

Vancouver Tree Height Geography Analysis

DSCI 522, Group 33

2024-12-04

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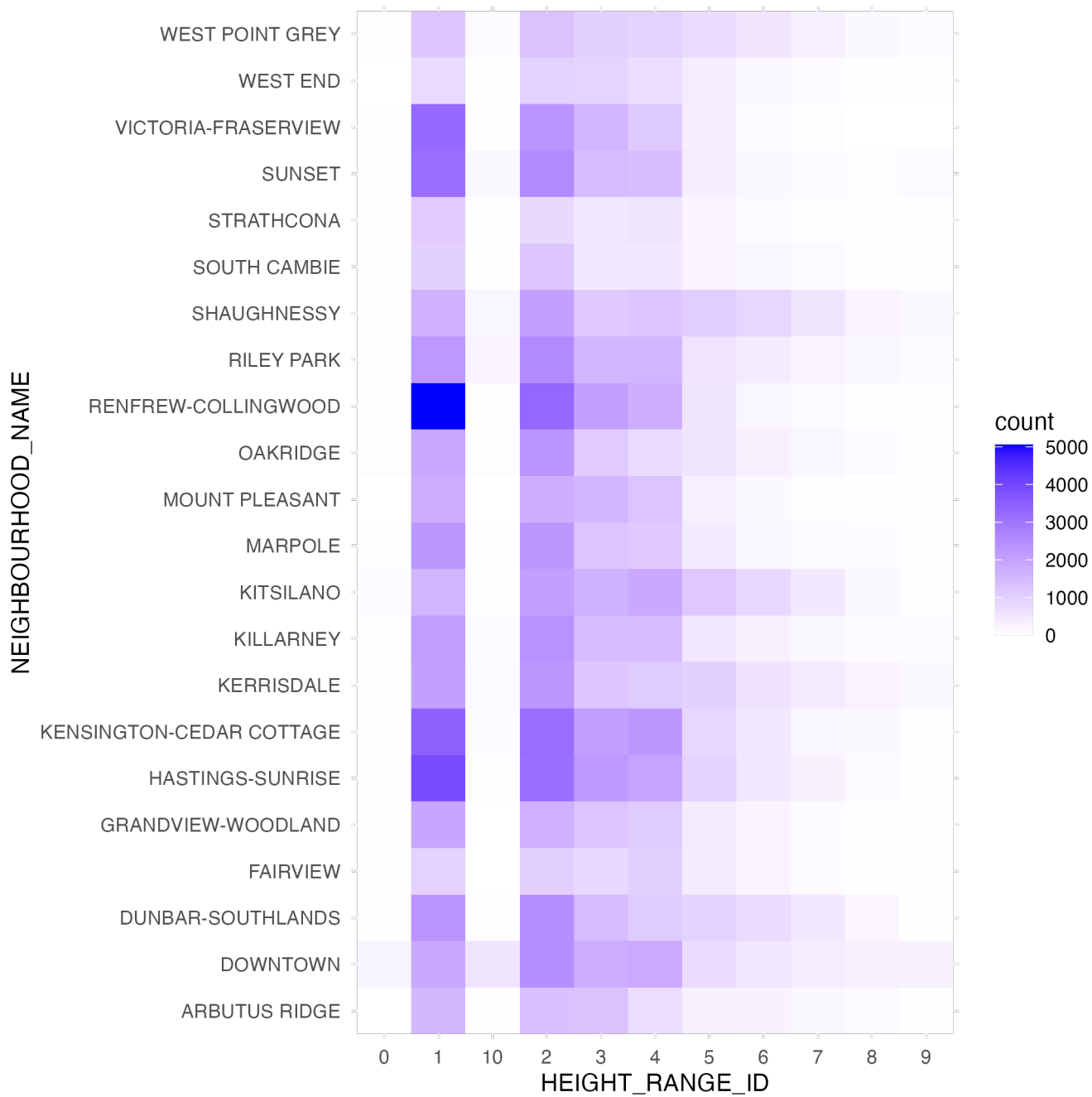
```
Rscript scripts/00_download_data.R "https://opendata.vancouver.ca/api/explore/v2.1/catalog/d
```

```
Rscript scripts/01_validate_data.R "data/street-trees.csv"
```

```
Rscript scripts/02_eda.R "data/street-trees.csv" "results/figures/heatmap.png" "results/tabl
```

```
Rscript scripts/03_stat_analysis.R "results/tables/contingency_table.csv" "results/models/ch
```

```
quarto render report/test.qmd --to pdf
```



See Figure @ref(fig:load_heatmap).

Rows: 22 Columns: 12
 -- Column specification -----

Delimiter: ","

chr (1): NEIGHBOURHOOD_NAME

dbl (11): 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10

i Use `spec()` to retrieve the full column specification for this data.

i Specify the column types or set `show_col_types = FALSE` to quiet this message.

Table 1: Contingency Table

NEIGHBOURHOOD_NAME		1	2	3	4	5	6	7	8	9	10
ARBUTUS RIDGE	9	1543	1371	1303	712	324	273	181	99	34	25
DOWNTOWN	212	1888	2448	1770	1858	760	516	408	314	272	563
DUNBAR-	11	2337	2446	1444	1130	979	773	481	207	53	41
SOUTHLANDS											
FAIRVIEW	13	998	1036	830	1042	421	236	81	33	15	7
GRANDVIEW-	12	1944	1701	1274	1119	421	226	84	45	25	0
WOODLAND											
HASTINGS-	36	3888	3138	2250	1996	966	497	282	109	42	61
SUNRISE											
KENSINGTON-	30	3459	3201	2067	2261	869	465	188	142	56	90
CEDAR COTTAGE											
KERRISDALE	37	2061	2289	1241	1129	1019	621	421	260	151	130
KILLARNEY	42	2123	2385	1458	1468	500	300	180	79	88	86
KITSILANO	94	1603	2092	1679	1883	1193	856	467	163	70	28
MARPOLE	13	2260	2298	1265	1155	437	201	115	90	72	53
MOUNT	3	1775	1735	1591	1285	344	159	70	38	15	0
PLEASANT											
OAKRIDGE	67	1917	2306	1139	760	557	293	187	81	66	62
RENFREW-	38	5055	3312	2085	1753	555	194	125	51	15	32
COLLINGWOOD											
RILEY PARK	42	2239	2562	1578	1596	607	424	256	186	112	242
SHAUGHNESSY	48	1698	2061	1170	1232	1085	869	564	254	151	201
SOUTH CAMBIE	22	1021	1236	469	499	242	192	98	41	19	31
STRATHCONA	11	1111	812	515	548	232	106	55	32	27	38
SUNSET	59	3178	2553	1474	1407	395	164	102	66	133	164
VICTORIA-	34	3275	2314	1599	1147	359	115	73	10	7	28
FRASERVIEW											
WEST END	7	801	993	924	708	404	187	90	44	16	11
WEST POINT	53	1233	1324	1004	955	753	575	342	136	91	128
GREY											

Refer to Table @ref(tab:load_contingency_table).

The Chi-squared test result yielded a statistic of 1.5509333×10^4 with a p-value of 0.