Dårlige erfaringer og rutevalg på sykkel

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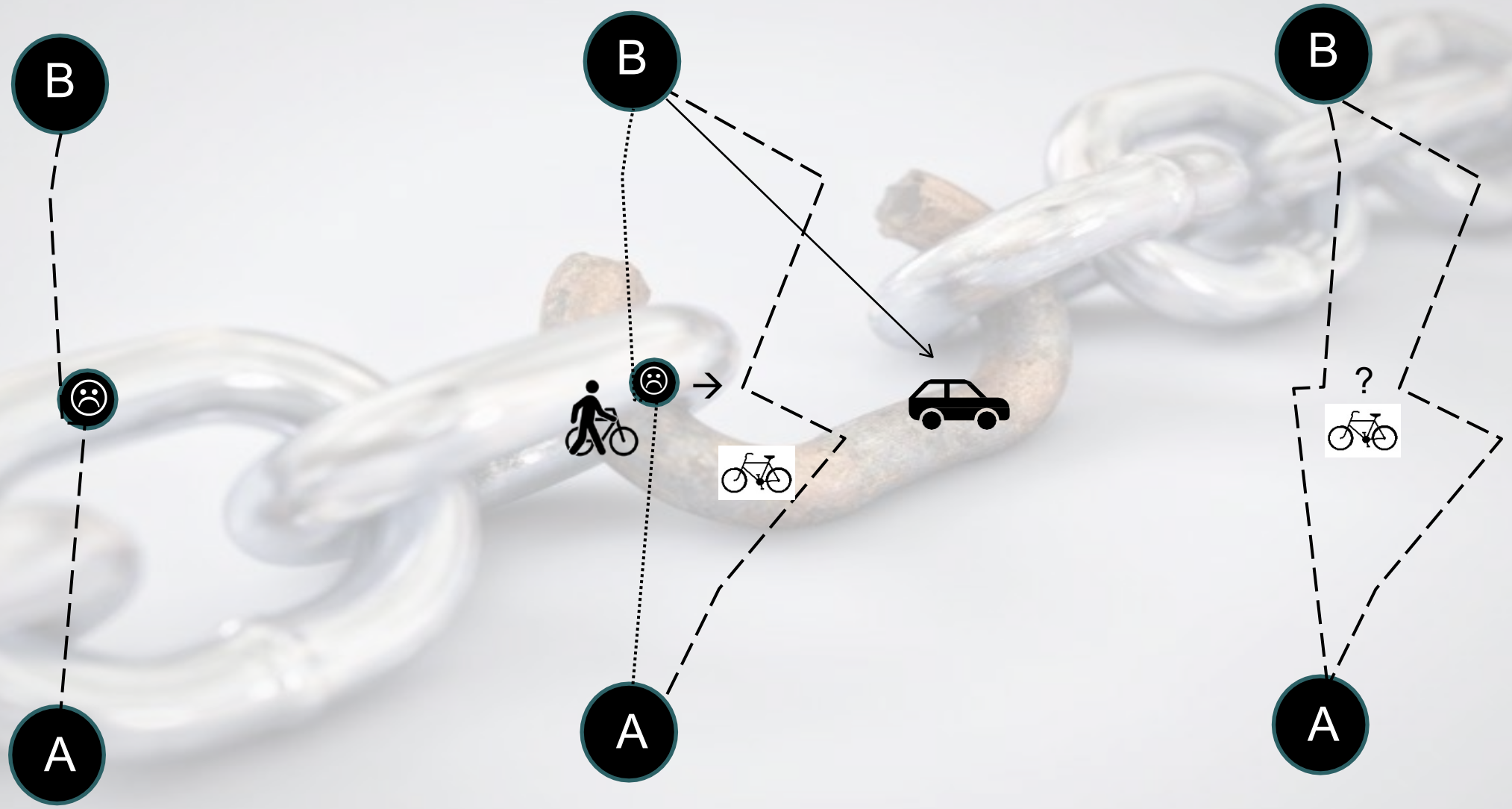
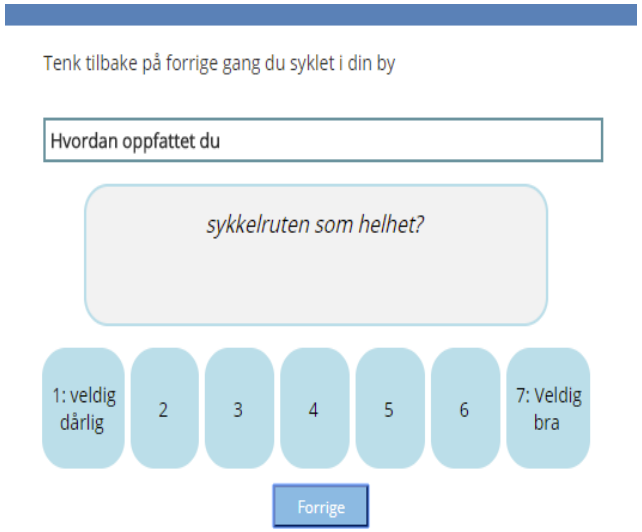
Dårlige erfaringer → Justering av atferd? → Rutevalg



