

# Traffic impact assessment

## Direct and indirect traffic effects

- Direct traffic effects: changes in speed, travel times and headways
- Indirect traffic effects: changes in the amount of congestion
- Traffic effects (direct and indirect) monetarised

## Main results

- Direct traffic effects: no noticeable effects on travel times expected, except for SpeedAlert
- Indirect traffic effects:
  - Effects expected for all systems
  - Relatively high effects for systems effective on all road types (especially motorways) and in high density traffic
- Traffic impacts modest compared to safety impacts

## Simulated systems

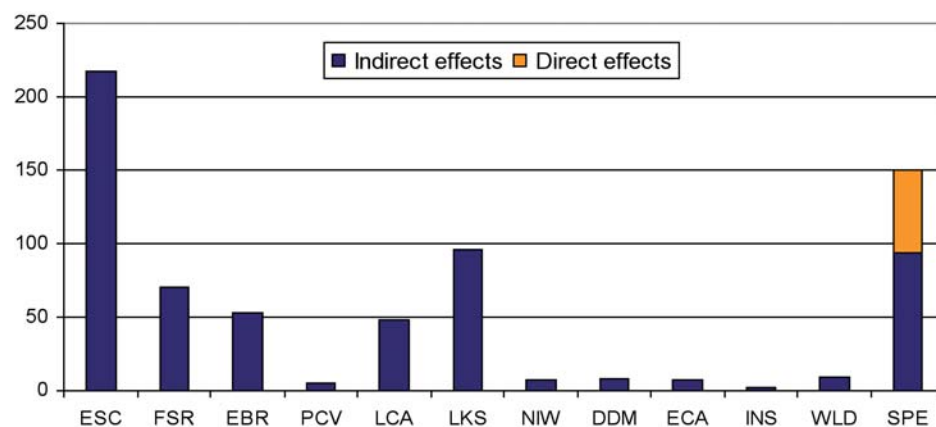
Model: VISSIM ptv vision

Intersection Safety (INS)  
Full Speed Range ACC (FSR)

Night Vision Warn (NIW)

Model: ITS modeller  
Intelligent Transport Systems

Speed Alert (SPE)  
Wireless Local  
Danger Warning (WLD)

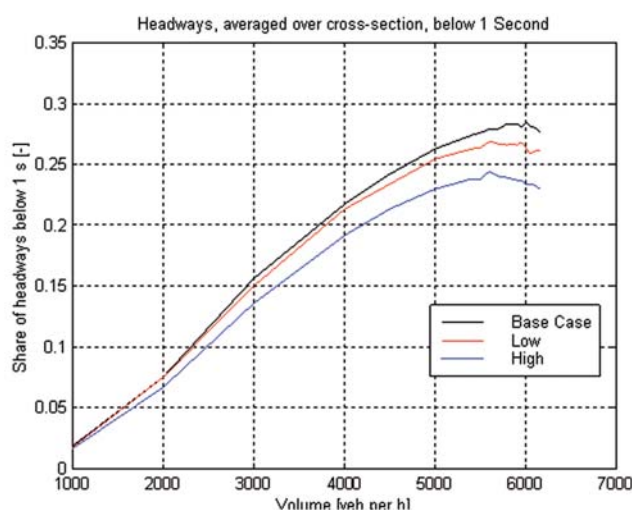


Direct and indirect traffic effects (benefits in MEUR, 2020 high scenario)

## Results: local versus network level

- All simulated systems have effects locally (at a cross-section)
- Effects on network level are very small to negligible, because of:
  - low penetration rates
  - “rare” events
  - local effects of IVSS cancelled out by other traffic flow characteristics

## Example: effects for FSR



Earlier breaking:

- WLD
- FSR
- NIW

Fewer small headways:

- SPE
- FSR

Change in speed:

- SPE (-)
- WLD (-)
- FSR (+/-)
- NIW (+)

Change in gap acceptance:

- INS