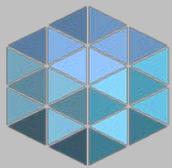
Elizabeth's Apple Atelier
Apples, 1lb (\$2) Ends: 2015-06-12

Closest Farmer's Market
0.3 Willis Tower Farmers Market
233 S Wacker Dr., Chicago, Illinois, 60606



Skills and STEAM Programs





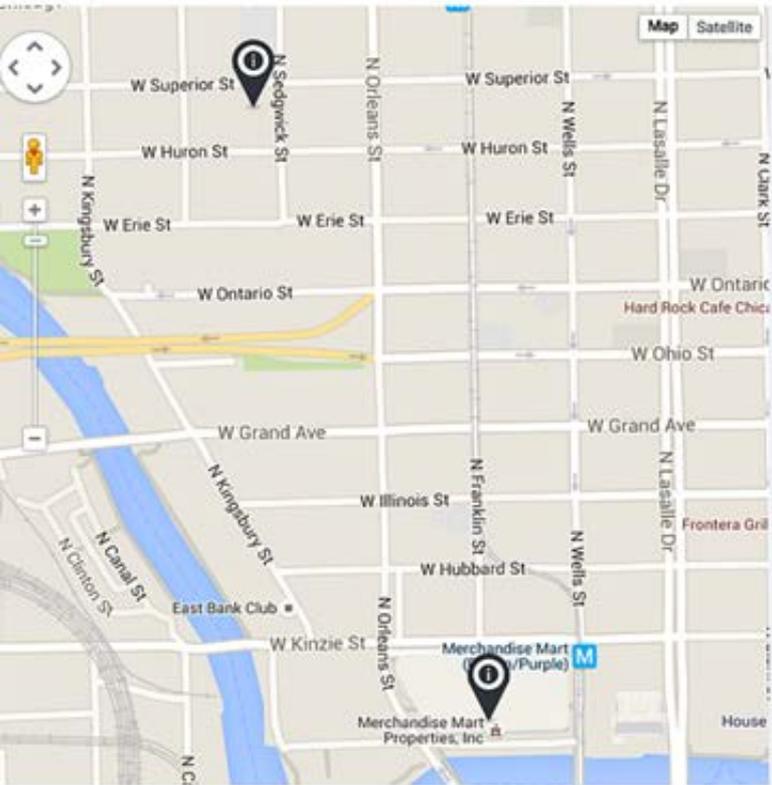
CITY SDK

Case Study: "AirBNB for Tech Spaces"

Civic Spark

Search Sign In Guest

Browse Categories Dashboard



Update Places

Showing all Places located in "Chicago, IL, USA" within a 50 mi radius

Reset RSS

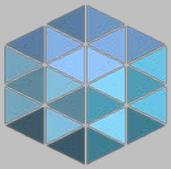
2 Results Found

1871
222 West Merchandise Mart Plaza
Chicago, IL 60654
(312) 239-0310

★★★★★ 5.0

Coalition: Impact
405 West Superior Street
Chicago, IL 60654
(312) 448-6175

☆☆☆☆☆ 0.0



CITY SDK

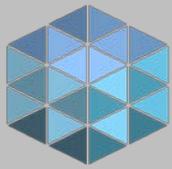
Problems we are trying to solve

“Improve access and usability of Census data”

“Bridge the federal and local data gap.”

“Enable value creation with government data assets.”

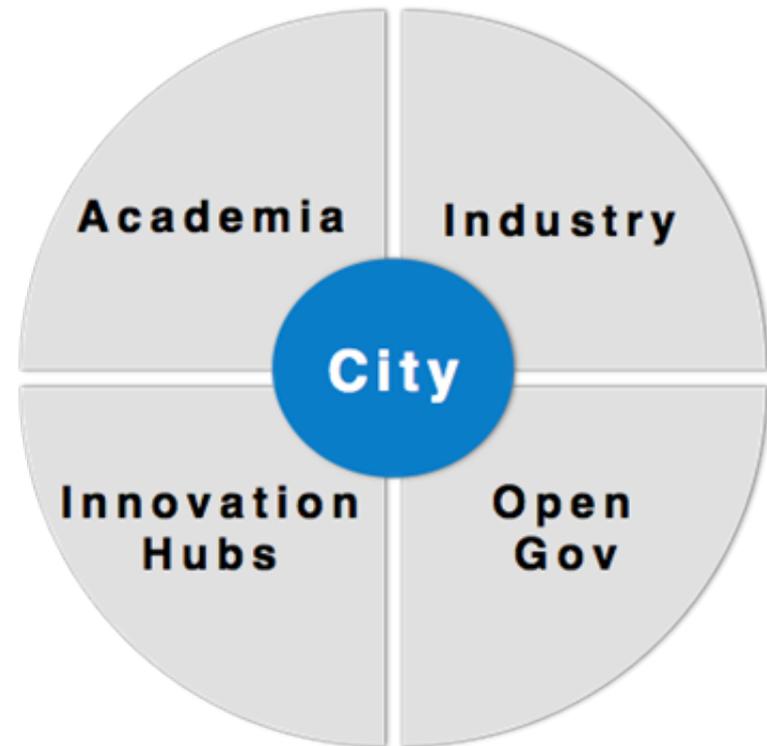
“Build apps in hours instead of days or weeks.”

