



Case 29-30 Noise Pollution Control

Problem to resolve

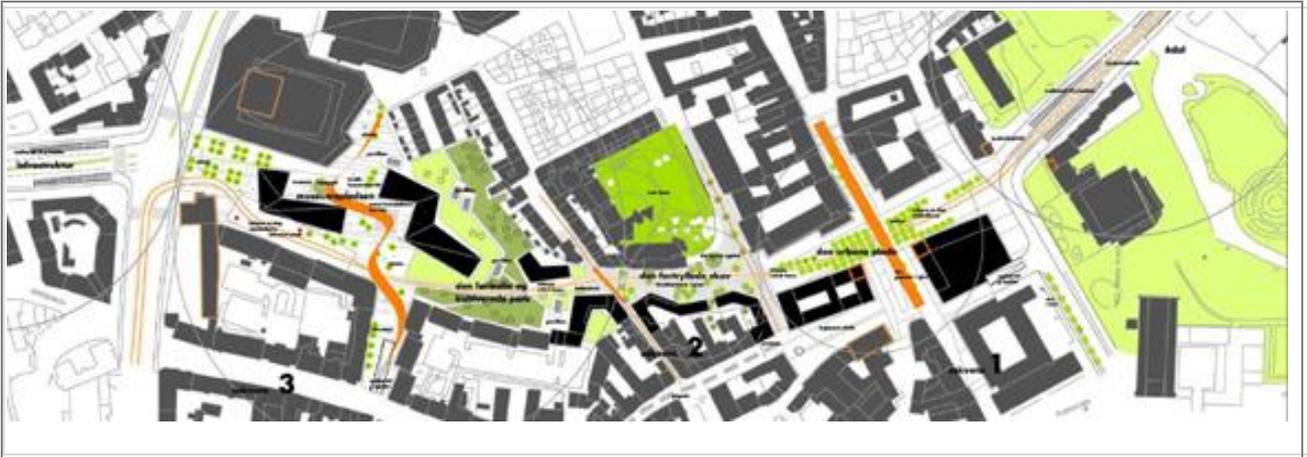
Noise pollution can cause disruption, interference and irritation and can in some cases lead to the development of stress or loss of sleep. So maintaining the comfort and well-being of people in their own homes is important – not just to protect human rights but also to help sustain a happy, healthy and productive society.¹ →Tool URR 1

How it Works: Traffic calming, road closures

If quiet zones are included in the master plan, then traffic planners can direct traffic to arterial roads and ensure that traffic stays outside the residential neighbourhood. Alternatively they can regulate traffic speeds to reduce noise levels during specific hours of the day or at night. The European Noise Directive² regulates the assessment and management of environmental noise. Another EU document³ states, "First conservative and partial estimates show that at least 1.600.000 Disability Adjusted Life Years are lost every year in the EU, mostly due to road traffic (noise)." The directive requires all cities and agglomerations of more than 100,000 inhabitants to assess the noise exposure of people in their residence. Buses, city utility vehicles and garbage trucks can be noisy, and it is expensive to replace them with quieter models.

To set a policy in place, the planning department of a community needs to present a cost/benefit analysis to enforce the improvements. A noise analysis and prognosis can pinpoint which school, hospital and neighbourhood is improved by what margin for a variety of noise solutions.⁴ →Tool URR 1