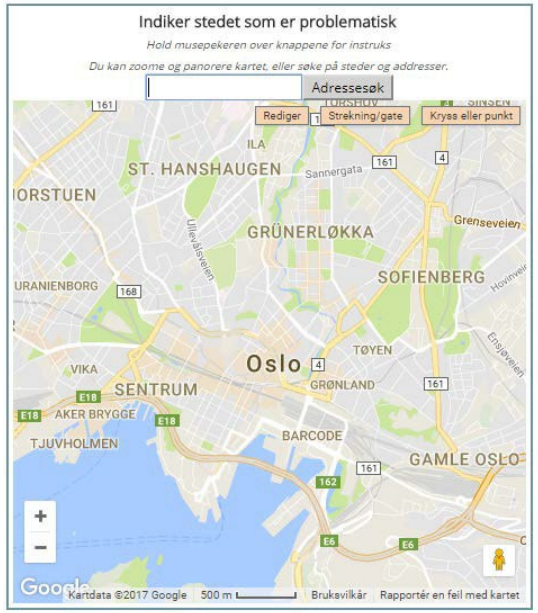
Survey

(n=ca. 3500)



Mapping

(n= 2121)



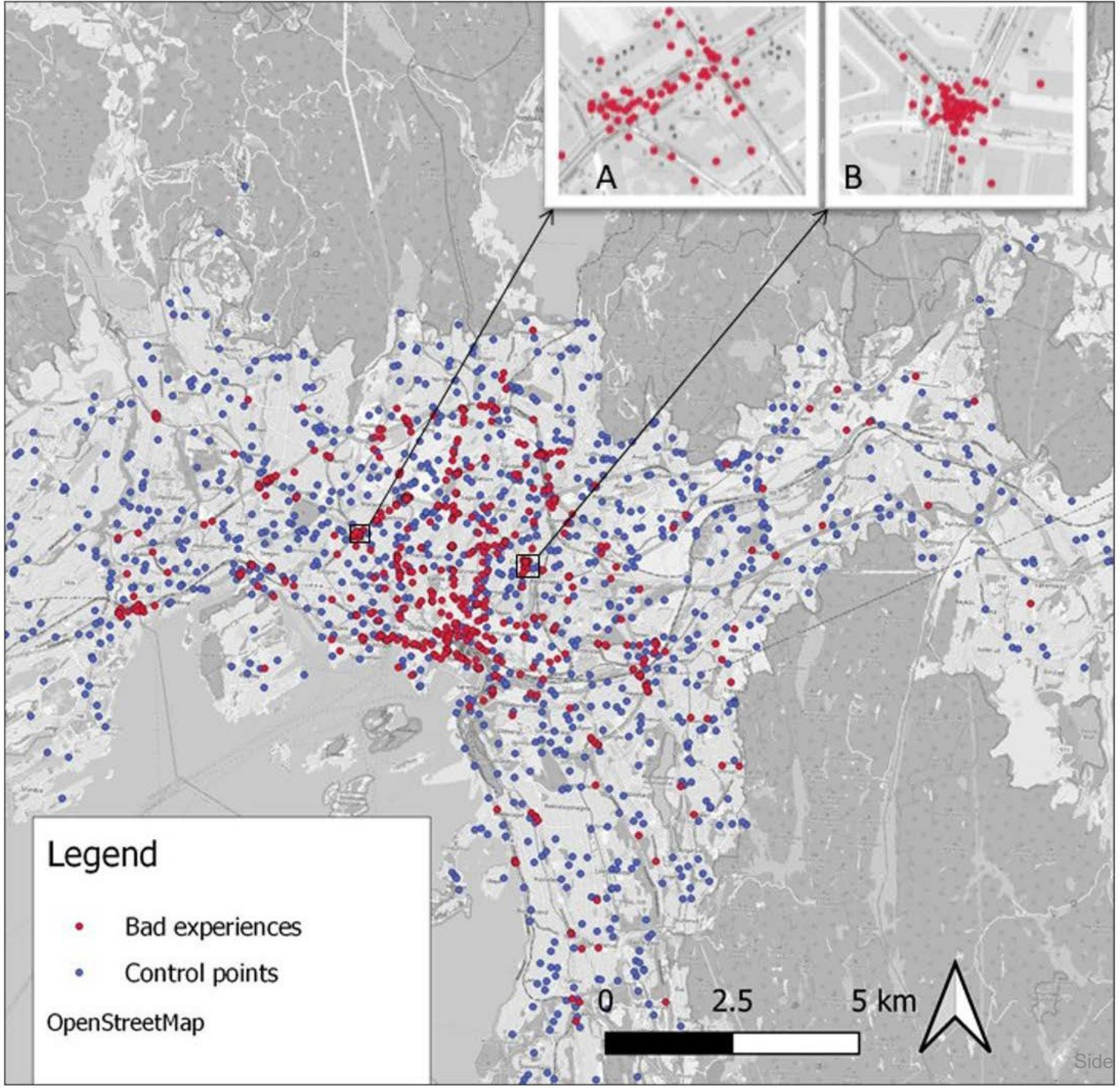