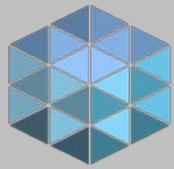


CITYSDK

What is the CitySDK

1. Set of Javascript tools, guides, and examples on Github to build web applications
2. Enhances usability and access to Census data through public APIs
3. Streamline how open data is used to build apps for cities through open-source tools
4. Support rural communities through USDA integration
5. Foster an ecosystem to improve interoperability across data silos at federal and local level

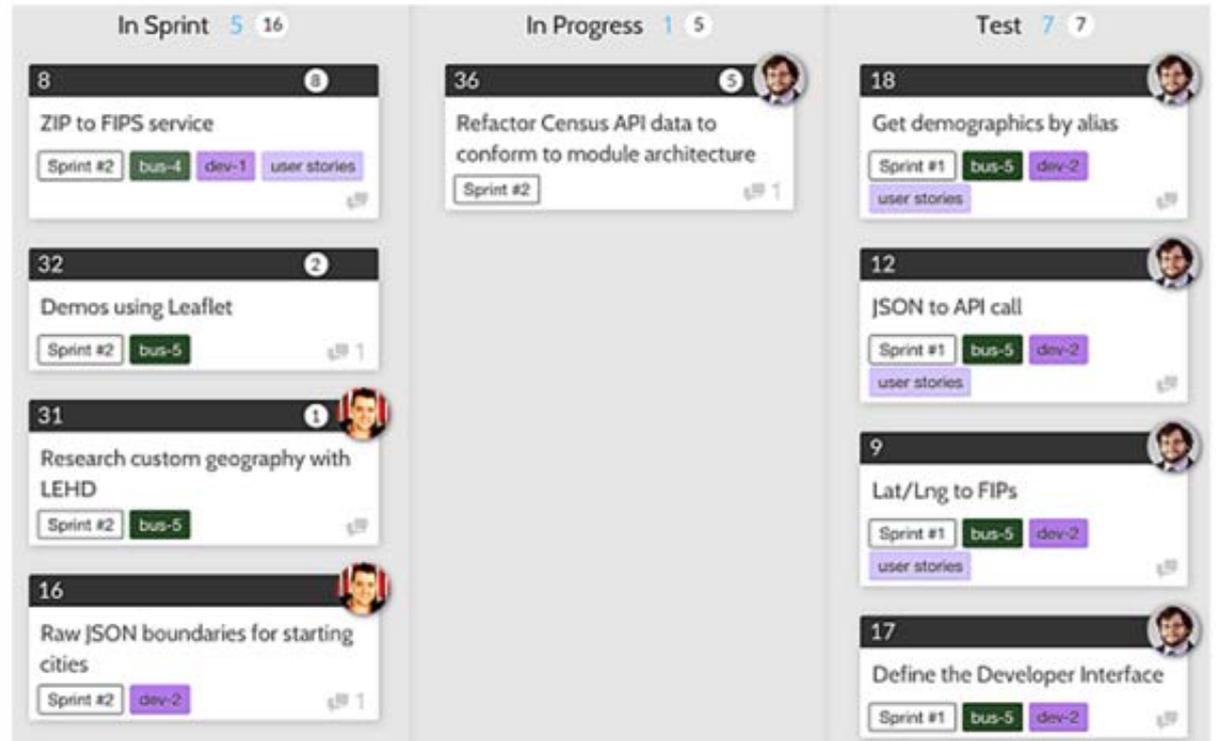


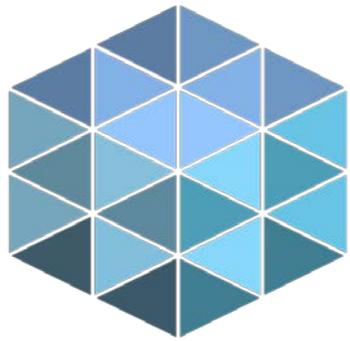


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Open-Source Project

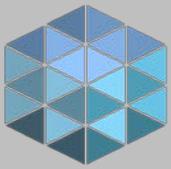
<http://uscensusbureau.github.io/citysdk/>





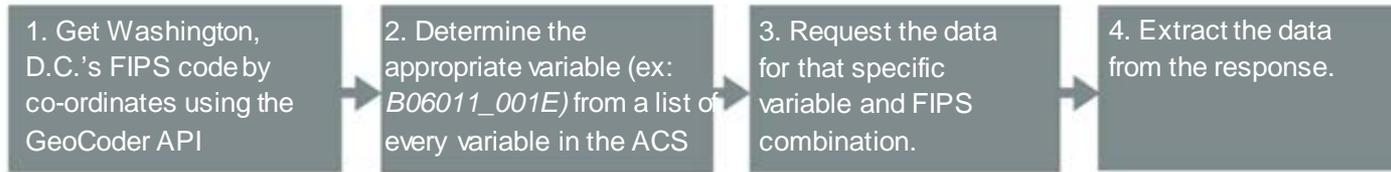
CITY **SDK**

How it Works: Technical Capabilities



Improving Access to Census Data

Before: Washington DC Population Example (Census ACS API)

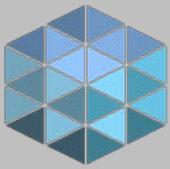


After: CitySDK



Benefits to user when using CitySDK:

- Abstracts multi-API requests into a single call.
- Allows for the aliasing of common variables.
- Modular architecture supports integrating other APIs



CITYSDK

Getting Started with CitySDK

Let's try getting some data

You can request data from the Census's API by specifying variables in your request. You can find more details about variable names and codes on our github examples.

