



The trade-off between residential locations, amenities and commuting

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RESEARCH GOALS

1. The relative importance of residential environment, amenities and commuting for employed individuals
2. The trade-off in residential location preferences



Data

Background
questionnaire

Conjoint
experiment

Stated residential preference survey
(PBL)

Mobility Panel NL (KiM)



Sample

- MPN participants + employed + completed travel diary
- 1,250 approached
- 1,009 completed (81%)
- N=870 final sample



A stated preference experiment

CHOICE BASED CONJOINT

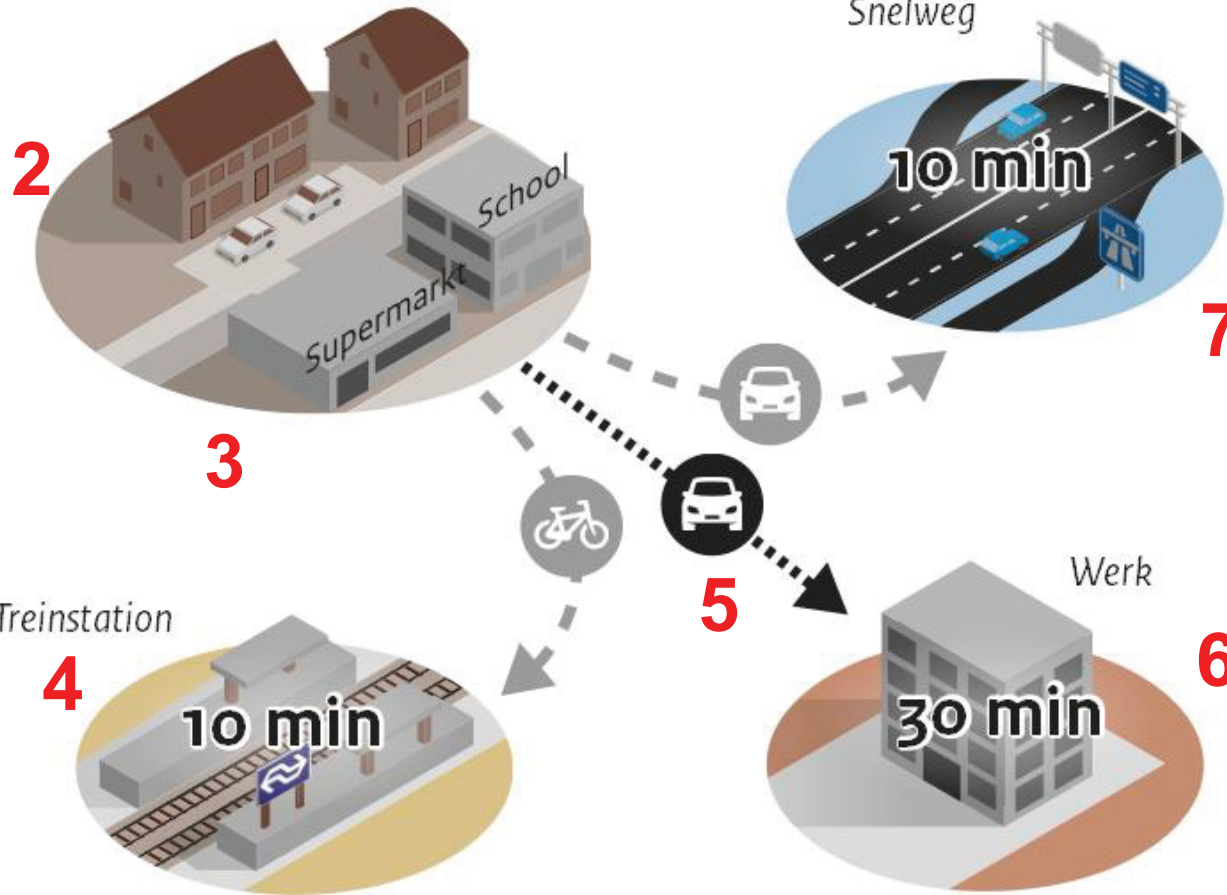


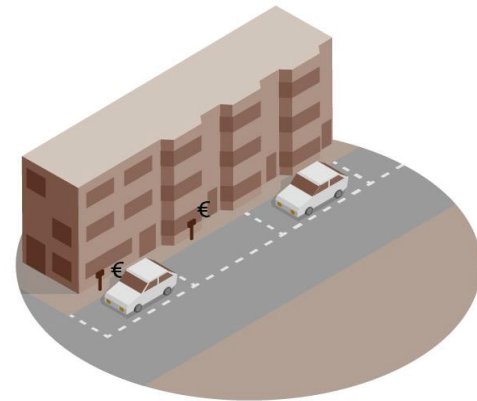
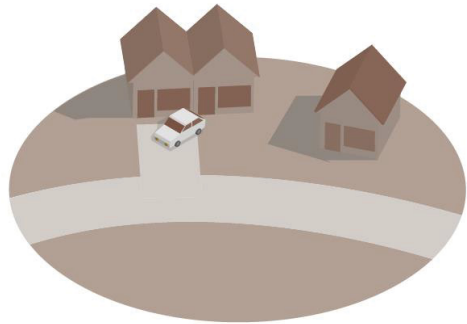
Choice based conjoint experiment (CBC)