Location of bad experiences

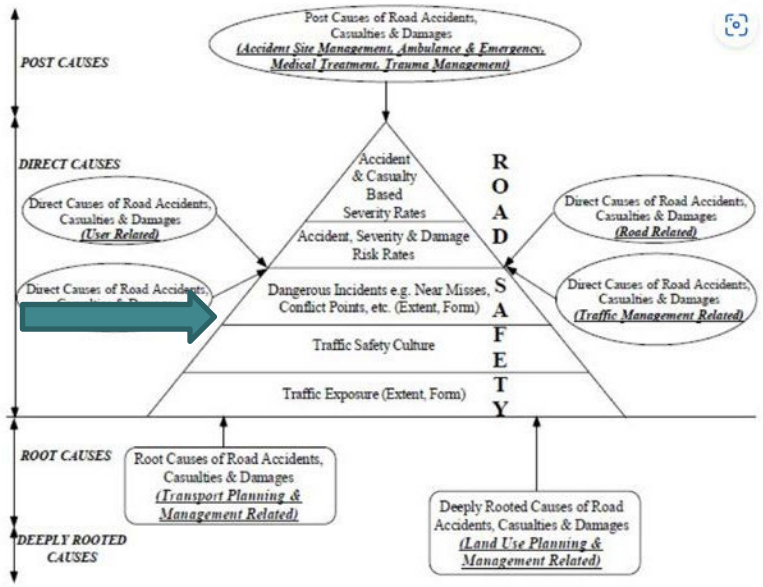
GPS tracking

(n= 734(>25.000 trips)