Try it out with the code on the right!

Try tinkering with the example to add sublevels, or query by a city, to see what happens.

You can use the same "variables" format tags when requesting geography data. Doing this will request the data for each geographical feature, and attach the data to the "properties" tag of that feature.

```
var request = {
  "lat": 40.7127,
  "lng": -74.0059,
  "level": "state",
  "variables": [
    "income",
    "population",
    "median_male_age"
  ]
};
```

```
var callback = function(response) {
  $('#example2output').append(
```

Run This »

Unifying multiple APIs

Let's try out another API - the USDA's Farmer's Market API. We've already imported the module, so all you need to do is put your zip code in the request below to find Farmer's markets near you!

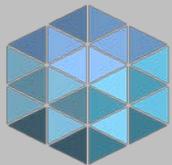
```
var request = {
  "zip": 10012
};

var callback = function(response) {
  $('#example3output').empty();
  $('#example3output').append(JSON.stringify(response, null, 4));
};

farmersMarket.search(request, callback);
```

Run This »

<http://uscensusbureau.github.io/citysdk/gettingstarted.html>



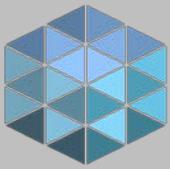
Acquiring Census Data

Example of simple request for State of Maryland geography

```
var request = {  
  "state": "MD",  
  "level": "state"  
};  
  
var callback = function(response) {  
  map.data.addGeoJson(response);  
};  
  
census.GEORequest(request, callback);
```

Run This »





Partner Integrations

CITY SDK

Show All

Browse by Dataset

Browse by Technology

US Census Bureau



The Census Bureau's mission is to serve as the leading source of quality data about the nation's people and economy.

[Guide to the Census CitySDK Module](#)
Demo: Interactive Query Builder

Leaflet



Leaflet is an Open-Source JavaScript library for web and mobile friendly interactive maps. It uses the GeoJSON format which is supported by the

[Demo: Leaflet NYC Boroughs](#)

Housing and Urban Development



Access data on FHA Loans, HUD Insured Properties, Fair Market Rents and dozens of other datasets related to national housing and property issues.

[CitySDK HUD Module](#)
Demo: Housing Loans in Pittsburgh

US Department of Agriculture



Discover fresh food near you with the National Farmer's Market directory module.

[CitySDK Farmer's Market Module](#)
Demo: Farmer's Markets in California

US Department of Energy



Access the extensive datasets of the U.S. Energy Information Agency using this module. Browse various categories and use their data series in your

[CitySDK Energy Information Agency Module](#)
Demo: Energy Information Agency browser

ESRI



Governments, industry leaders, academics, and nongovernmental organizations (NGOs) use ESRI to connect with analytic knowledge they

[ESRI ArcGIS Module](#)
Demo: Chart Showing DC School Enrollment

Socrata



The Socrata platform is commonly used by municipal, state, and federal agencies use to distribute their data.

[CitySDK Socrata Module](#)
Demo: Chicago Payroll Query
Demo: Baltimore Crime and Demographics

Google Maps



There are several CitySDK examples that utilize Google Maps to create interactive web apps.

[Demo: Farmer's Markets in California](#)
Demo: Housing Loans in Pittsburgh

Public Spaces for Innovation



The Data Science for Social Good Fellows at the University of Chicago have created datasets and a tool for community organizers using the CitySDK.

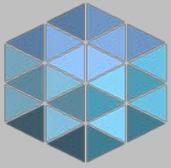
[Demo: Innovation Ecosystems](#)

Bing Maps



CitySDK apps can be built with Microsoft Bing's mapping technology.

[Demo: Using Bing Maps with the CitySDK](#)



What's Next

CITY SDK

1. Pilot with North Carolina state data center network and rural communities
2. Continue collaboration with ecosystem participants
3. Deepen our open-source engagement with users
4. Add support for smart cities



The White House Smart City Forum

Community
Focus

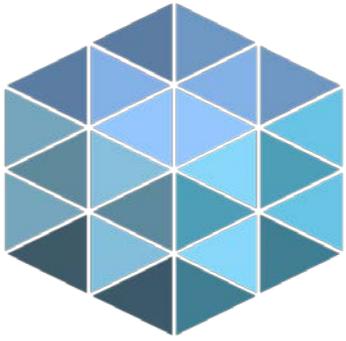


Improved Access to
Government Data



Agile Playbook for
Code for America Brigades





CITY **SDK**

Q&A