Road/Rail Noise

Many helpful tools and graphical features
edit, evaluate and present the data - no expensive GIS required

Road day histogram library
allows direct assignment of hourly traffic volumes from road planning software

Emission or other properties can change
within the sources, no need to handle small source sections

True wall optimization
on the basis of target levels, facade length above target or costs

Max level and pass-by level for railways
displayed either in a chart or as an animated noise map
The road and rail modules consist of 2 main parts, the emission calculation and the propagation calculation. The emission calculation is performed inside the Geo-Database where the vehicle numbers for various vehicle categories, the speed of the vehicles and the road surfaces/track conditions are fed into a calculation that results in the emission level. The propagation calculation is the second major part, it is executed inside the Calculation Core. Calculations can be performed for single receivers or various types of noise maps (Grid Noise Map, Façade Noise Map, Vertical Noise Map, Triangulated map). The results from the calculations can be presented in the Documentation, Spreadsheet and in the Graphics.

Wall Design optimizes the height or cost of noise protection barriers. The optimization delivers the least expensive noise protection wall that properly shields the receivers.

ROAD/RAIL STANDARDS IN SOUNDPLAN:
Nord 2000 Road (Scandinavia) · RVS 3.02/4.02 (Austria) · NMPB - Routes 96, Guide de Bruit (France) · RLS 90 (Germany) · Calculation of Road Traffic Noise (Great Britain) · TNM (USA) · ASJ - Model B 1998 and ASJ - Model B 2003 (Japan) · DIN 18005 (Germany) · Statens Planverk 48 (Scandinavia) · Calculation of Road Traffic Noise (Scandinavia) · StL-86, StL-95 and StL 97 (Switzerland) · Federal Highway Model (USA) · VBUS (Germany) · ONRegel 305011 (Austria) · VBUSCH (Germany) · RMR 2002 (EU) · Schall 03 (Germany) · Japan Narrow-Gauge Railways, based on ASJ Model (Japan) · DIN 18005 (Germany) · Nordic Rail Prediction Method (Kilde Report 130) (Germany) · SEMIBEL (Switzerland) · Calculation of Railway Noise (Great Britain) · Nordic Prediction Method for Train Noise (Scandinavia) · Transrapid (Germany) · Nord 2000, Rail Traffic Noise (Scandinavia) · French Rail (NFS 31-133) (France)