

Danish Traffic Noise Strategy

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Outline

- Background
- Putting a price on noise
- Results from Cost-benefit analysis
- Who is going to invest in noise reductions?
- Multi-stakeholder approach
- Conclusions



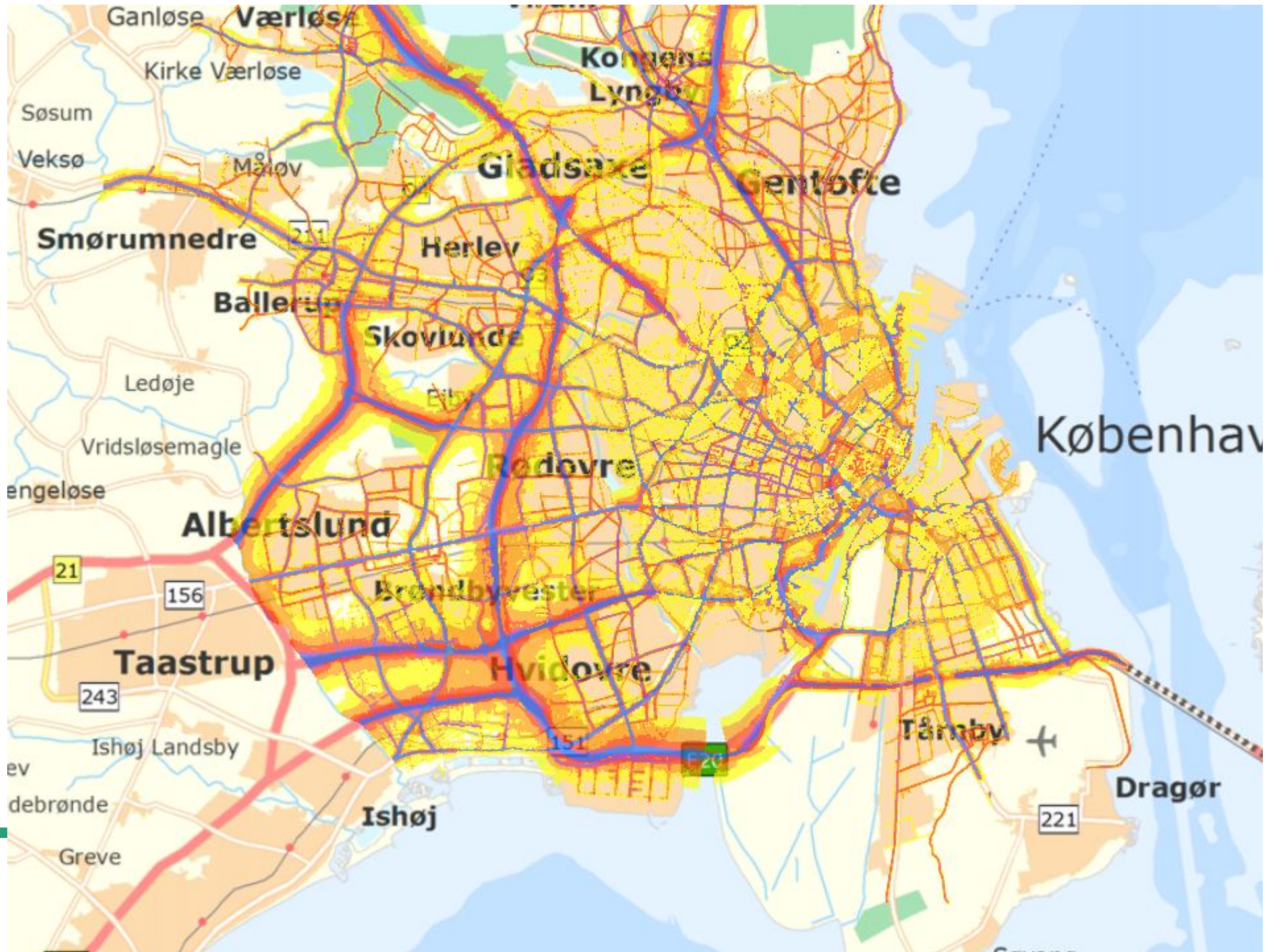
Skagerrak

Støjkort kan ikke vises på dette kortudsnit. Zoom ind



Kattegat

Østersøen



Conclusions

- 1/3 of all dwellings are affected
- The challenge is on municipal roads
- Put a price on noise!
- It pays to reduce noise
- Noise partnerships
- Find new partners "outside the noise world"
- Multistakeholder-approach



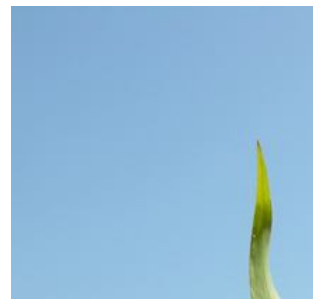
Background

- Problem stabilized but not at all solved in Denmark
- 1/3 of all dwellings affected
- National Noise Strategy launched in 2003
- Evaluated in 2010
- The big challenge is on municipal roads
- Use of thin-layer asphalt and lower speed limits in cities
- AP gives added value



Putting a price on noise

- 2003: Annually 200-500 premature deaths in DK due to noise
- Annoyance valued by a study of house prices
- Price on noise: annoyance + health effects



Costs and benefits in a Danish context

- Which are the most cost-effective tools?
- Gains come from a rise in house prices and less sickness/death
- Most tools give a positive socio-economic result
- It pays to reduce noise!
- Next step: price for quiet areas, cyclists, pedestrians.



Cost-benefit results – theoretical calculations

Tool	Investment EUR p/y 2005-20 1) Widespread use 2) Moderate use	Socioeconomic result Mill. EUR Per year
Asphalt ("drain")	143 mill. (4000 km)	+269
	31 mill. (850 km)	+233
Asphalt ("Thin layer")	6 mill. (4000 km)	+221
	1 mill. (850 km)	+146
Windows	56 mill. (135.000 dwe)	+176
	7 mill. (20.000 dwe)	+49
Lower speed limit	0 mill. (1700 km)	-46
	0 mill. (164 km)	+43
Noise screens	191 mill. (700 km)	-109
	44 mill. (150 km)	+15
Tyres	Private costs 1 dB (all vehicles)	+46
Engines	Private costs 1 dB (all vehicles)	+105



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Conclusions

- Potential in next generation AP
- Put a price on noise
- It pays to reduce noise!
- Noise partnerships – co-financing
- Find new partners "outside the noise world".
- Multistakeholder-approach.
- Communication, communication and more communication

