

(a) **Areal weighting**

Unit A, n=54

Unit B, n=36

6	6	6	4	4	4
6	6	6	4	4	4
6	6	6	4	4	4

(b) **Dasymetric: binary weights** Grey: built-up land
Hashed: no built-up

Unit A, n=54

Unit B, n=36

0	0	0	0	0	0
0	13.5	13.5	18	0	0
0	13.5	13.5	18	0	0

(c) **Dasymetric: empirically derived weights e.g., land use classes (different grey tones)**

Unit A, n=54

Unit B, n=36

4	4	4	3	3	3
4	8.5	8.5	7.5	3	3
4	8.5	8.5	7.5	3	3

(d) **Dasymetric: statistically derived weights** (informed by multiple ancillary variables): $\hat{Y} = \alpha + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_n X_n$

Unit A, n=54

Unit B, n=36

5	5.5	5.5	3	2	2
5	7	7	9	3	2
5	7	7	9	3	3