Turboroundabouts in The Netherlands

Dirk de Baan

June 2013

Turboroundabouts worldwide by country

Aantal van Weg 1		Binnen-buiten kom		
Land	Provincie	Binnen	Buiten	Eindtotaal
Aruba	Aruba		4	4
België	België		1	1
Duitsland	Duitsland	3	5	8
Estland / Estonia	Estland / Estonia		1	1
Hongarije	Hongarije	2	7	9
Litouwen	Litouwen		1	1
Nederland	Drenthe	2		2
	Flevoland	17	5	22
	Friesland	2	5	7
	Gelderland		8	8
	Groningen		4	4
	Limburg	5	13	18
	Noord-Brabant	9	32	41
	Noord-Holland	12	8	20
	Overijssel	2	13	15
	Utrecht	7	14	21
	Zeeland		4	4
	Zuid-Holland	16	60	76
Totaal Nederland		72	166	238
Oostenrijk	Oostenrijk		1	1
Polen	Polen	3	4	7
Roemenië	Roemenië		3	3
Slovenië	Slovenië	6	3	9
Spanje	Spanje	1		1
USA	Arizona		2	2
Zuid-Afrika	Zululand		1	1
Eindtotaal		87	199	286

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Turboroundabouts worldwide by type

Aantal van Locatie	Jaar																
Vorm turbo	??	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Eindtotaal
ei-rotonde	7		1	3	4	1		5	1	2	11	12	22	7	2		78
knierotonde	4		2					4	1	1	4	7	9	1	3		36
look-a-like	3			1				2	1		1	4	5	1			18
onbekend													1	4	1		6
ovonde (met turbokenmerken)			1		1			1			1	1					5
partiële turborotonde	4			1	1	1	1	1		1	6	7	7	2	1		33
rotorrotonde	1																1
spiraalrotonde								1					3		2		6
turbokluifrotonde	1	1					1			1	3	2	4		1		14
turborotonde	6		2	1	2			7	4	5	7	19	15	11	5	2	86
turboverkeersplein									2			1					3
Eindtotaal	26	1	6	6	8	2	2	21	9	10	33	53	66	26	15	2	286

