



Universiteit Antwerpen
| Faculteit Bedrijfswetenschappen
en Economie

Autoloos door het leven:

analyse Belgisch autodeeellandschap

Pieter De Smet

Living without owning a passenger car

- Literature study
- Analysis Belgian car-sharing landscape
- Conclusion

Literature study

Zero-car households: heterogeneity



Brown, A. E. (2017). Car-less or Car-Free? Socioeconomic and Mobility Differences Among Zero-Car households. *Transport Policy*, 60, 152-159.
doi:10.1016/j.tranpol.2017.09.016

Zero-car households: disadvantages



- **Car deprivation**

- Mobility disadvantages and their direct consequences (e.g., mobility-related exclusion)

- **Forced car ownership (FCO)**

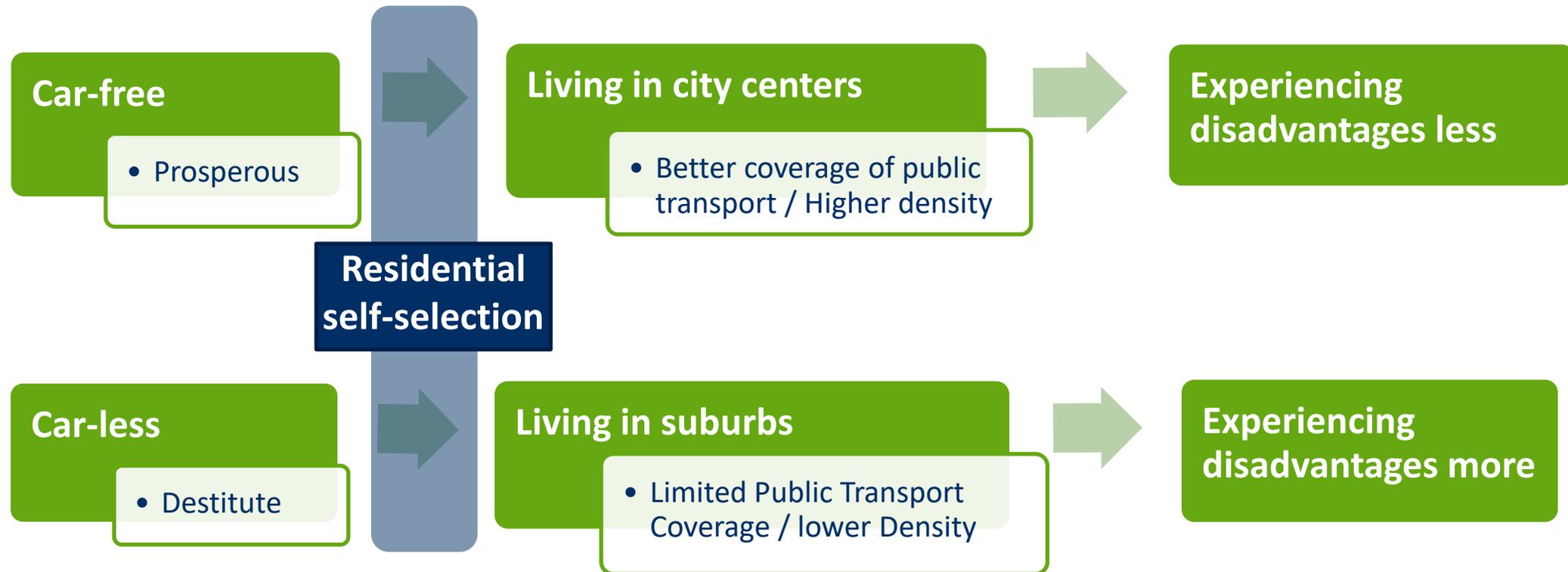
- Still owning a passenger car despite financial difficulties

Kenyon, S., Lyons, G., & Rafferty, J. (2002). Transport and social exclusion: investigating the possibility of promoting inclusion through virtual mobility. *Journal of Transport Geography*, 10(3), 207-219. doi:10.1016/S0966-6923(02)00012-1.

Mattioli, G. (2014). Where Sustainable Transport and Social Exclusion Meet: Households Without Cars and Car Dependence in Great Britain. *Journal of Environmental Policy & Planning*, 16(3), 379-400. doi:10.1080/1523908X.2013.858592

Mattioli, G. (2017). "Forced car ownership" in the UK and Germany: socio-spatial patterns and potential economic stress impacts. *Social Inclusion*, 5(4), 147-160. doi:10.17645/si.v5i4.1081

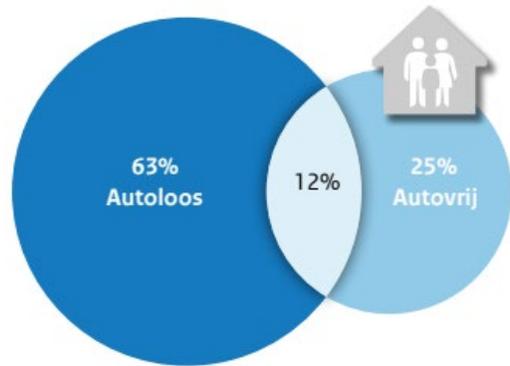
Zero-car households



Mitra, S. K., & Saphores, J. M. (2018). Carless in California: Green choice or misery? *Journal of Transport Geography*, 65, 1-12. doi:10.1016/j.jtrangeo.2017.09.016.

