



C I T Y S D K



Presenters:

Alex Cohen, Program Manager - Center for Applied Technology

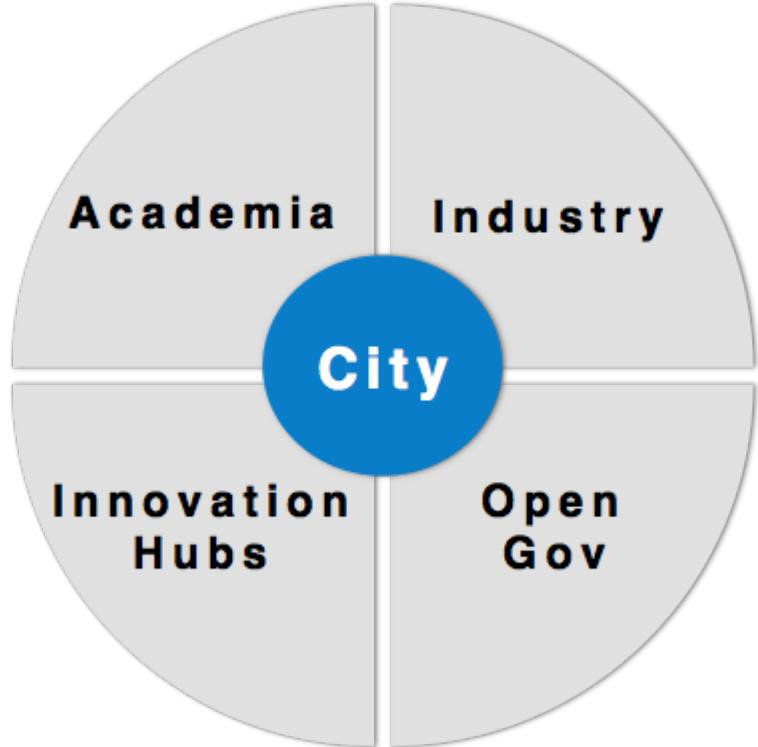
Arman Frasier, CitySDK Technical Lead

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



Why a CitySDK?

- Streamline how open data is used to build apps for cities through open-source tools
- Collaborate to address needs of software developers that rely on federal and local data
- Foster an ecosystem to improve interoperability across data silos



“build with, not for”

What is the CitySDK?

- 1. Open-Source Code Library** – set of Javascript libraries and functions to improve access and usability of open data.
- 2. Guides** – technical docs that walk users through combining datasets and using open-source friendly approaches (e.g. GeoJSON).
- 3. Ecosystem** – open-source project to facilitate code contributions from all city stakeholders.
- 4. Current set of integrations:**



A screenshot of a GitHub repository page for "uscensusbureau / citysdk". The page shows basic repository statistics: 19 commits, 3 branches, 5 releases, and 6 contributors. It also displays a list of recent commits, including merges and releases for "docs", "examples", "js", and "showcase" branches. The commits are dated from 7 days ago to 21 days ago. The right sidebar of the GitHub interface is visible, showing links for "Issues", "Pull requests", "Wiki", "Pulse", and "Graphs".

bit.ly/city-sdk

Example: Improve access and usability

Before: Washington DC Population Example (Census ACS API)

1. Get Washington, D. C.'s FIPS code by coordinates using the GeoCoder API
2. Determine the appropriate variable (ex: *B06011_001E*) from a list of every variable in the ACS
3. Request the data for that specific variable and FIPS combination.
4. Extract the data from the response.

After: CitySDK

1. Build your request in a JSON object
2. Issue the request to the SDK
3. Handle the response object



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

Let's get started...



City SDK by US Census Bureau

Overview Getting Started Guides Gallery Challenge Contribute

Getting Started

Modularity

CitySDK is designed with modularity in mind. Are you working on a project and want to include population, income, or any other Census data? Load the Census module! Would you rather tell people where the closest Farmers' Market is? There's a module for that.

Modules allow you to customize your CitySDK experience - take the functionality you want, and trim back on the things you don't need.

Community

We've written modules for the Census, EIA, and the USDA - but we can't write them all. CitySDK is an open-source project hosted on GitHub, open and ready for community participation.

Does your local city have an open data API that you think others might like? Create a module for it! Writing a module is simple - you can leverage the core CitySDK functionality and some simple JavaScript to get started.