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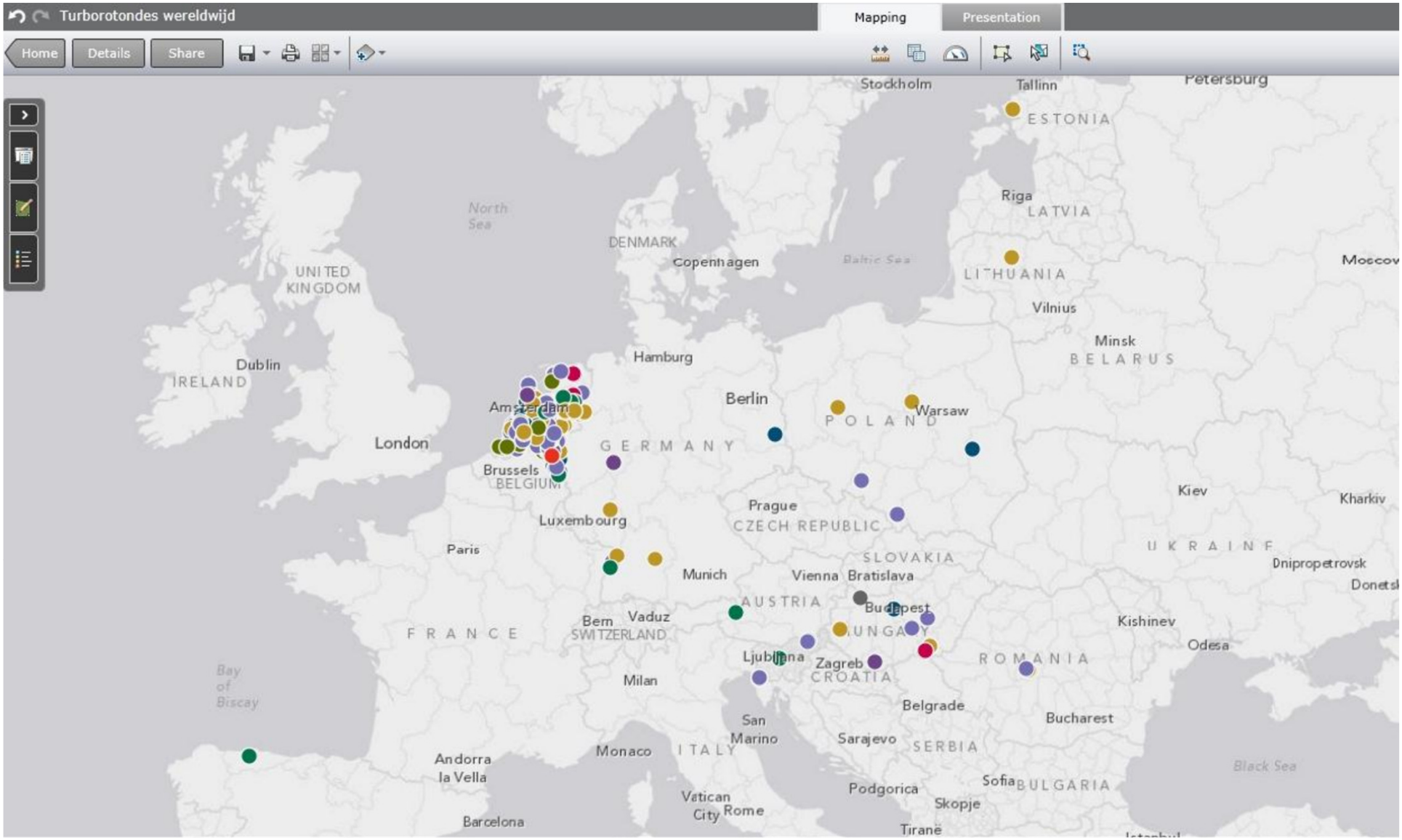
