

# Meet CONVERGE Data Ambassadors

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Meet the CONVERGE Data Ambassadors  
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# DesignSafe Example: End-to-End Capability

designsafe-ci.org/data/browser/public/designsafe.storage.published/PRJ-2978

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PRJ-2978 | **Automated Neighborhood Characteristics for Community Resilience Planning** Download Dataset

Author Rosenheim, Nathanael; Day, Wayne; Seong, Kijin

Project Type Other

Awards Center for Risk-Based Community Resilience Planning - NIST-70NANB20H008

Published

Published (NEES)

Add

Project team included two PhD students - project took about 2 months from start to finish.





Rosenheim, Nathanael; Day, Wayne; Seong, Kijin (2021) "Automated Neighborhood Characteristics for Community Resilience Planning." DesignSafe-CI. <https://doi.org/10.17603/ds2-hj0p-bp40>.

# Project files developed and created in DesignSafe

← → ↻ [designsafe-ci.org/data/browser/public/designsafe.storage.published/PRJ-2978](https://designsafe-ci.org/data/browser/public/designsafe.storage.published/PRJ-2978) ☆ ⌵ ⚙ N Paused ⋮

process to obtain, clean, and explore census block group data. The data outputs include CSV files required to run a post disaster population dislocation model currently in use by IN-CORE. This project applies the code to six community testbeds (Seaside, OR; Joplin, MO; Galveston, TX; Lumberton, NC; Memphis MSA; and Mobile, AL) to illustrate the generalizability of the code. The code utilizes Census API and may be modified to identify some of the socio-demographic and socio-economic characteristics of a neighborhood's social vulnerability.

PRJ-2978

<input checked="" type="checkbox"/> Name	Size	Last modified
<input type="checkbox"/>  <a href="#">_ReadMeFirst_CensusAPI_BlockGroup_2021-01-19.docx</a> <i>README</i>	79.9 kB	1/28/21 1:37 PM
<input type="checkbox"/>  <a href="#">IN-CORE_ACSdata_BGMAP_2021-01-19.ipynb</a> <i>Jupyter Notebook</i>	1.7 MB	1/28/21 1:37 PM
<input type="checkbox"/>  <a href="#">IN-CORE_BGMAP_2021-01-19</a> <i>Data</i>	--	1/28/21 1:22 PM
<input type="checkbox"/>  <a href="#">IN-CORE_BGMAP_2021-01-19.ipynb</a> <i>Jupyter Notebook</i>	6.5 MB	1/28/21 1:37 PM

# Project Developed Within Jupyter-DesignSafe

← → ↻ [jupyter.designsafe-ci.org/user/nrosen/tree/MyProjects/PRJ-2978](https://jupyter.designsafe-ci.org/user/nrosen/tree/MyProjects/PRJ-2978) ☆ ⏸ ⏪ ⏩ ⚙️ N Paused ⋮

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<input type="checkbox"/>		WorkKJS			
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<input type="checkbox"/>		IN-CORE_CENSUSAPI_DWNLD_JOPLINMSA_2021-01-13.ipynb		15 days ago	245 kB
<input type="checkbox"/>		_ReadMeFirst_CensusAPI_BlockGroup_2021-01-19.docx		10 days ago	81.8 kB

Notice that internal project folders do not have to be published.

# Jupyter Notebook uses Python - Free and Open Source

jupyter IN-CORE\_ACSdata\_BGMAP\_2021-01-19 Last Checkpoint: 01/19/2021 (unsaved changes)



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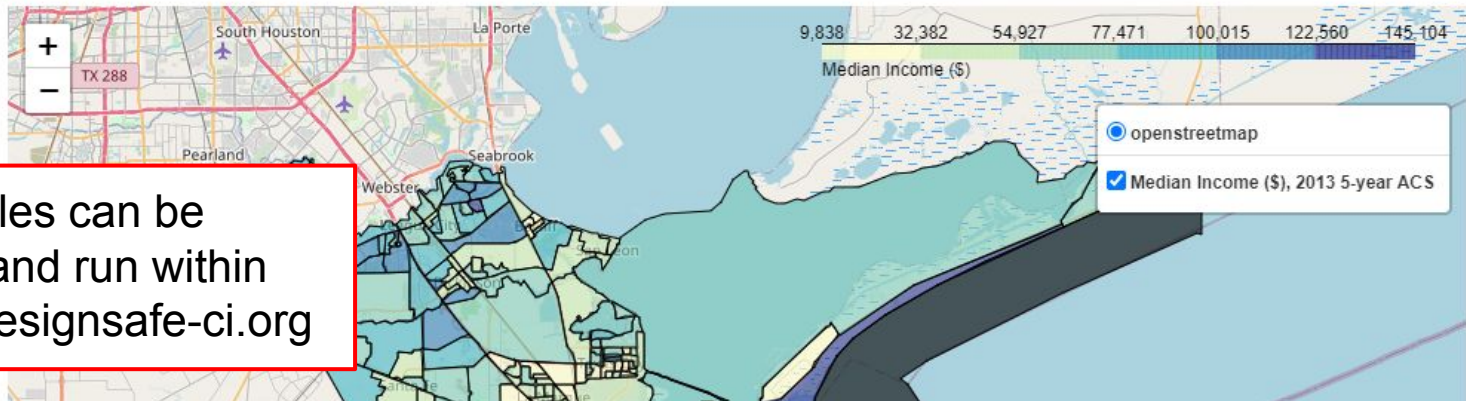
Python 3

Run Cell Up Down Run Stop Refresh Run All

```
map.fit_bounds([sw_corner, ne_corner])  
  
map.save(filename+'meidianincome.html')  
#files.download(f'output_maplayers/{mapname}.html')
```

The center of the map data file is located at -94.96170002319587 29.394953239690718  
The map data file is bounded by at [29.062738999999997, -95.233081] [29.598264, -94.369361]

In [24]: `display(map)`



Python files can be opened and run within [jupyter.designsafe-ci.org](http://jupyter.designsafe-ci.org)