Lack of quantitative data

- Relative ratios between car-free and car-less households?
- Number of households affected by car deprivation and/or FCO?
- Exception: Zijlstra, Witte en Bakker (2022)



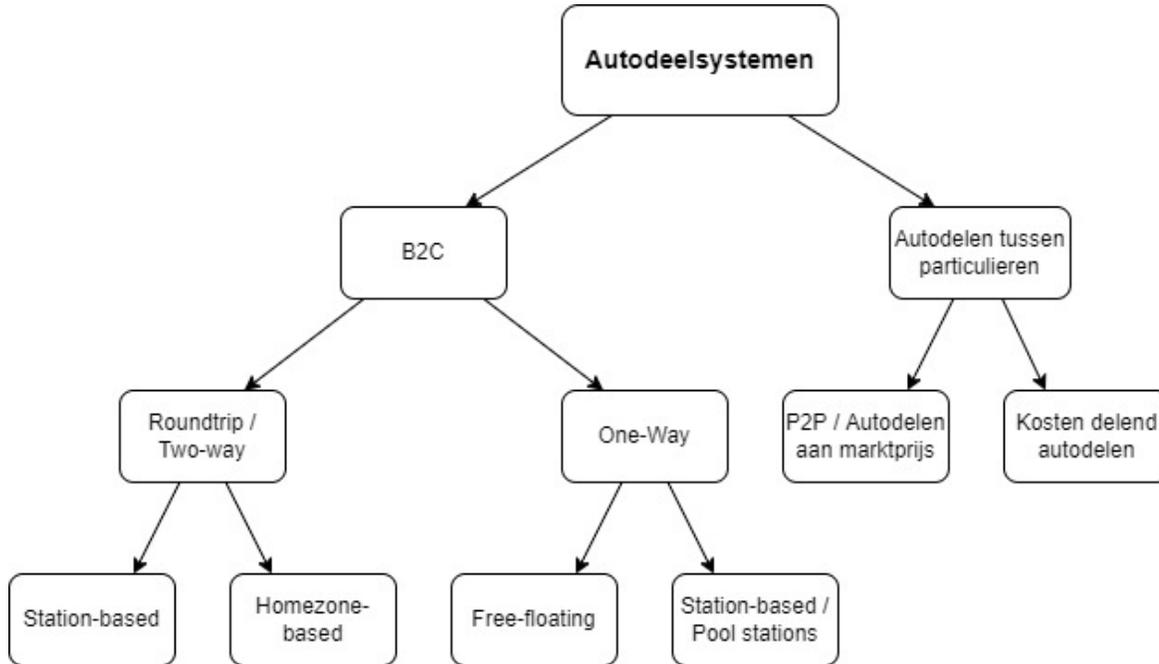
Distribution of households without a car (Zijlstra, Witte en Bakker, 2022)

“In totaal heeft, volgens onze schattingen, bijna 6% van de Nederlanders met een auto dit ‘gedwongen autobezit’”. (p.8)

Zijlstra, T., Witte, J.-J., & Bakker, S. (2022). De maatschappelijke effecten van het wijdverbreide autobezit in Nederland. Retrieved from <https://www.kimnet.nl/publicaties/publicaties/2022/02/22/het-wijdverbreide-autobezit-in-nederland>

Analysis Belgian car-sharing landscape

Taxonomy



Taxonomy of car-sharing systems



Roundtrip station-based	Roundtrip homezone-based	One-way free-floating
BattMobility	CoopStroom	GreenMobility
Cambio		
Claus2you	Partago	Poppy
Flexigo	Wibee	
Autopartners Share		
Stapp.in		

Kosten delend autodelen	Autodelen aan marktprijs
Cozywheels	Getaround
Dégage!	