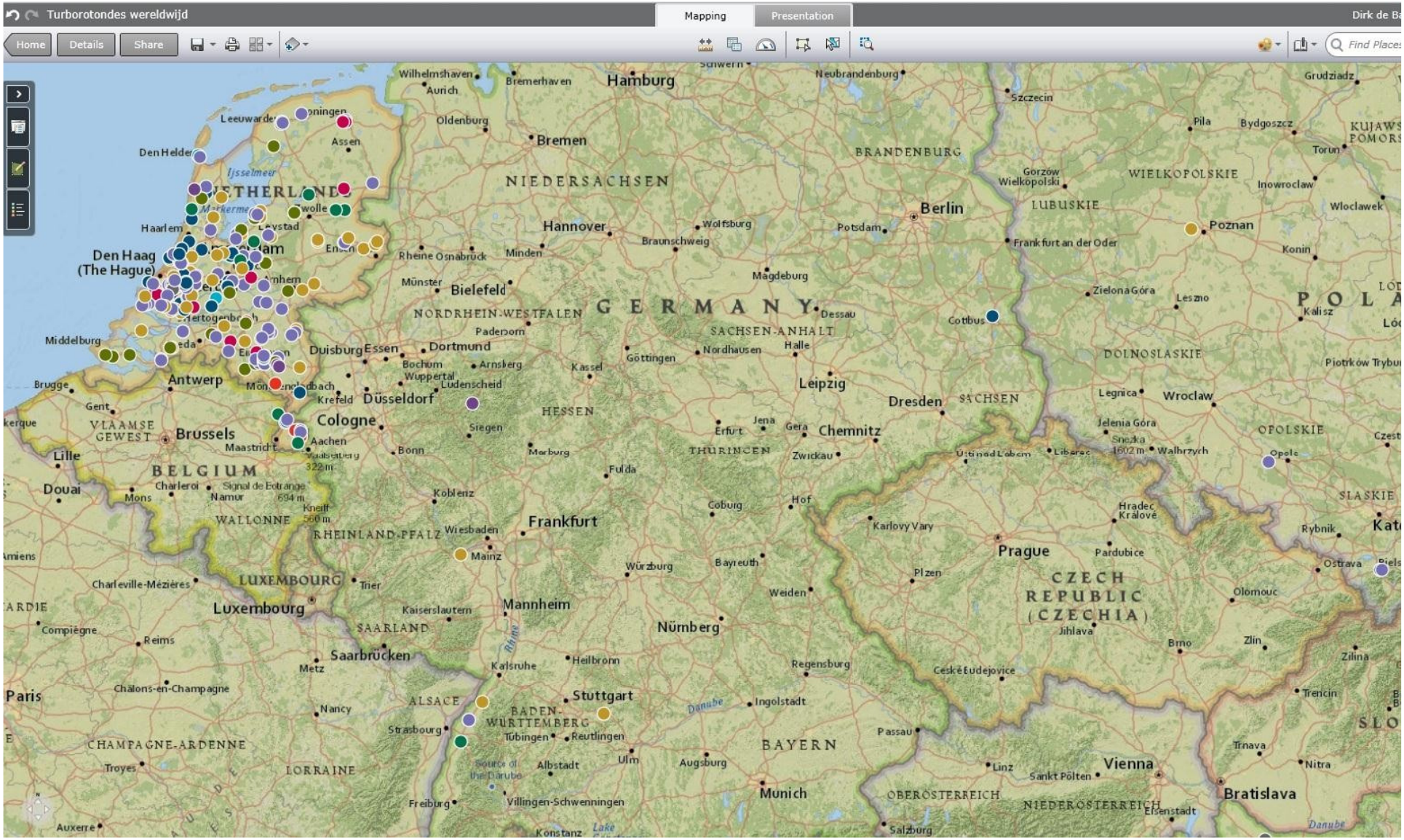
Turboroundabouts Europe

