

COUNTRY EXPOSURE MODEL

Review main statistic of a exposure model and create summaries for a given Country.

```
/home/risk/venvs/py38w/lib/python3.8/site-packages/geopandas/_compat.py:111: UserWarning: The Shapely GEOS version (3.9.1-CAPI-1.14.2) is incompatible with the GEOS version PyGEOS was compiled with (3.10.1-CAPI-1.16.0). Conversions between both will be slow.
  warnings.warn(
```

```
# Parameters
country = "British_Virgin_Islands"
```

Exposure files:
Exposure_Com_British_Virgin_Islands.csv
Exposure_Ind_British_Virgin_Islands.csv
Exposure_Res_British_Virgin_Islands.csv

Sanity checks and formats

British_Virgin_Islands
Exposure/Exposure/Exposure_Com_British_Virgin_Islands.csv
Exposure/Exposure/Exposure_Ind_British_Virgin_Islands.csv
Exposure/Exposure/Exposure_Res_British_Virgin_Islands.csv
Occupants / Dwellings = 4.1
No refence household size data available
Population (exposure / UN_2021) = 1.01
Exposure models OK

Exposure at National level

Summary by occupancy type

	OCCUPANTS	BUILDINGS	COST_USD	BUILDINGS_%	COST_USD_%
OCCUPANCY					
Res	30.6K	7,197	\$1,342.4M	89.03%	42.25%
Ind	0.0K	240	\$624.4M	2.97%	19.65%
Com	0.0K	647	\$1,210.3M	8.00%	38.09%

Other metrics to consider

	AREA_SQM	COST_BUILDING_USD	AVG_BUILDING_AREA_SQM	AVG_COST_PER_AREA_USD
OCCUPANCY				
Total	5,133.0K	\$1,921.6M	635	\$619
Res	3,814.7K	\$878.7M	530	\$352
Ind	836.0K	\$307.4M	3,483	\$747
Com	482.3K	\$735.5M	745	\$2,510

Exposure summary at Admin level 1

	COST_USD	BUILDINGS	OCCUPANTS	COST_USD_%	BUILDINGS_%	OCCUPANTS_%
NAME_1						
British_Virgin_Islands	\$3,177.2M	8.1K	30.6K	100.00%	100.00%	100.00%

Exposure by simplified taxonomy

Adding `MACRO_TAXO` column

	COST_USD	BUILDINGS	OCCUPANTS	COST_USD_%	BUILDINGS_%	OCCUPANTS_%
MACRO_TAXO						
RC	\$1,293.1M	1,074	3,181	40.70%	13.29%	10.39%
W	\$925.0M	4,181	20,565	29.11%	51.72%	67.17%
S	\$485.6M	326	0	15.28%	4.03%	0.00%
MR	\$425.4M	2,392	6,602	13.39%	29.59%	21.56%
MCF	\$39.1M	60	0	1.23%	0.74%	0.00%
OT	\$9.0M	51	269	0.28%	0.63%	0.88%

Exposure by taxonomy

Showing only taxonomies that represent 90% of the total `COST_USD`

		COST_USD	BUILDINGS	COST_USD_%	BUILDINGS_%
MACRO_TAXO	TAXONOMY				
W	W+WLI/LWAL+CDM+DUM/HEX:1/RES	\$700.0M	3,936	24.63%	52.97%
RC	CR/LFINF+CDM+DUM/HEX:4/COM	\$639.0M	97	22.48%	1.31%
MR	MR/LWAL+CDL+DUL/HEX:1/RES	\$425.4M	2,392	14.97%	32.19%
S	S+SR/LFINF+CDM+DUM/HEX:1/IND	\$269.5M	72	9.48%	0.97%
RC	CR/LFINF+CDM+DUM/HEX:2/COM	\$256.9M	13	9.04%	0.17%
W	W+WLI/LWAL+CDM+DUM/HEX:2/COM	\$222.0M	227	7.81%	3.05%
S	S+SR/LFM+CDM+DUM/HEX:1/IND	\$179.7M	48	6.32%	0.65%
RC	CR/LFINF+CDL+DUL/HEX:2/RES	\$149.7M	646	5.27%	8.69%

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