

## Expert Meeting on Automated Video Analysis of Road Traffic Scenes

---

TNO seminar, November 15-16, 2010

Poul Greibe  
Trafitec

Denmark

## About Trafitec

Trafitec is a consultancy firm that provide research and development services and innovative consultancy in the area of road safety, traffic management and traffic planning.

Our main expertise includes:

- Road safety
- Road user behavior
- Effect and evaluation studies
- Capacity and level-of-service
- Traffic operations
- Development of road standards

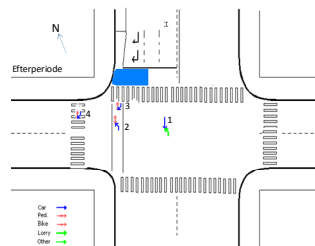


## Video analysis

Used video analysis for many years

- Conflict technique
- Road user behaviour
- Traffic operation

## Traffic Conflict Technique



## Road user behaviour in 2-lane roundabouts

- Critical gap
- Follow up times
- Lane use



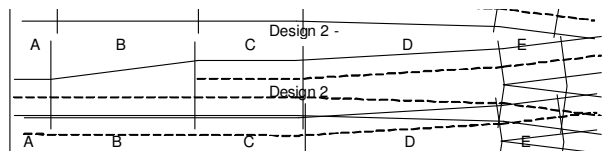
## Road user behaviour – freeway workzone



## Signalised intersections

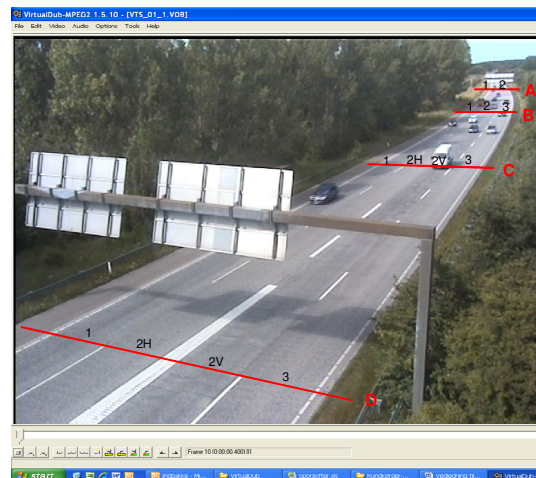


## Freeway – diverge section

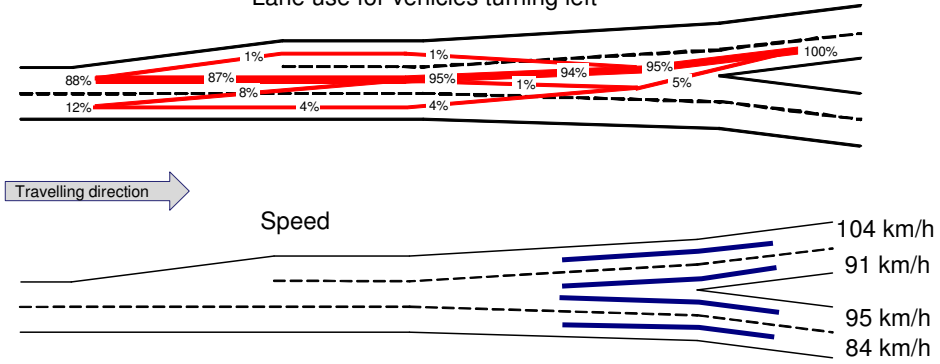


Observe:

- Speed
- Lane use for vehicles turning left at the diverge section
- Vehicles crossing painted centreline / potential conflicts