http://www.dirkdebaan.nl/locaties.html



Turboroundabouts NL+D

http://www.dirkdebaan.nl/locaties.html



Proposition 1 / *Vorschläge 1*

The lane separation (7 cm high) is essential for reducing the speed by. Applying the lane separation leads to greater road safety.

Die Spur Trennung (7 cm hoch) ist für die Verringerung der Geschwindigkeit von wesentlicher Bedeutung. Die Anwendung der Spur Trennung führt zu mehr Sicherheit im Straßenverkehr.

Proposition 2 / *Vorschläge 2*

A "*turbo traffic square*"(Dutch: *turboverkeersplein*) has a very high capacity and is also applicable in Germany.

Ein „Turbo Karussell" hat eine sehr hohe Kapazität und kann in Deutschland auch angewendet werden.

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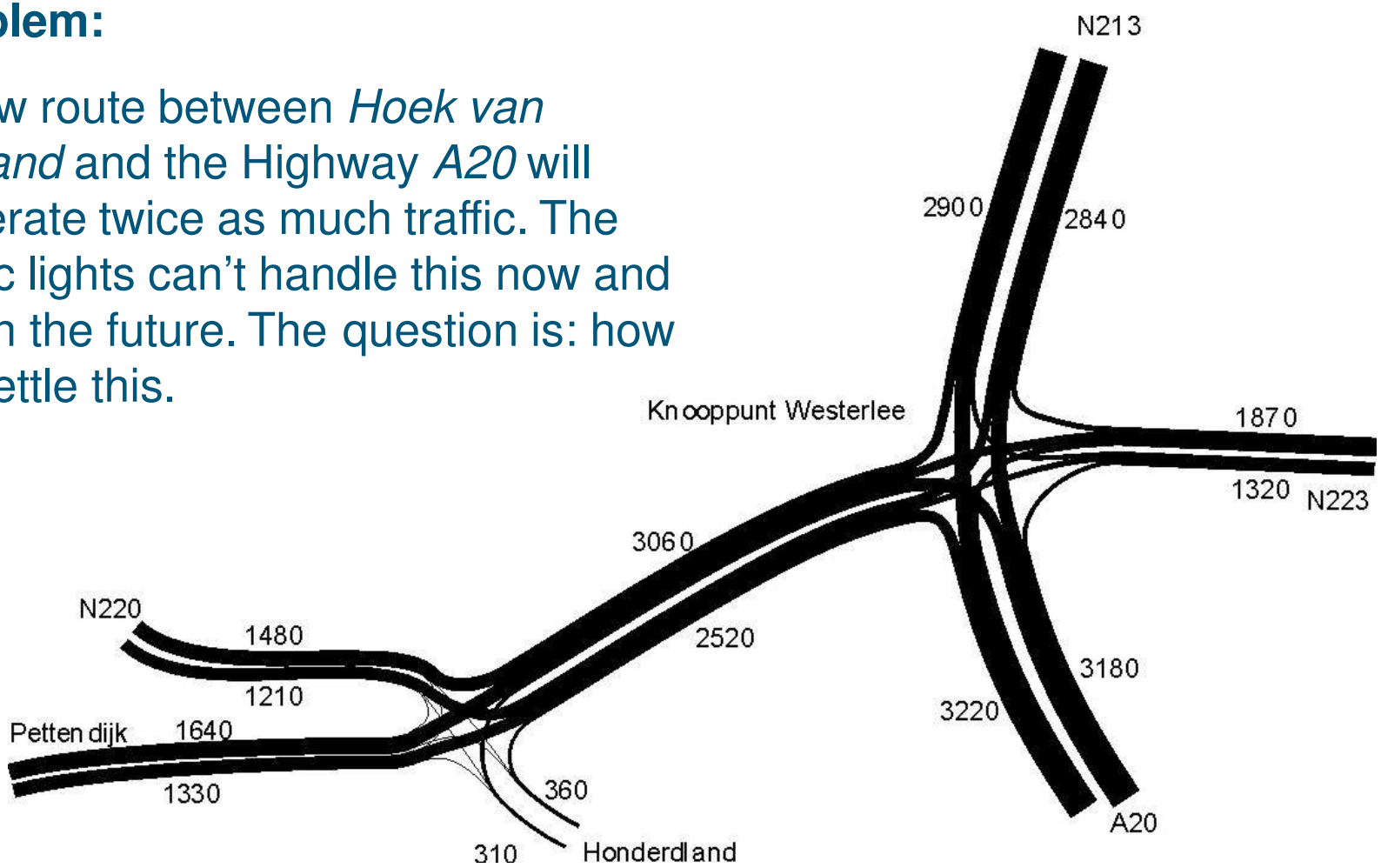
Traffic 2010 on *turbo traffic square* "Westerlee"

