COUNTRY EXPOSURE MODEL

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

```
# Parameters
country = "Dominica"
```

```
Exposure files:
  Exposure_Com_Dominica.csv
  Exposure_Com_Dominican_Republic.csv
  Exposure_Ind_Dominica.csv
  Exposure_Ind_Dominican_Republic.csv
  Exposure_Res_Dominica.csv
  Exposure_Res_Dominican_Republic.csv
```

Sanity checks and formats

```
Dominica
  Exposure/Exposure/Exposure_Com_Dominica.csv
  Exposure/Exposure/Exposure_Ind_Dominica.csv
  Exposure/Exposure/Exposure_Res_Dominica.csv
  Occupants / Dwellings = 4.3
  WARNING - Check avg householde size:
    UN 2019 avg household = No data
    PRB 2019 avg household = 2.7
  Population (exposure / UN_2021) = 1.02
  Exposure models  OK
```

Exposure at National level

Summary by occupancy type

OCCUPANCY	OCCUPANTS	BUILDINGS	COST_USD	BUILDINGS_%	COST_USD_%
Res	73.3K	16,383	$870.7M	90.95%	78.74%
Ind	0.0K	954	$71.3M	5.30%	6.45%
Com	0.0K	676	$163.7M	3.75%	14.81%

Other metrics to consider

OCCUPANCY	AREA_SQM	COST_BUILDING_USD	AVG_BUILDING_AREA_SQM	AVG_COST_PER_AREA_USD
Total	4,335.0K	$743.6M	241	$255
Res	4,038.2K	$608.6M	246	$216
Ind	117.9K	$35.8M	124	$604
Com	178.9K	$99.1M	265	$915

Exposure summary at Admin level 1

NAME_1	COST_USD	BUILDINGS	OCCUPANTS	COST_USD_%	BUILDINGS_%	OCCUPANTS_%
Saint George Parish	$342.0M	5,686	23,580	30.93%	31.57%	32.16%
Saint Andrew Parish	$165.0M	2,692	11,281	14.92%	14.94%	15.39%
Saint Patrick Parish	$159.3M	2,478	9,445	14.40%	13.76%	12.88%
Saint David Parish	$97.6M	1,662	6,824	8.83%	9.23%	9.31%
Saint Paul Parish	$94.7M	1,515	6,445	8.56%	8.41%	8.79%
Saint John Parish	$82.2M	1,294	5,255	7.43%	7.18%	7.17%
Saint Joseph Parish	$65.0M	1,031	3,692	5.88%	5.72%	5.04%
Saint Luke Parish	$38.6M	656	2,787	3.49%	3.64%	3.80%
Saint Mark Parish	$36.7M	551	2,364	3.32%	3.06%	3.22%
Saint Peter Parish	$24.7M	448	1,641	2.23%	2.49%	2.24%

Exposure by simplified taxonomy

Adding `MACRO_TAXO` column

MACRO_TAXO	COST_USD	BUILDINGS	OCCUPANTS	COST_USD_%	BUILDINGS_%	OCCUPANTS_%
MR	$700.2M	13,662	54.0K	63.33%	75.85%	73.66%
RC	$186.4M	2,018	10.0K	16.86%	11.20%	13.66%
W	$122.1M	1,423	9.3K	11.04%	7.90%	12.69%
S	$75.7M	624	0.0K	6.85%	3.46%	0.00%
MCF	$21.3M	286	0.0K	1.93%	1.59%	0.00%

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	$700.2M	13,662	71.00%	81.67%
RC	CR/LFINF+CDL+DUL/HEX:2/RES	$84.7M	1,272	8.59%	7.60%
W	W+WLI/LWAL+CDM+DUM/HEX:1/RES	$61.0M	1,191	6.19%	7.12%
W	W+WLI/LWAL+CDM+DUM/HEX:2/COM	$59.7M	203	6.05%	1.21%
RC	CR/LFINF+CDM+DUM/HEX:2/COM	$32.7M	7	3.31%	0.04%
S	S+SR/LFINF+CDM+DUM/HEX:1/COM	$24.8M	169	2.52%	1.01%
RC	CR/LFINF+CDM+DUM/HEX:3/RES	$23.1M	224	2.35%	1.34%