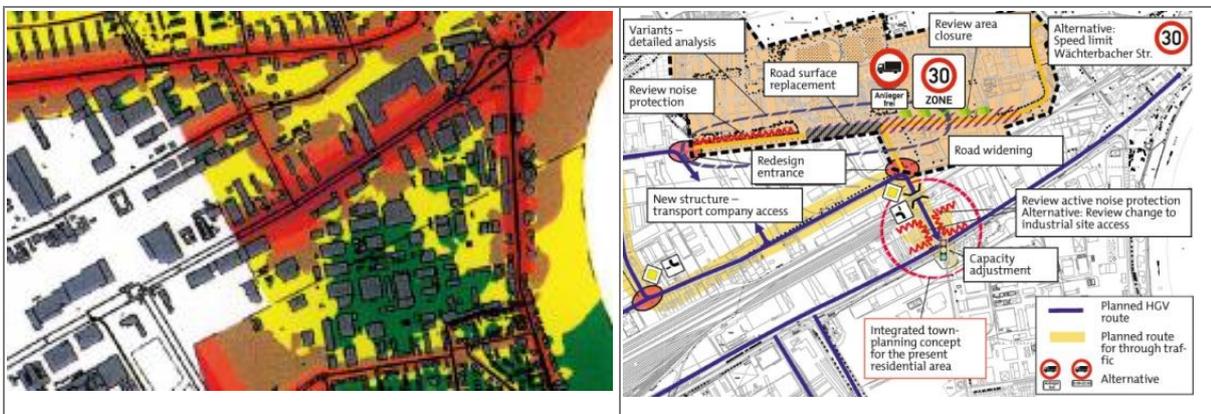




Odense city transformed main street⁵

Case 1 Odense, Denmark: Traffic calming 2009^{6,7,8}

Odense is the 3rd biggest city in Denmark, and used to be the traffic nerve centre of Denmark. The attempt to keep cars out of the city centre represents a break from 50 years of urban planning. The main street through the city centre, previously used by 35,000 cars per day, was closed for motorized traffic. The remainder of Odense's central area was divided into four zones, and motorists may not cross directly between one to the next zone. Instead a new Parking route was established in surrounding streets and motorists are being guided to the nearest free parking lot. A speed limit is enforced on the Parking Route to reduce noise and air pollution. This measure counted on inducing a traffic modal split and aimed 60% more bike rides and 60% fewer traffic deaths by 2025, an increase of public transport by 200%, to have 75% less people burdened by harmful pollution and 90% less burdened by traffic noise. →Tool URR 1



Noise emission plan and possible noise abatement measures in Frankfurt⁹

Case 2 Frankfurt, Germany: Noise Action Plan 2010¹⁰

Frankfurt is assumed to be Germany's central traffic hub, therefore noise protection is a key topic in the municipal strategies with the public being involved in the noise abatement plan.¹¹ The Frankfurt Noise action plan of 2010 concerns mostly mobility, with the goals established at "reducing noise pollution so as to maintain and improve the city's residential quality". Envisaged measures include low noise road surfaces, upgrading of rail routes, increasing the share of bicycles, and traffic management including an impressive catalogue of aircraft procedures for air traffic noise abatement. →Tool URR 1

Credentials

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References

- ¹ <http://noisenuisance.org/> viewed 24/07/2015
- ² http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1435827004963&uri=OJ:JOL_2015_168_R_0001 viewed 24/07/2015
- ³ <http://ec.europa.eu/environment/noise/home.htm>, viewed 24/07/2015
- ⁴ http://www.soundplan.com/noise-control.htm?qclid=CInetJCv8sYCFRLMtAodPb0A_g viewed 7/24/2015
- ⁵ Source; http://www.dac.dk/media/32568/Odense_juulfrost_TBT_midterfoto_besk%C3%A5ret.jpg
- ⁶ <http://www.dac.dk/en/dac-cities/sustainable-cities/all-cases/transport/odense-masterplan-for-sustainable-mobility/>, seen 7/24/2015
- ⁷ <http://www.danishnet.com/travel-denmark/odense-denmark/> seen 24/07/2015
- ⁸ <http://www.eltis.org/discover/case-studies/improving-accessibility-senior-friendly-walking-routes-odense-denmark> seen 7/24/2015
- ⁹ <http://www.frankfurt-greencity.de>
- ¹⁰ <http://www.frankfurt-greencity.de/en/environment-frankfurt/noise-in-frankfurt/> , viewed 7/24/2015
- ¹¹ <http://www.frankfurt-greencity.de/en/environment-frankfurt/noise-in-frankfurt/reducing-noise-pollution/noise-abatement-planning/>, seen 7/24/2015