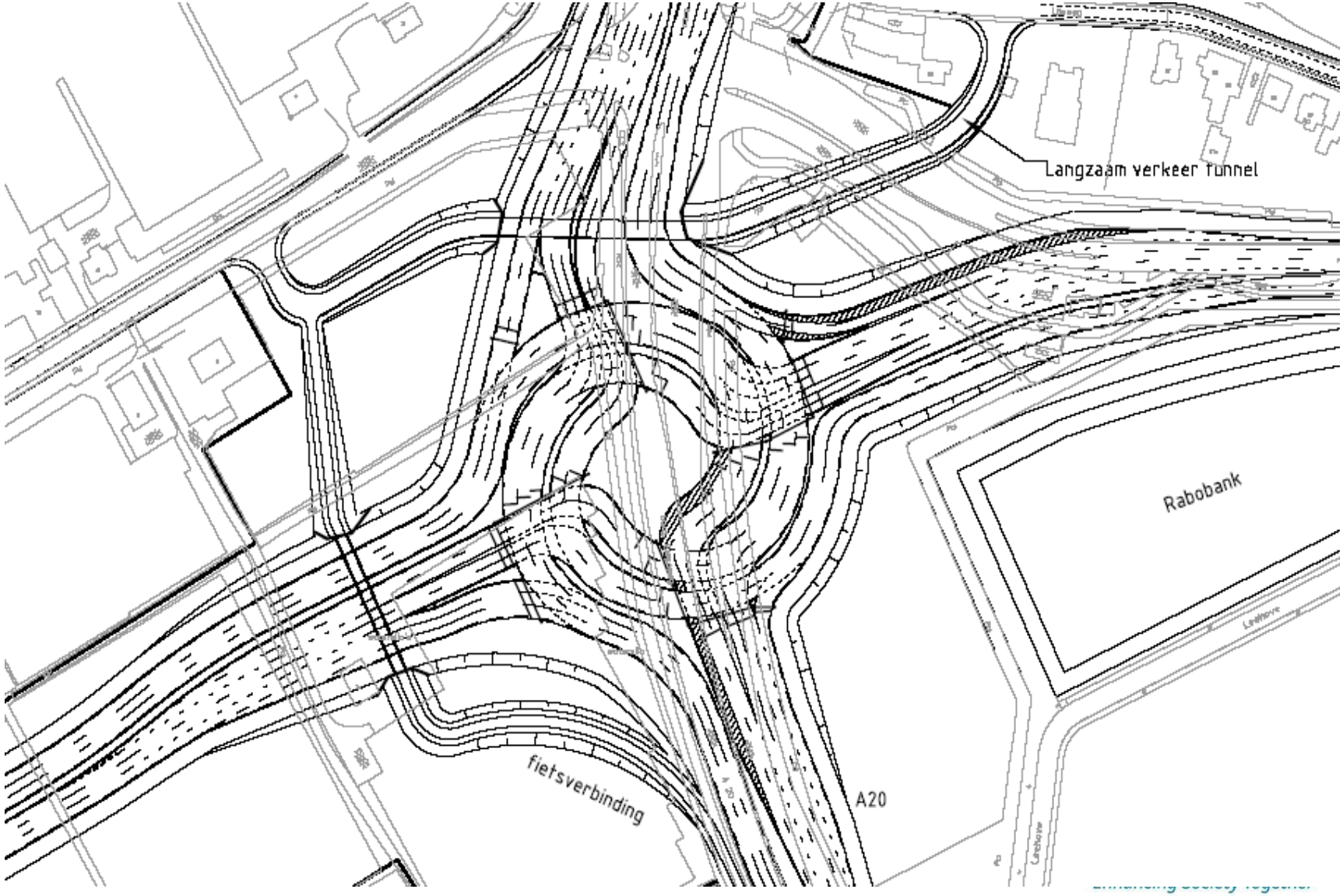
Problem:

A new route between *Hoek van Holland* and the Highway *A20* will generate twice as much traffic. The traffic lights can't handle this now and not in the future. The question is: how to settle this.