Obtaining a Census Developer Key

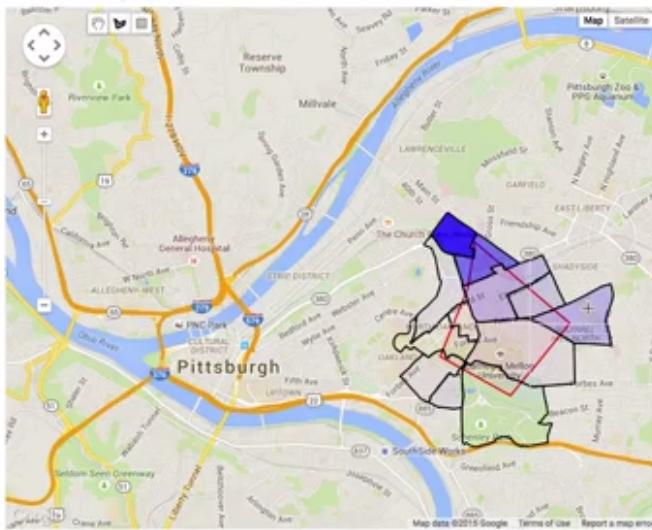
You'll need a Census API key to fully enjoy our samples. Keys are free and quick. Click the button on the left to get one, and then enter it with the button on the right.

[Get a Census API Key](#)

[Enter your Census API Key](#)

CitySDK-HUD web module

Demo of CitySDK-HUD



CitySDK module for ArcGIS

CitySDK-ArcGIS is a simple JavaScript library for connecting to API geoservices. These services are available from local cities and governments around the world. CitySDK is a JavaScript library developed by the US Census for web developers to quickly connect to the rich sets of national data.

[Example: GeoEnrichment](#) [Example: Map](#) [Example: Chart](#)



Census Data

CitySDK provides easy access to the full suite of Census API and data. Through a simple JavaScript interface developers can request population, income, commutes and more by tract, block, county, or state.

GeoServices API

GeoServices are an open, RESTful API for accessing data. The API provides direct access to authoritative data with SQL-like query, location and time filtering, statistical aggregation, and analysis processing.

Open Government Data

They power over 23,000 government agencies, all with a common API - whether it's Schools in DC or Health in Colorado - discover local data from ArcGIS Open Data community and US Data.gov.

Join the CitySDK movement

1. Get started in your city during National Day of Civic Hacking (NDoCH) on June 6th

**NATIONAL DAY
OF CIVIC HACKING**

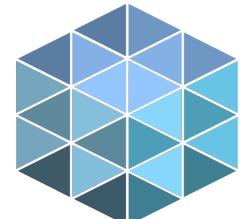


City SDK Data Solutions Challenge
By Lilibeth Ganga

Can you create an application leveraging the U.S. Census Bureau's City SDK that addresses...

[View Challenge](#)

2. Continue building, adding new capabilities to your solution. More CitySDK webinars and hands-on events on the way!



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3. Submit your solution via Challenge.gov by July 31st, 2015 to be selected for a National Virtual Demo Day

 **Challenge.gov**
Government Challenges, Your Solutions

[City Software Development Kit \(SDK\) Data Solutions Challenge](#)

[View Prize List On This Challenge](#)

Submit apps that tackle your city's most pressing sustainability issues across economic, environmental, social cultural, and housing themes

Open Until **Jul 31, 2015**

Posted by: **Bureau of the Census**

Find a local NDoCH CitySDK team

- **Chicago, IL:**
 - Join the [Urban Sustainability Apps Competition](#) featuring Avi Bender, Census CTO. [Register here](#) and be sure to check the box: "Using the City SDK"
- **Washington, DC:**
 - The Census CitySDK team is partnering with SBA for the D.C. [CODE-A-THON SMALL BUSINESS EDITION](#)
- **Minneapolis, MN:**
 - Join the [Twin Cities Census CitySDK team](#).
- **Boston, MA:**
 - Join the [Open Data Nation CitySDK team](#). Open Data Nation is a B-corp that helps cities, causes and brands put their open data to good use.
- **Los Angeles, CA:**
 - Join the ESRI team at [hackforla.org](#) and work on a CitySDK project.
- **Philadelphia, PA:**
 - Join the [CodeForPhilly](#) team
- **St Louis, MS:**
 - Join [OpenDataSTL](#)



Don't see your city?

Check out: <http://hackforchange.org/events/>



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Q&A Segment

Thank you for joining us!

...Stay Connected...

- [About the CitySDK](#)
- [Virtual Scrumboard](#)
- [Github Repository](#)
- [Challenge.gov Challenge Posting](#)
- [Census API Developers Forum](#)

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