

	Status quo (D1)	New transport hub (D2)	New transport hub and new residential estate (D3)
Grocery store (G)	8 1	12 1	20 1
Hair salon (H)	7 2	11 2	21 9
Coffee shop (C)	9 0	13 6	25 5
Tuition centre (T)	6 3	12 1	30 0

10
9
5
3

(a) pessimism

C

(b) optimism

T

(c) Laplace

G

$$\frac{8+12+20}{3} = \frac{40}{3}$$

T

H

$$\frac{7+11+21}{3} = 13 = \frac{39}{3}$$

C

$$\frac{9+13+25}{3} = \frac{47}{3}$$

T

$$\frac{6+12+30}{3} = \frac{48}{3}$$

(d) T

(e) $C_{opt} = k$

$$G \quad k \times 20 + (1-k) \times 8 = 12k + 8$$

$$H \quad 21k + (1-k) \times 7 = 14k + 7$$

$$C \quad 25k + (1-k) \times 9 = 16k + 9$$

$$T \quad 30k + (1-k) \times 6 = 24k + 6$$

$$k > \frac{3}{8} \quad T$$

$$k < \frac{3}{8} \quad C$$

$$k = \frac{3}{8} \quad C/T$$