- comparing realistic, fictional scenarios

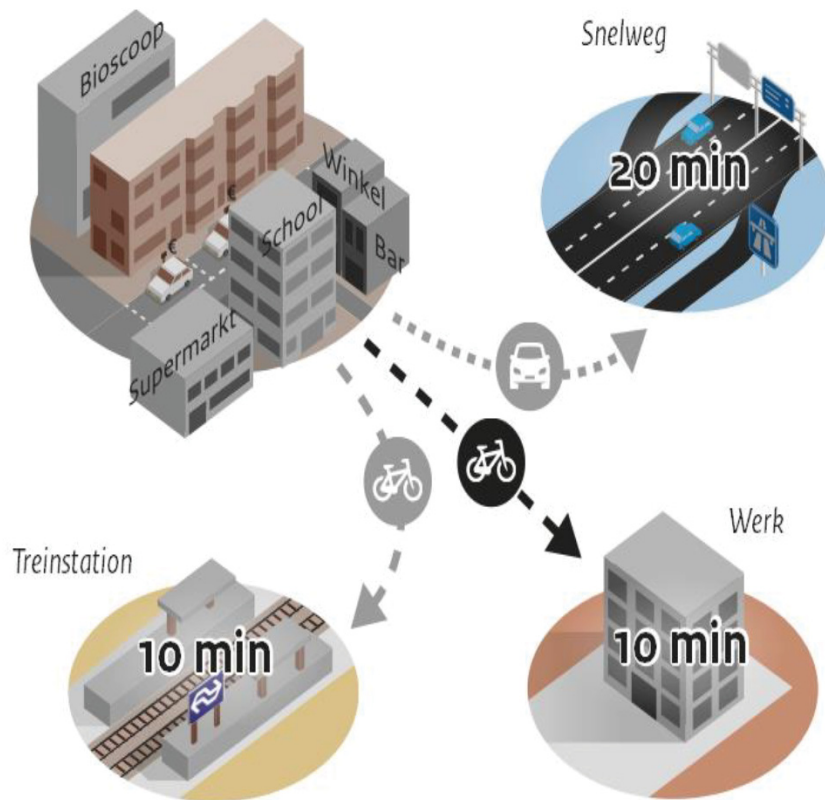


Woonwijk
10% hogere woonlasten dan nu
1

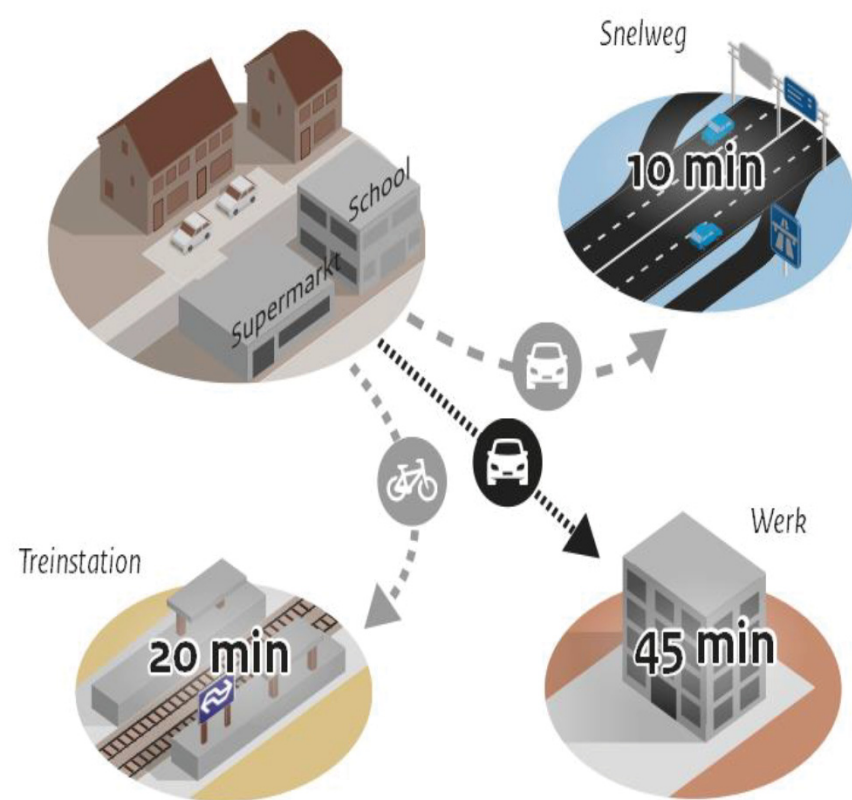




Stedelijk
Gelijke woonlasten als nu



Woonwijk
Gelijke woonlasten als nu





Choice based conjoint experiment (CBC)

- comparing realistic, fictional scenarios
- 7 tasks per person
- 2 concepts per task
- 1 extra “holdout” task