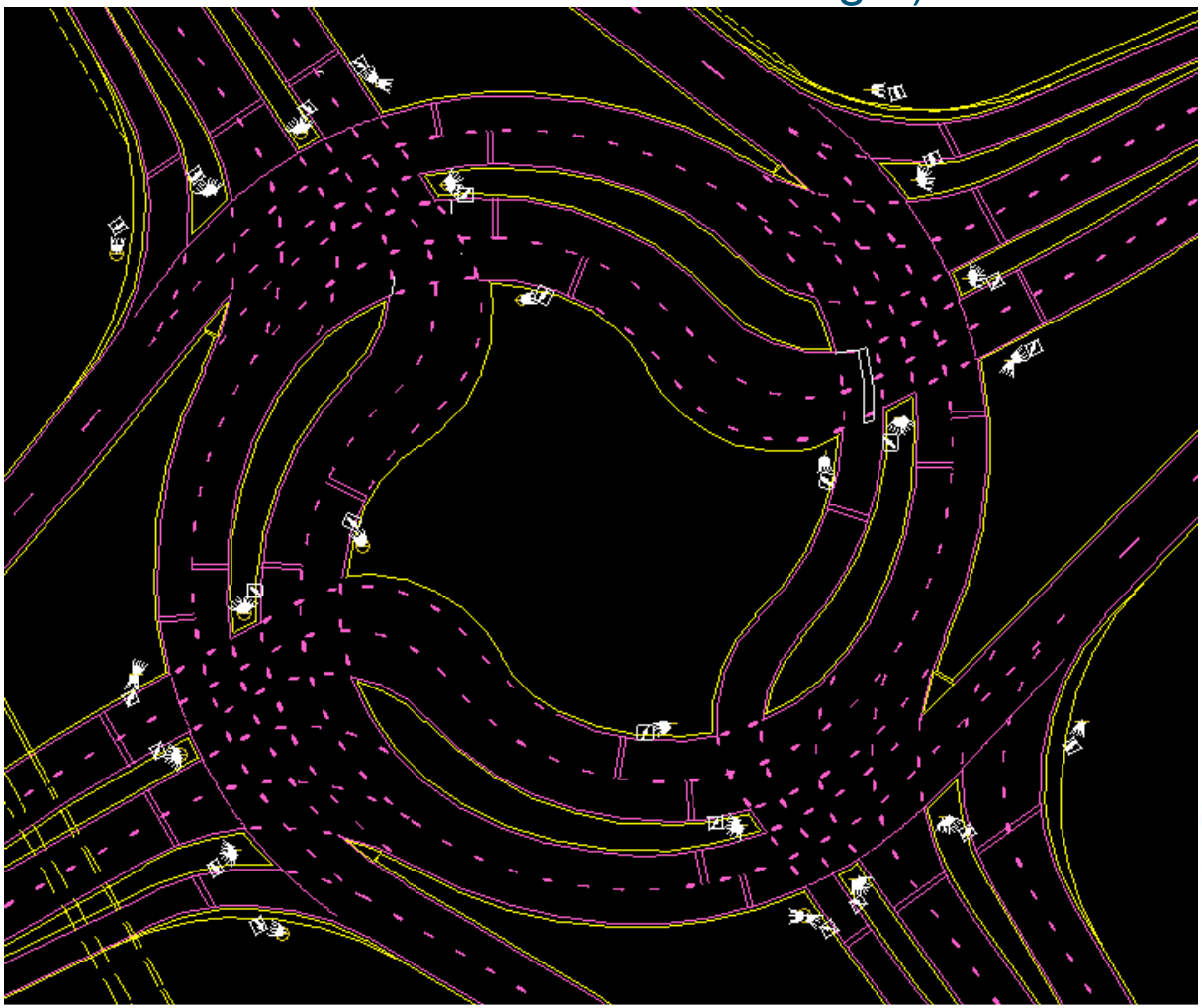
Total traffic at Westerlee evening rush hour:
2004: 5.500 veh/h
2010: 10.470 veh/h

Design of the *turbo traffic square* “Westerlee”



Mark of a *turbo traffic square*

- Left and straight on seperated
- A long length to put cars in (½ roundabout in contrast to a normal roundabout with ¼ length)