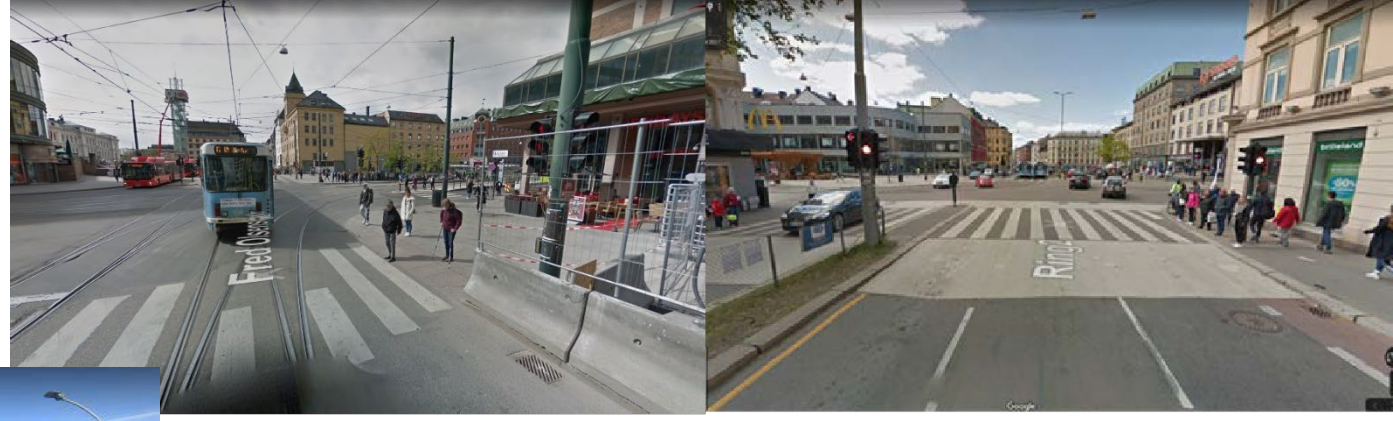
All travel, all day
Tracking and mode

Steder med dårlige erfaringer på sykkel (rød)