RESULTS

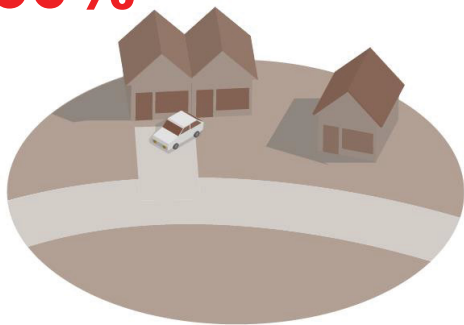


Example – utility of person 1

HOUSE			AMENITIES		
DETACHED	TERRACED	APARTMENT	LOW	MEDIUM	HIGH
-3.2	-0.5	3.7	-1.9	1.0	0.9

Distribution of max score for housing

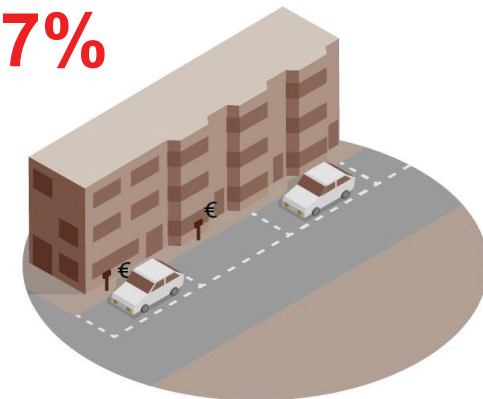
60%



23%



