COUNTRY EXPOSURE MODEL

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

```
# Parameters
country = "Saint_Kitts_and_Nevis"
```

```
Exposure files:
  Exposure_Com_Saint_Kitts_and_Nevis.csv
  Exposure_Ind_Saint_Kitts_and_Nevis.csv
  Exposure_Res_Saint_Kitts_and_Nevis.csv
```

Sanity checks and formats

Saint_Kitts_and_Nevis
  Exposure/Exposure/Exposure_Com_Saint_Kitts_and_Nevis.csv
  Exposure/Exposure/Exposure_Ind_Saint_Kitts_and_Nevis.csv
  Exposure/Exposure/Exposure_Res_Saint_Kitts_and_Nevis.csv
  Occupants / Dwellings = 3.6
  No refence household size data available
  Population (exposure / UN_2021) = 1.02
  Exposure models OK

Exposure at National level

Summary by occupancy type

	OCCUPANTS	BUILDINGS	COST_USD	BUILDINGS_%	COST_USD_%
OCCUPANCY					
Res	54.7K	14,132	$983.9M	92.15%	73.99%
Ind	0.0K	321	$103.8M	2.09%	7.81%
Com	0.0K	883	$242.1M	5.76%	18.21%

Other metrics to consider

	AREA_SQM	COST_BUILDING_USD	AVG_BUILDING_AREA_SQM	AVG_COST_PER_AREA_USD
OCCUPANCY				
Total	5,328.6K	$897.1M	347	$250
Res	4,895.8K	$695.1M	346	$201
Ind	200.2K	$52.1M	624	$519
Com	232.7K	$149.9M	263	$1,041

Exposure summary at Admin level 1

	COST_USD	BUILDINGS	OCCUPANTS	COST_USD_%	BUILDINGS_%	OCCUPANTS_%
NAME_1						
Saint George Basseterre	$163.4M	1,863	6,406	12.28%	12.15%	11.71%
Saint Thomas Middle Island	$162.9M	1,887	6,765	12.25%	12.30%	12.37%
Saint John Capisterre	$123.4M	1,507	5,210	9.28%	9.83%	9.52%
Saint Peter Basseterre	$119.4M	1,364	4,969	8.98%	8.89%	9.08%
Christ Church Nichola Town	$112.2M	1,340	4,906	8.44%	8.74%	8.97%
Saint Anne Sandy Point	$101.0M	1,075	3,873	7.59%	7.01%	7.08%
Trinity Palmetto Point	$95.2M	1,103	3,981	7.16%	7.19%	7.28%
Saint James Windward	$91.5M	1,093	3,864	6.88%	7.13%	7.06%
Saint Paul Capisterre	$88.5M	1,057	3,808	6.66%	6.89%	6.96%
Saint Mary Cayon	$86.0M	1,006	3,616	6.47%	6.56%	6.61%
Saint John Figtree	$75.8M	733	2,632	5.70%	4.78%	4.81%
Saint George Gingerland	$50.8M	612	2,149	3.82%	3.99%	3.93%
Saint Thomas Lowland	$50.1M	588	2,114	3.76%	3.83%	3.86%
Saint Paul Charlestown	$9.8M	108	406	0.74%	0.70%	0.74%

Exposure by simplified taxonomy

Adding `MACRO_TAXO` column

	COST_USD	BUILDINGS	OCCUPANTS	COST_USD_%	BUILDINGS_%	OCCUPANTS_%
MACRO_TAXO						
MR	$570,236.1K	8,923	27,666	42.88%	58.18%	50.58%
RC	$450,690.9K	4,091	15,447	33.89%	26.68%	28.24%
W	$199,104.4K	1,766	11,396	14.97%	11.52%	20.83%
S	$96,989.6K	434	0	7.29%	2.83%	0.00%
MCF	$11,283.4K	96	0	0.85%	0.63%	0.00%
OT	$1,587.0K	26	190	0.12%	0.17%	0.35%

Exposure by taxonomy

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

MACRO_TAXO	TAXONOMY	COST_USD	BUILDINGS	COST_USD_%	BUILDINGS_%
MR	**MR/LWAL+CDL+DUL/HEX:1/RES**	$570.2M	8,923	49.06%	62.73%
RC	**CR/LFINF+CDL+DUL/HEX:2/RES**	$290.2M	3,494	24.97%	24.56%
W	**W+WLI/LWAL+CDM+DUM/HEX:2/COM**	$105.4M	300	9.07%	2.11%
	W+WLI/LWAL+CDM+DUM/HEX:1/RES	$93.7M	1,466	8.06%	10.31%
S	**S+SR/LFINF+CDM+DUM/HEX:1/IND**	$54.5M	32	4.69%	0.22%
RC	**CR/LFINF+CDM+DUM/HEX:2/COM**	$48.4M	9	4.16%	0.06%