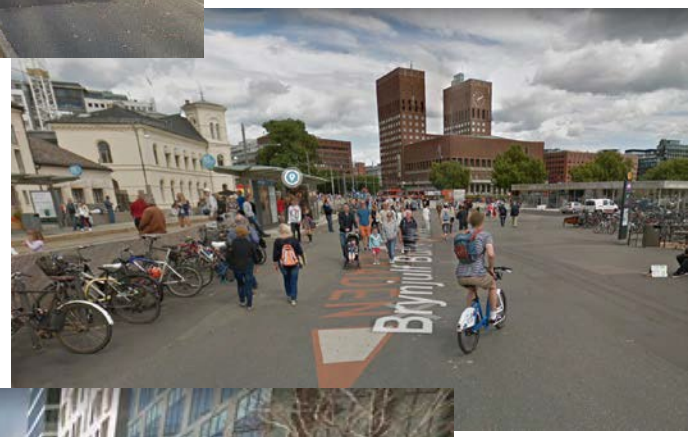


Kollektiv transport holdeplass

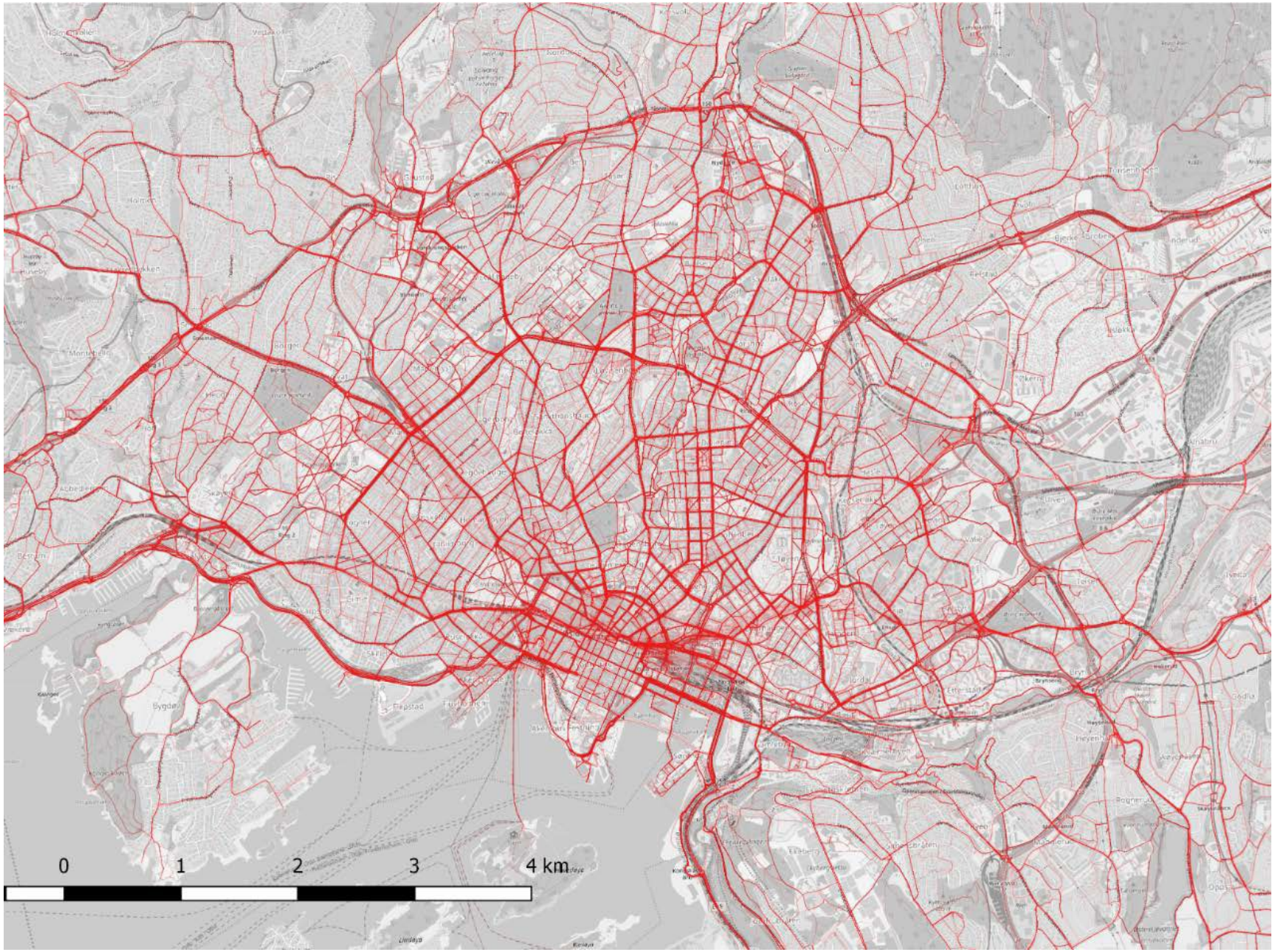


Ring 3 kryss

Sentrale steder



Sykkelfelt ring 2 og DEG



Problem; steder hvor mange sykler blir også rapportert mye.

→ Normalisert med

antall syklister

Steder med dårlige erfaringer på sykkel

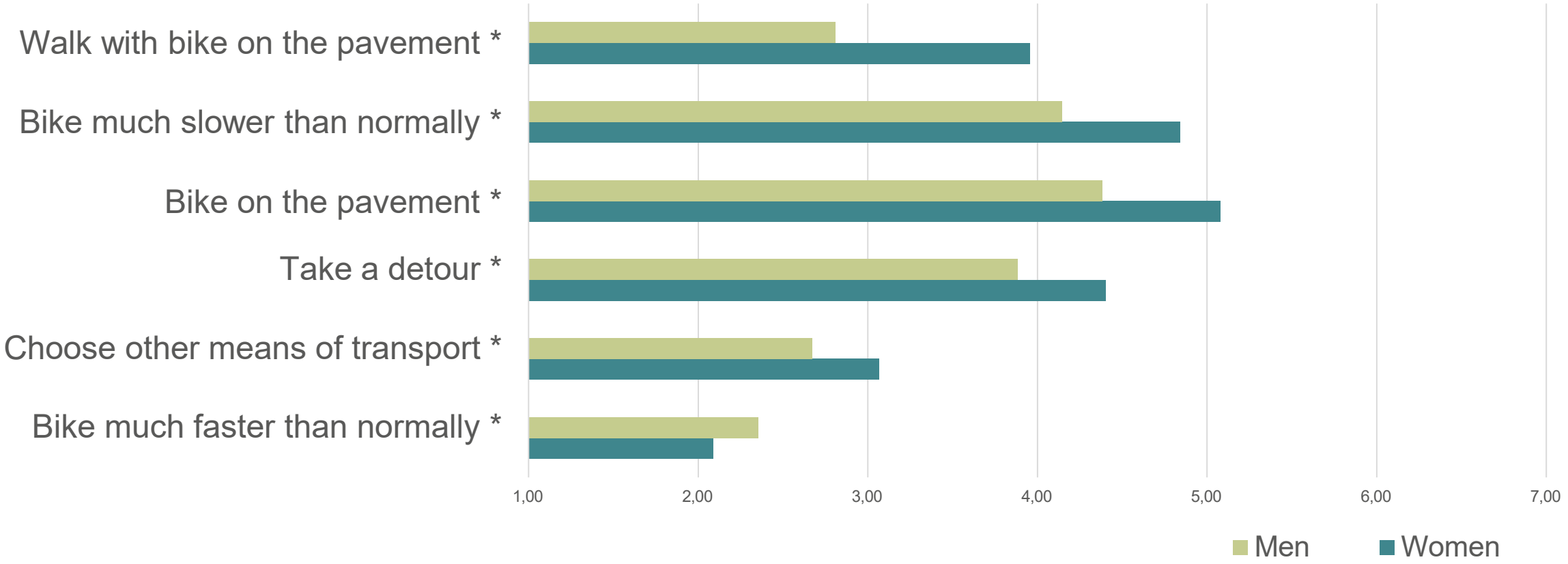
		Bootstrapped results			non-Bootstrapped	
		B	Lower	Upper	Sig.	Exp(B)
Bicycle infrastructure	Shared road				**0,00**	
	Pedestrian/cycle road	**0,65**	**0,30**	**1,04**	**0,00**	**1,92**
	Cycle lane	0,02	-0,40	0,49	0,93	1,02
Public Transport Infrastructure	**Public transport stop density**	**0,22**	**0,04**	**0,42**	**0,01**	**1,24**
	Tramline	**1,33**	**0,66**	**2,09**	**0,00**	**3,77**
General infrastructure	**Amount of daily traffic[1]**	**0,07**	**0,03**	**0,10**	**0,00**	**1,07**
	Speed limit (30)				**0,02**	
	40	**0,45**	**-0,02**	**0,92**	**0,05**	**1,56**
	50	**0,60**	**0,20**	**1,06**	**0,00**	**1,81**
	60 +	-0,13	-1,22	0,81	0,85	0,88
	Road section lenghth[1]	**-0,15**	**-0,25**	**-0,06**	**0,00**	**0,86**
	Pedestrian crossing[1]	0,66	-1,02	2,36	0,29	1,94
Land use	Population density	0,07	-0,21	0,38	0,59	1,08
	Establishment density	**0,40**	**0,22**	**0,60**	**0,00**	**1,49**
	Highway environment	-0,61	-1,36	0,13	0,12	0,55
Topography	Slope gradient	-1,89	-8,09	3,07	0,45	0,15
Other	**User frequency**	**2,14**	**1,91**	**2,49**	**0,00**	**8,46**