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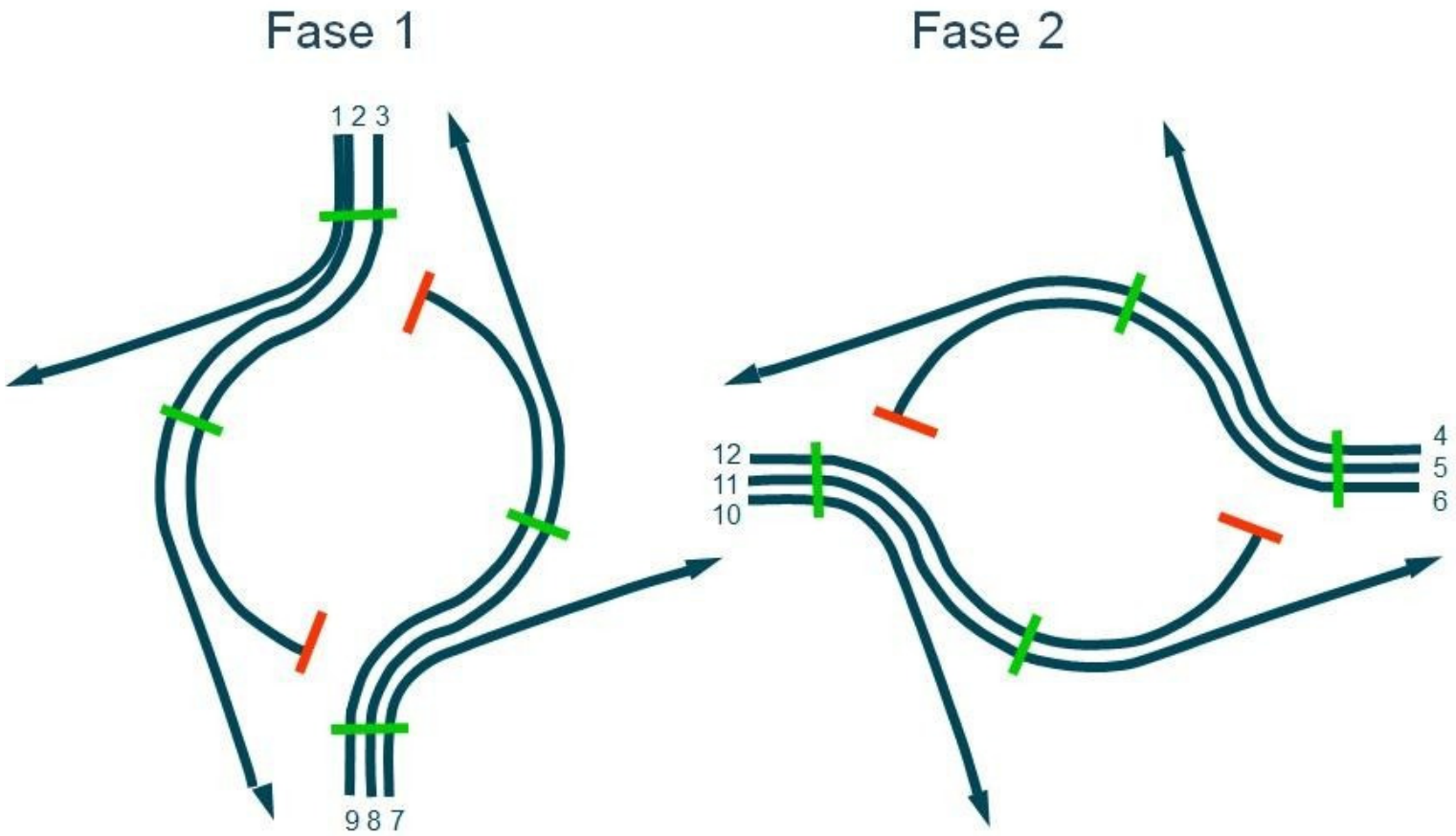
Traffic lights with two fhases