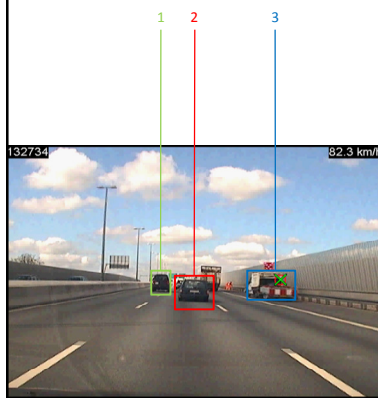
### Lane use for vehicles turning left



Potential conflicts

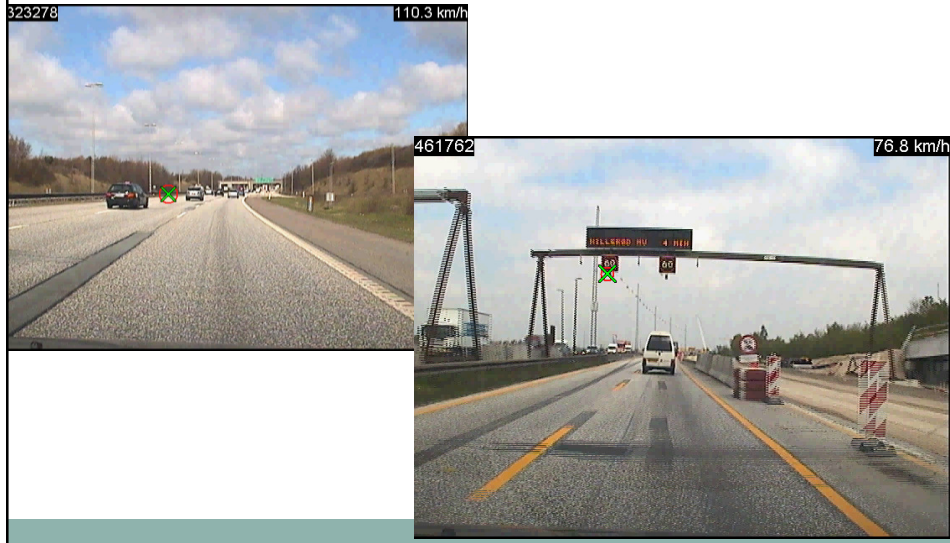
### Instrumented car

- Eye tracker
- Laser scanner
- GPS



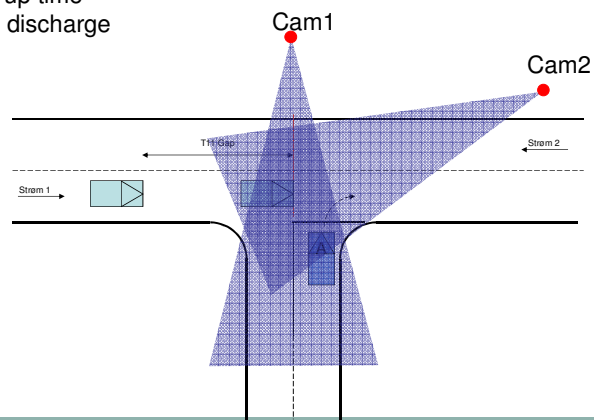


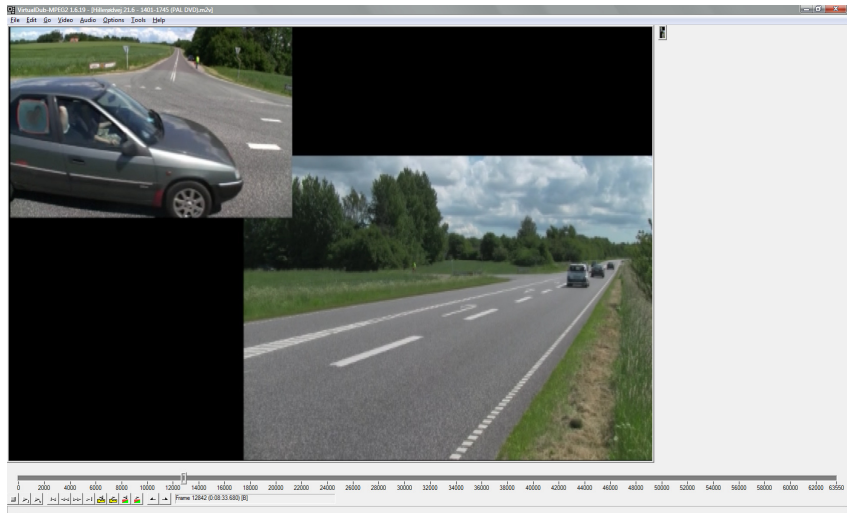
## Eye track analysis



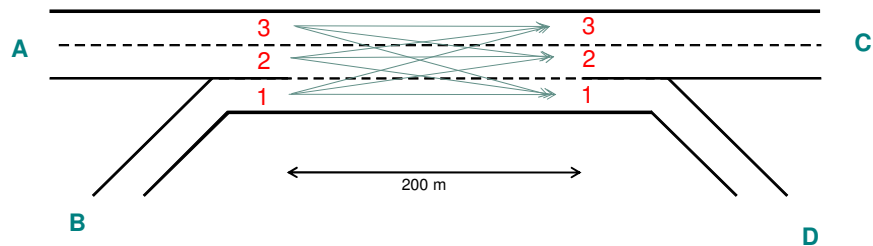
## Driver behaviour in non signalised rural intersections

- Critical gap
- Follow up time
- Queue discharge





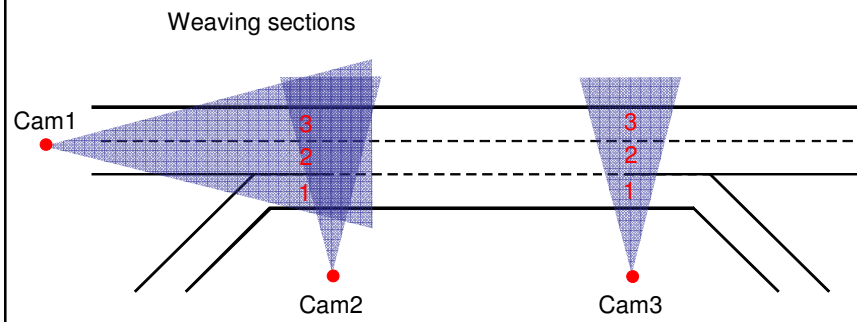
## Freeway Weaving sections



Flow: Q11, Q12, Q13, Q21, Q22, Q23, Q31, Q32, Q33

Speed: V11, V12, V13, V21, V22, V23, V31, V32, V33





Cam1



Cam2



Cam3



## Freeway Capacity at lane closure

- Average travelling speed (capacity estimations, delay etc)
- Lane use