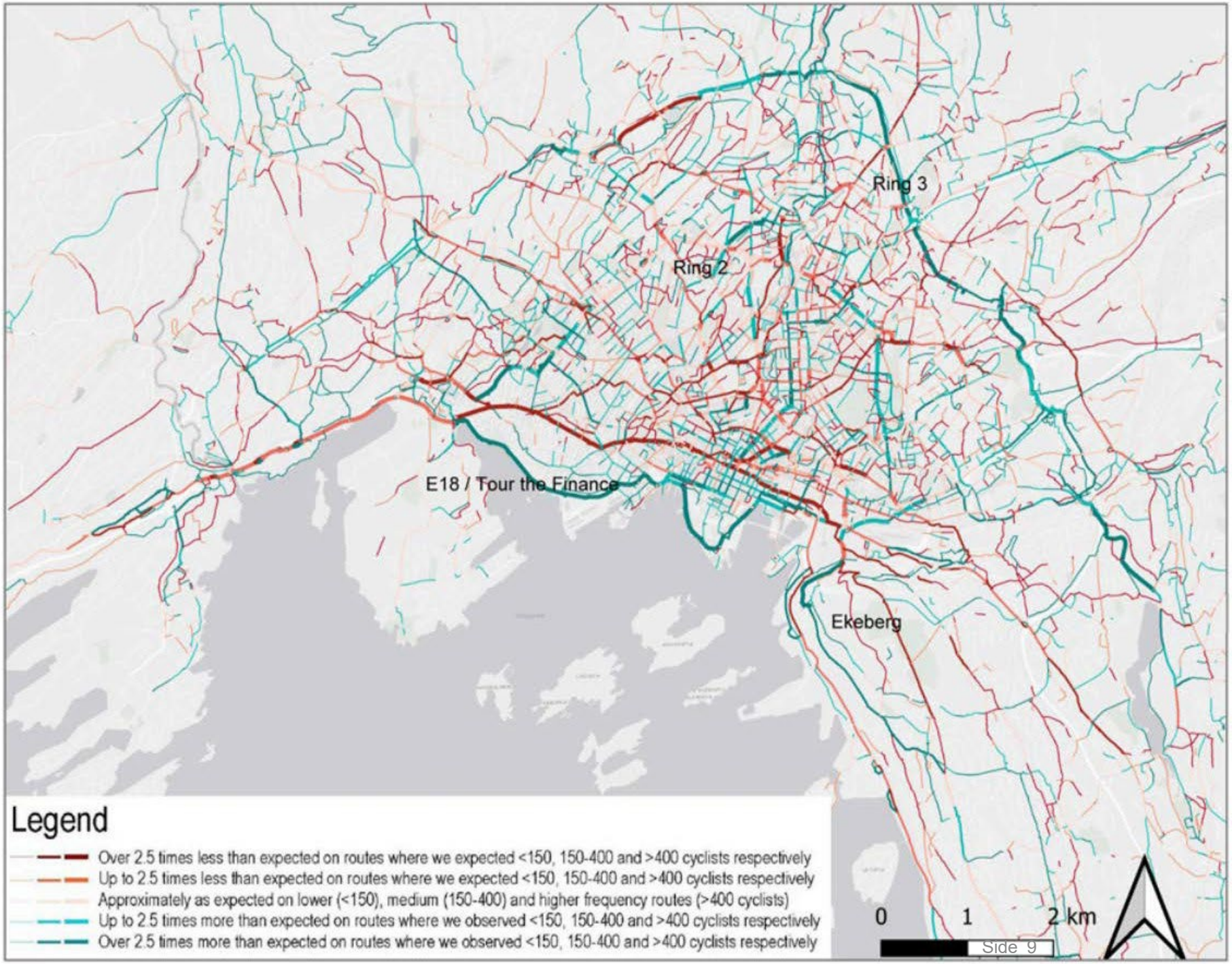
[1] log transformed values

- Trikkelinjer & stoppesteder kollektiv transport
- Høyere hastighet trafikk
- Veikryss
- Steder med mange bedrifter (butikk/kontor)
- Kombinert Gang- og sykkelvei

Endring av atferd

In which degree do you do the following at places where you find it difficult, unsafe or uncomfortable to bike?





Detouring

Rød= mindre valgt
Grønn= oftere valgt

Spatial regression

Table 1. Linear regression models: 1. Cycling demand model. 2. Relative cycling route choice model - explaining observed cyclist frequencies against those expected had all chosen to cycle shortest paths.

	Model 1: Cycling frequency			Model 2: Relative route choice		
	Coefficient	t	P>|t|	Coefficient	t	P>|t|
Built environmental attributes						
Area % green space	1.870498	5.48	0.000	−.5295923	−2.26	0.024
Area % water	15.96709	5.09	0.000	4.122135	3.88	0.000
Population density	.1653381	9.76	0.000	−.0033138	−1.88	0.060
Workplace density	.1151609	9.72	0.000	−.0001701	−0.24	0.812
Highway environment	1.048291	1.45	0.147	−.9309451	−1.97	0.049
Infrastructural attributes						
Section length[1]	−2.792848	−17.77	0.000	.2621142	4.21	0.000
Tramline presence	84.40119	11.71	0.000	−.1927907	−0.91	0.361
PT stop presence	.0853806	8.08	0.000	.0018484	1.10	0.271
Speed limit on road	.0479106	7.41	0.000	.0098122	2.39	0.017
Bike highway (segregated)	35.66265	15.60	0.000	3.397936	6.85	0.000
Bike road (segregated)	67.37219	5.37	0.000	2.550859	6.83	0.000
Bike lane	65.75296	13.01	0.000	1.156659	3.13	0.002
Pedestrian path	−.3155473	−0.99	0.324	.6916641	4.63	0.000
Average slope gradient	−7.638744	−2.81	0.005	−5.675645	−4.20	0.000
_cons	10.83353	16.89	0.000	−.4633427	−1.79	0.073
R square	0.1865			0.1010		

1 Log transformed values.

→Unngår; kryss, bakker, og grønne områder

→Omvei mot; all sykkeltilretteleggi ng , høyere fartsgrenser

Figure 2. Revealed versus shortest route A—avoidance of a park. Street View images from: (Google, 2022)