Overview car-sharing providers in Belgium (based on Matthijs et al., 2021)

Matthijs, J., Rodenbach, J., Vansenant, M., Sneeuws, B., & Ryvers, Z. (2021). *Rapport Autodelen 2020*. autodelen.net. Retrieved from <https://www.autodelen.net/wp-content/uploads/2021/02/Jaarrapport-autodelen-2020.pdf>

Rodenbach, J., Mathis, J., Chicco, A., & Diana, M. (2018). Car sharing in Europe: a multidimensional classification and inventory. Europese Commissie. Retrieved from <https://stars-h2020.eu/wp-content/uploads/2019/06/STARS-D2.1.pdf>

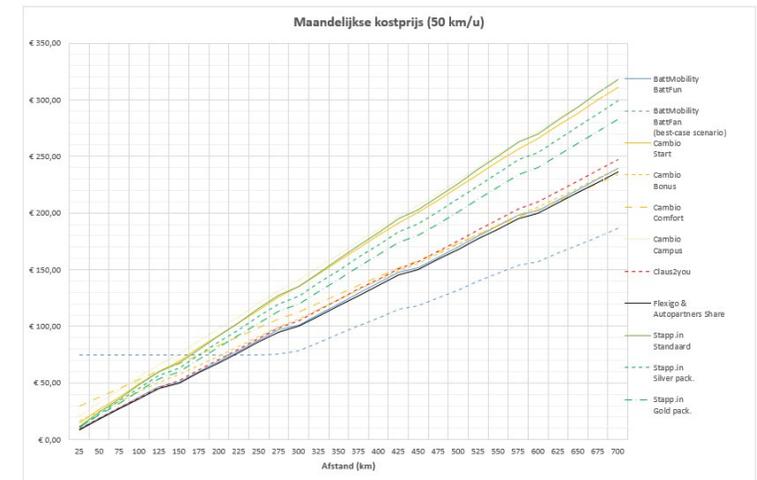
Research design

- Per subgroup comparison in terms of :
 - Operational features (age restrictions, active region)
 - Car fleet (amount, type, models)
 - facilities (reservation policy, free parking, abroad)
 - Prices (Determined on *April 15th, 2022*, for Renault ZOE)

	BattMobility BattFun	BattMobility BattFan
Waarborg	€ 275,00	€ 275,00*
Maandelijks engagement	€ 0,00	> € 75,00
kostprijs per km	€ 0,16	€ 0,13**
kostprijs per uur	€ 5,30	€ 3,97**
Dagprijs	€ 31,45	€ 23,60



Afstand(km)	Tijd (uur)	BattMobility BattFun	BattMobility BattFan (best-case scenario)
25	1	€ 9,30	€ 75,00
50	2	€ 18,60	€ 75,00
75	3	€ 27,90	€ 75,00
100	4	€ 37,20	€ 75,00
125	5	€ 46,50	€ 75,00
150	5	€ 50,50	€ 75,00
175	6	€ 59,80	€ 75,00
200	7	€ 69,10	€ 75,00
225	8	€ 78,40	€ 75,00
250	9	€ 87,70	€ 75,00
275	10	€ 97,00	€ 75,45
300	10	€ 101,00	€ 78,70
325	11	€ 110,30	€ 85,92
350	12	€ 119,60	€ 93,14
375	13	€ 128,90	€ 100,36
400	14	€ 138,20	€ 107,58
425	15	€ 147,50	€ 114,80
450	15	€ 151,50	€ 118,05
475	16	€ 160,80	€ 125,27
500	17	€ 170,10	€ 132,49
525	18	€ 179,40	€ 139,71
550	19	€ 188,70	€ 146,93
575	20	€ 198,00	€ 154,15
600	20	€ 202,00	€ 157,40
625	21	€ 211,30	€ 164,62
650	22	€ 220,60	€ 171,84
675	23	€ 229,90	€ 179,06
700	24	€ 239,20	€ 186,28



Conclusions

■ General

- Complex sector
 - Lack of standardisation
- In full development
- Mainly differentiation in terms of facilities, active regions and age
 - With the exception of Cozywheels en Dégage

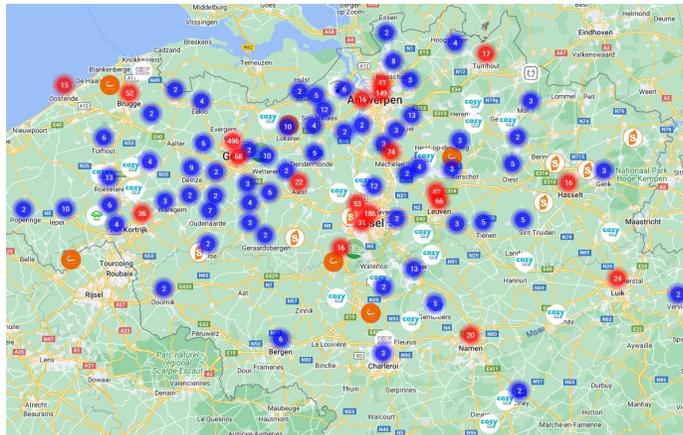
■ Critical remarks

- False information (autodelen.net, Wibee)
- Market position Getaround

Conclusion

Conclusion

- Car-sharing organizations targeting sparsely populated areas as a solution for car-less households
- Problem regarding the location of car-less households:



Autodelen.net



- Significant decline in car use among millennials ↔ Age restrictions