17%



PRICE

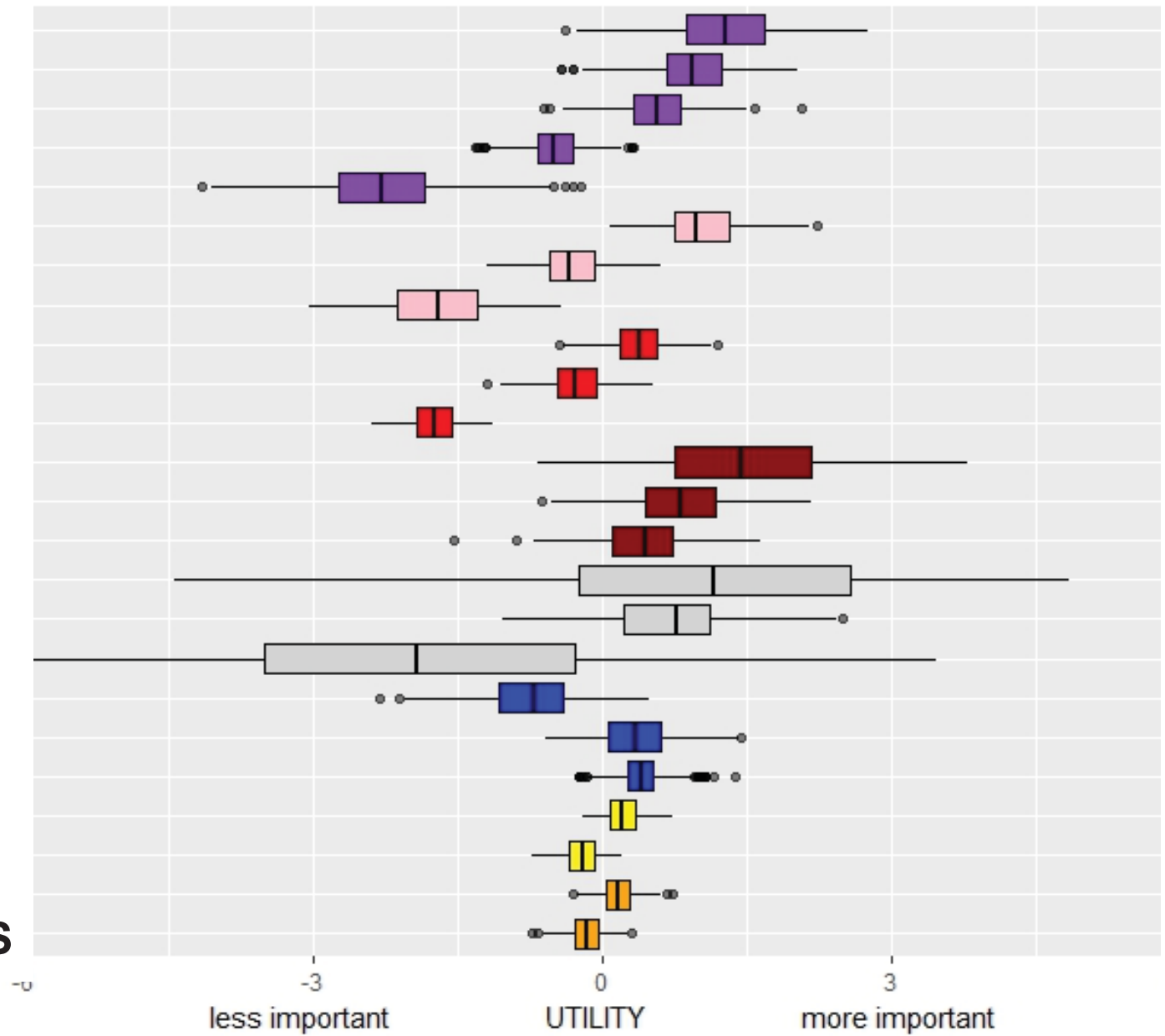
COMMUTE

BUILDING

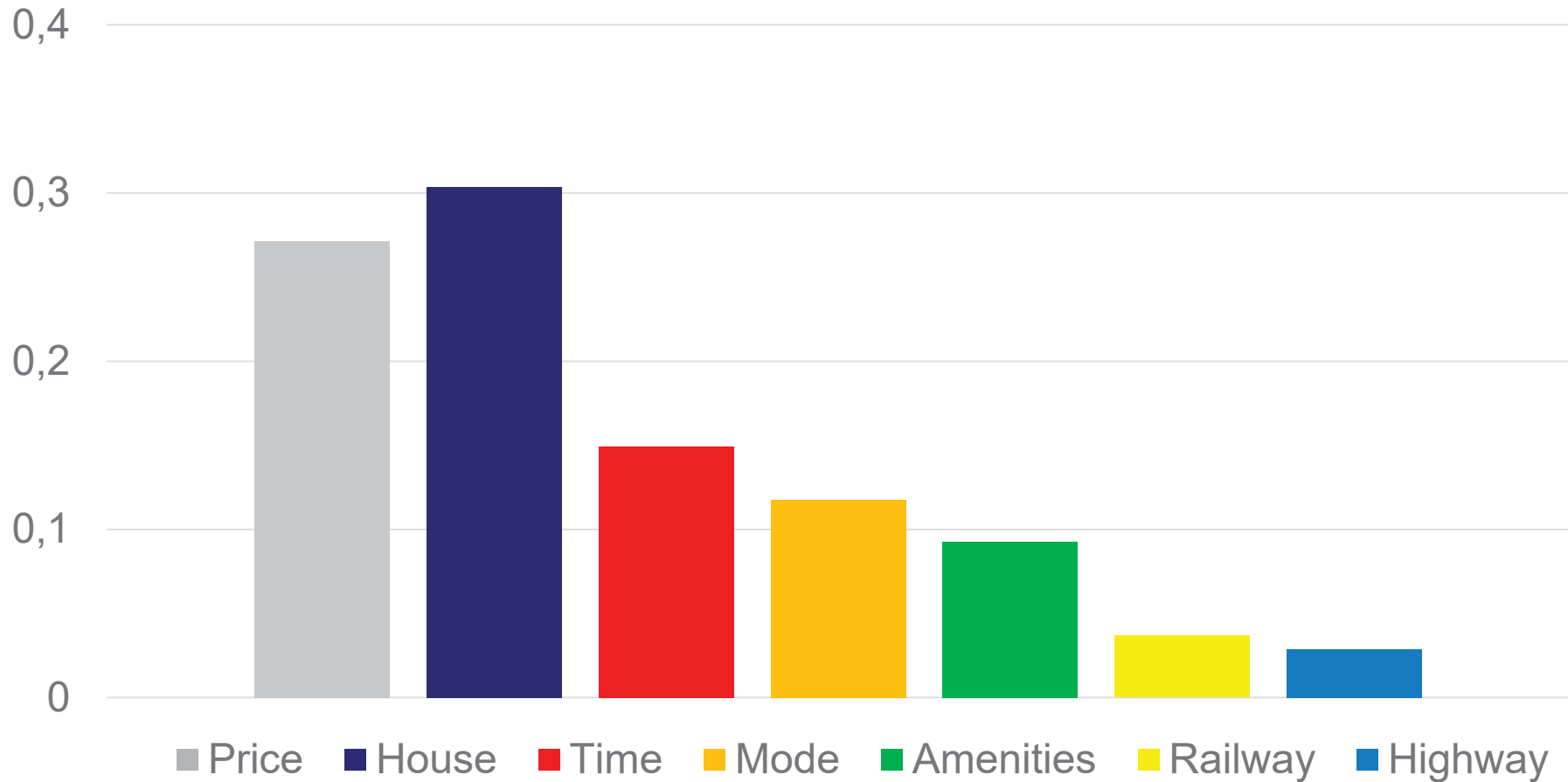
AMENITIES

RAIL ACCESS

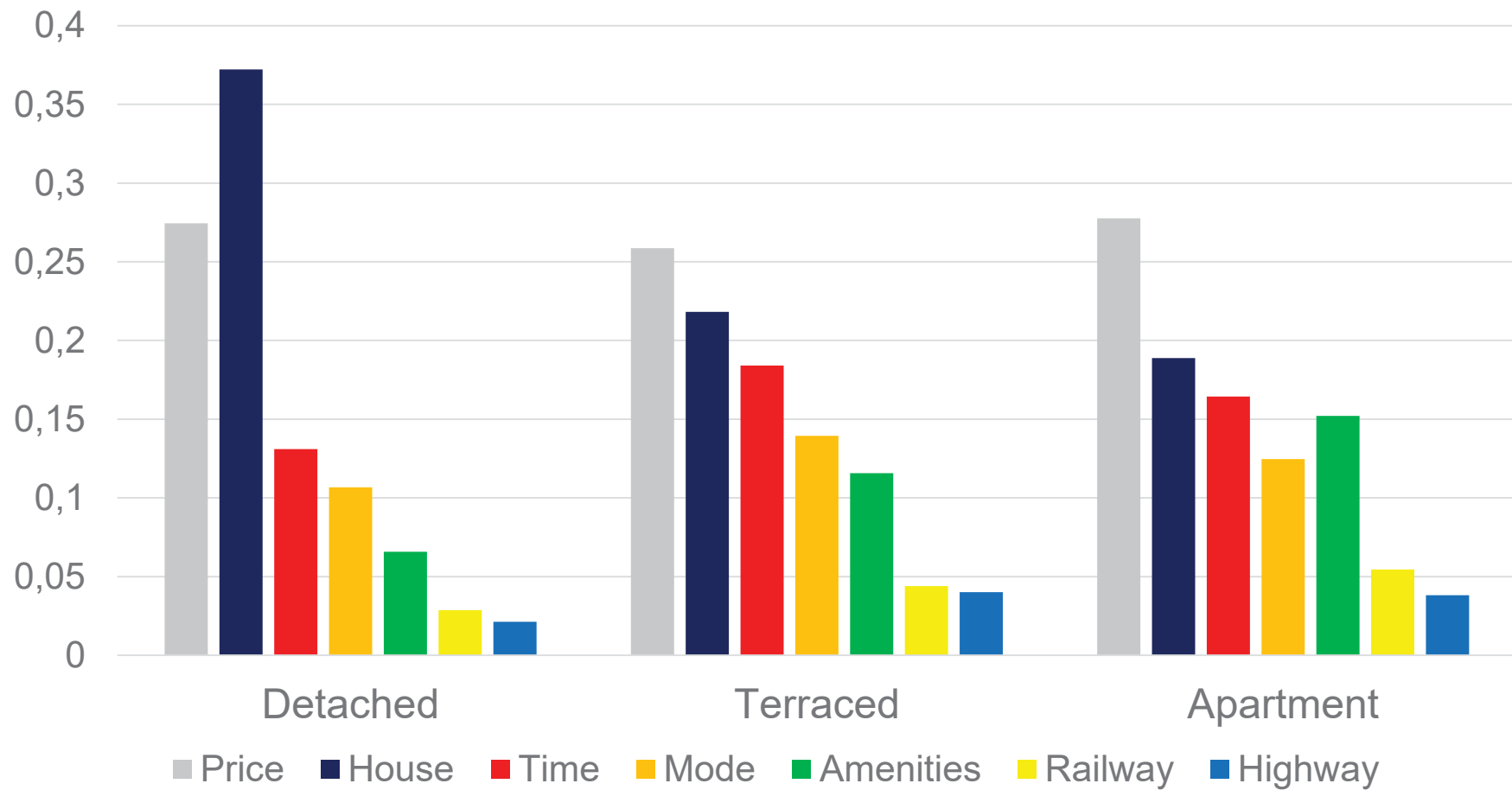
HIGHWAY ACCESS



Relative importance (u-range)



Relative importance (u-range)





Who finds what more important? (Logit model)

Residential environment	Commuting
Households with child	Households w/o child
Current commute long (20-50km)	Current commute short (0-5km)
Currently in low and medium density	Currently in high density

Controlled for: gender, age, household composition, income, education, degree of urbanization



Limitations

- Price modelled as relative to current costs and current tenure
- Variation in housing market is larger than depicted
- Missing variables that explain preferences? (occupation, biography...)