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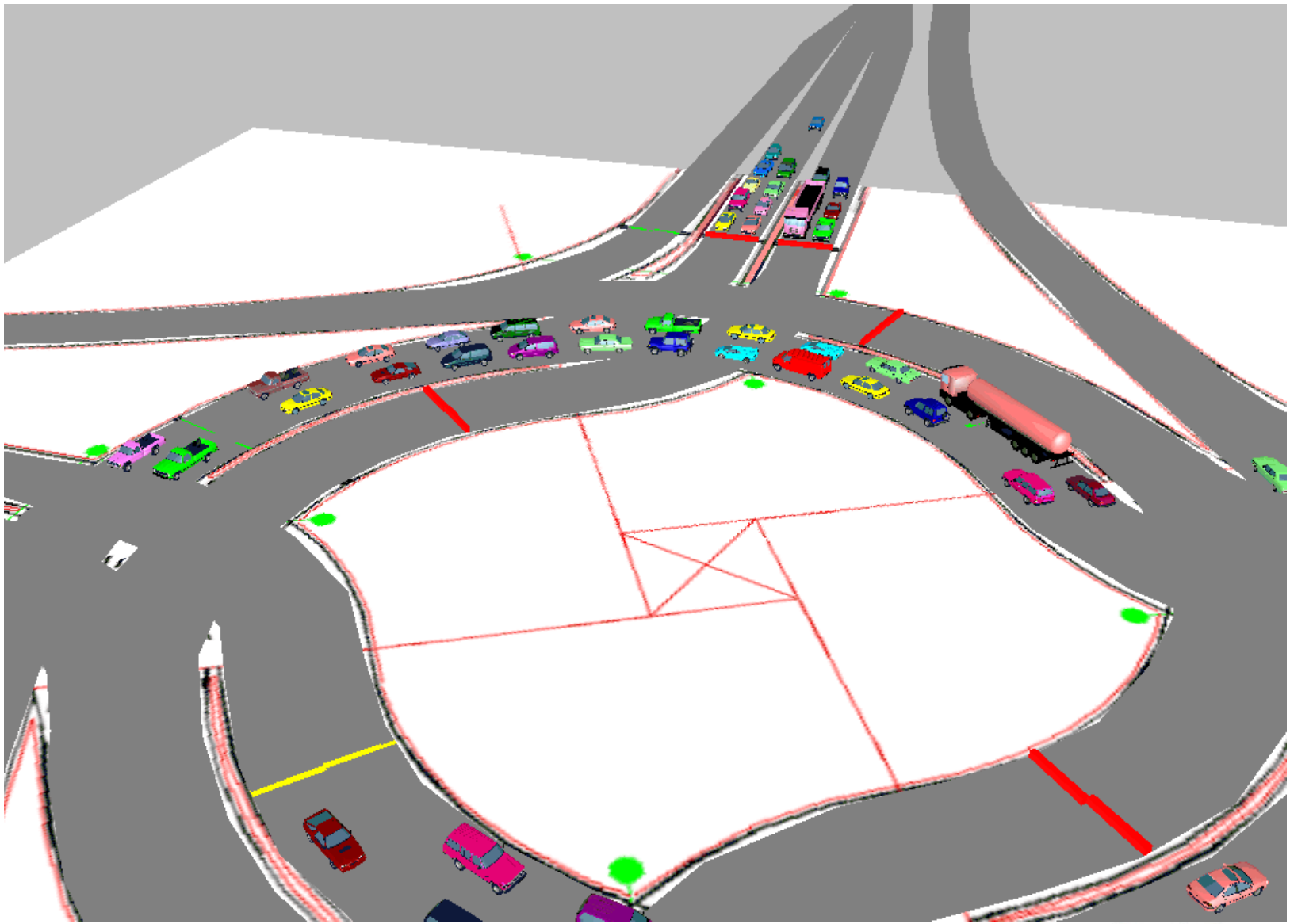
Detail of the *turbo traffic square* “Westerlee”

Doenkadeplein (Province South-Holland)

Tolhekplein (Province South-Holland)

Vissim-simulation



Proposition 2 / *Vorschläge 2*

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