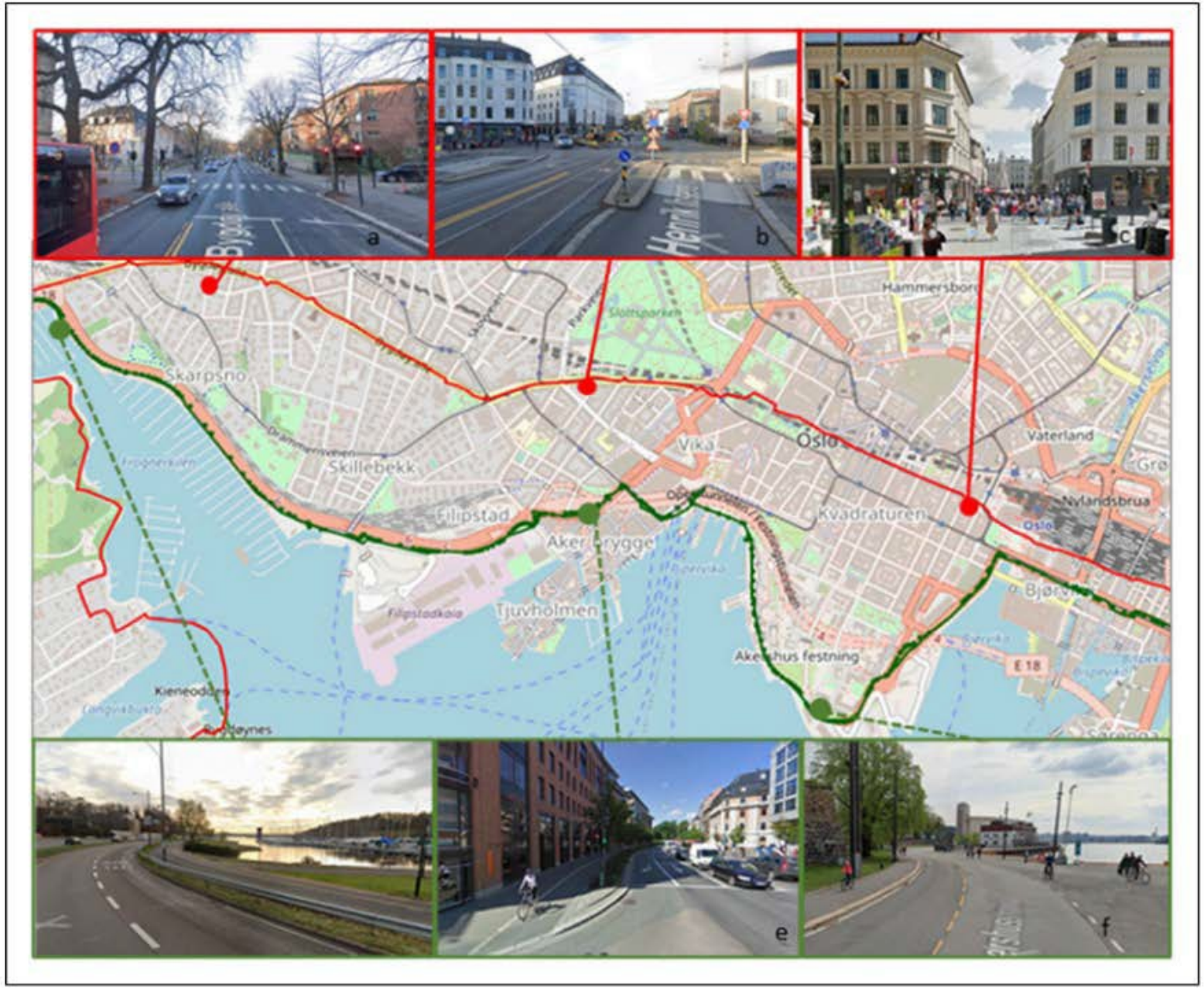


Figure 3. Revealed versus shortest route B—a waterfront detour. Street View from: (Google, 2022)

Figure 4. Revealed versus shortest route C—avoiding steep slopes and poorly navigable narrow streets. Street View from: (Google, 2022)

Conclusions

- Dårlige erfaringer på sykkel er vanlig;
  - *kollektivholdeplasser, trikkelinjer, gang og sykkelvei*
  - *Hastighet og antall biler bidrar også*
  - *Density på antall kryss og bedriftstetthet*
- Kompenserende atferd mer vanlig for kvinner:
  - *Gå eller sykling på fortau, sykle saktere, eller ta en omvei → forklarende factor for lavere sykkelbruk og ulykker?*
- *Omvei mot*, all sykkelinfrastruktur, men også høyere fartsgrenser.
  - *Ungår; krysstetthet, bakker og grønne områder*

  →Kollektivholdeplasser, trikkelinjer og høy bedriftstetthet ikke sig. her → ikke mulig å unnga?

Lese mer?

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Road infrastructures, spatial surroundings, and the demand and route choices for cycling: Evidence from a GPS-based mode detection study from Oslo, Norway

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Abstract
To achieve a higher cycling uptake, it is essential for planners to know what kind of cycling infrastructure to plan and where, that is, through which types of urban environments. In this paper, we provide a deeper understanding of cycling demand and cycling route choices and

Takk for meg.

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