

Automatische voertuigen: Kansen en uitdagingen

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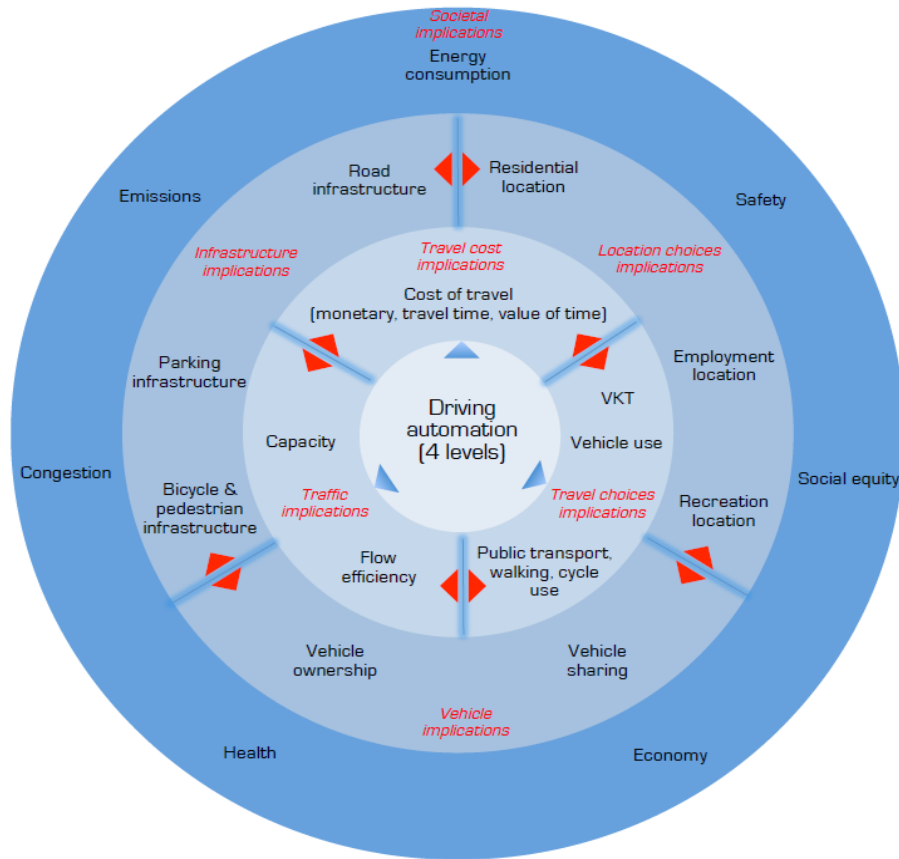
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Onderzoek

- Vraag Zuidvleugel:
- Kansen en uitdagingen voor automatische voertuigen?
 - Auto
 - Vracht
 - OV
- Essay
- Workshop 10 maart 2015

Impact en soorten AV's



NHTSA level	SAE level	SAE name
Human driver monitored		
0	0	Non-Automated
1	1	Assisted
2	2	Partial Automation
Automated driving system		
3	3	Conditional Automation
4	4	High Automation
	5	Full Automation

-SAE International 2014

-Milakis et al. 2014

Conclusies

- Dossier automatische voertuigen is booming (R&D ~ media)
- Believers en non-believers; Technology push?
- Techniek is 1,
maar veiligheid, gedrag en aansprakelijkheid zijn 2
- Kansen op korte termijn voor varianten met gedeeltelijke automatisering en/of scheiding van overig verkeer
- Rotterdam The Hague airport mogelijke pilot voor Zuidvleugel

Discussie

Hoe kunnen AV's bijdragen aan (verbeteren) innovatieve verbinding naar de airport RTHA?



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NHTSA level	SAE level	SAE name	SAE narrative definition	Execution of steering and acceleration/deceleration	Monitoring of driving environment	Backup performance of <i>dynamic driving task</i>	System capability (<i>driving modes</i>)
Human driver monitors the driving environment				Human driver	Human driver	Human driver	n/a
0	0	Non-Automated	the full-time performance by the <i>human driver</i> of all aspects of the <i>dynamic driving task</i> , even when enhanced by warning or intervention systems				
1	1	Assisted	the <i>driving mode</i> -specific execution by a driver assistance system of either steering or acceleration/deceleration using information about the driving environment and with the expectation that the <i>human driver</i> perform all remaining aspects of the <i>dynamic driving task</i>	Human driver and system	Human driver	Human driver	Some driving modes
2	2	Partial Automation	the <i>driving mode</i> -specific execution by one or more driver assistance systems of both steering and acceleration/deceleration using information about the driving environment and with the expectation that the <i>human driver</i> perform all remaining aspects of the <i>dynamic driving task</i>	System	Human driver	Human driver	Some driving modes
Automated driving system ("system") monitors the driving environment				System	System	Human driver	Some driving modes
3	3	Conditional Automation	the <i>driving mode</i> -specific performance by an <i>automated driving system</i> of all aspects of the <i>dynamic driving task</i> with the expectation that the <i>human driver</i> will respond appropriately to a <i>request to intervene</i>				
4	4	High Automation	the <i>driving mode</i> -specific performance by an <i>automated driving system</i> of all aspects of the <i>dynamic driving task</i> , even if a <i>human driver</i> does not respond appropriately to a <i>request to intervene</i>				
	5	Full Automation	the full-time performance by an <i>automated driving system</i> of all aspects of the <i>dynamic driving task</i> under all roadway and environmental conditions that can be managed by a <i>human driver</i>	System	System	System	All driving modes