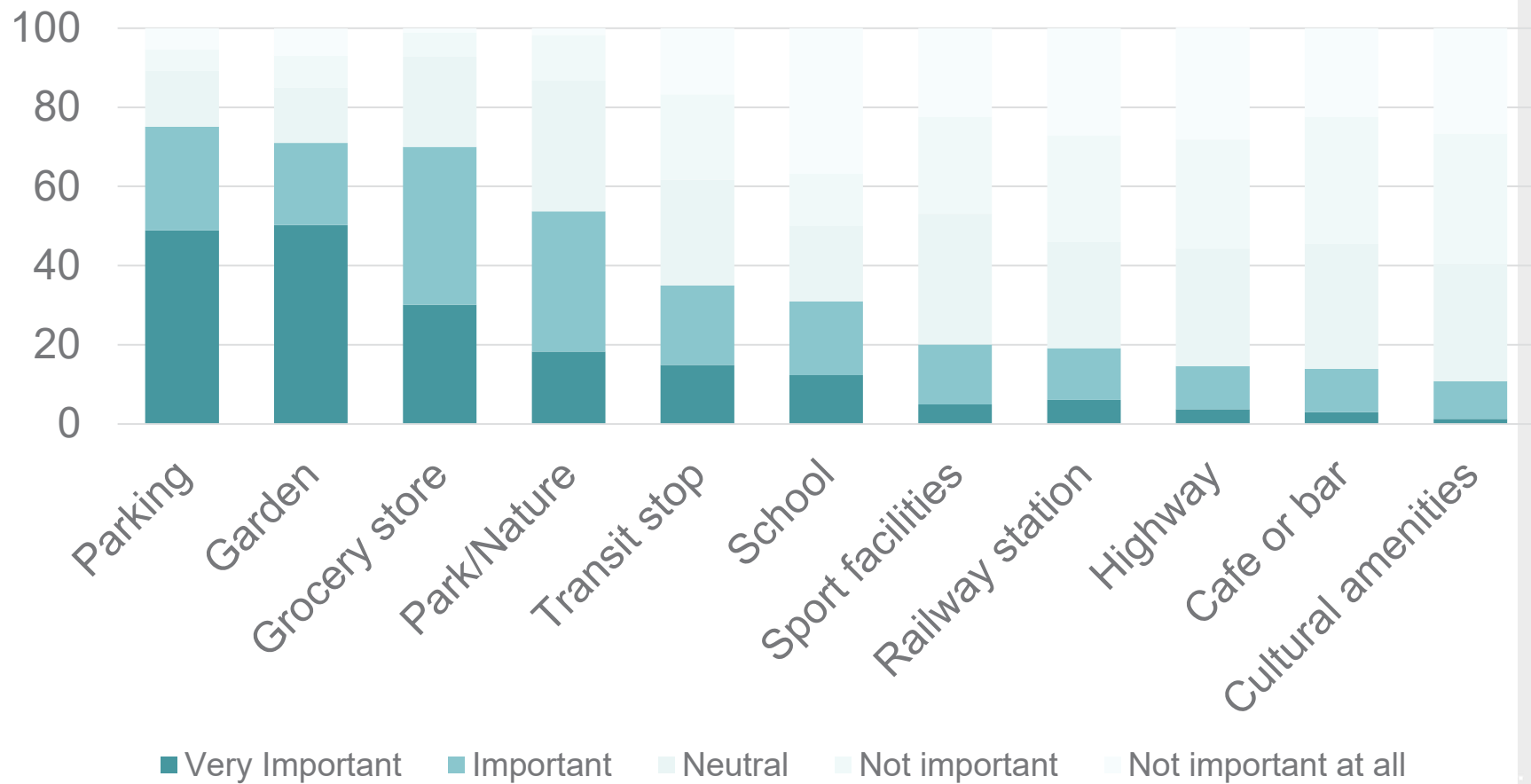
Conclusions

1. On average housing more important than commuting
2. Preference for low urban environment → commuting and amenities less important
3. Preference for urban environment → commuting and amenities more important
3. Life cycle variables more relevant

More info? O.Rubin@uva.nl



Background survey: importance of amenities



Example – Importance for person 1

HOUSE			AMENITIES		
DETACHED	TERRACED	APARTMENT	LOW	MEDIUM	HIGH
-3.2	-0.5	3.7	-1.9	1.0	0.9



$$3.7 - (-3.2) = \underline{6.9}$$

$$70.4\%$$



$$1.0 - (-1.9) = \underline{2.9}$$

$$29.6\%$$



Correlation of attribute importance

	Price	House	Time	Mode	Ameni	Railw.	Highw.
Price		-	-	-	+	-	-
House			-	-	-	-	-
Time				+	0	+	+
Mode					+	+	+
Ameni						+	+
Railw.							+
Highw.							