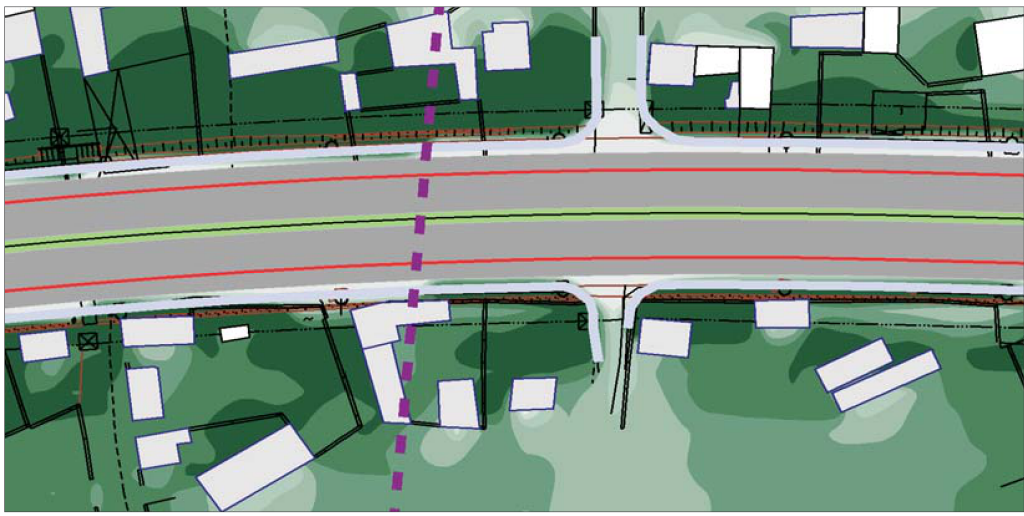
SoundPLAN®
PROPAGATION SOFTWARE

SoundPLAN®



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 assignement 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

Sound® PLAN

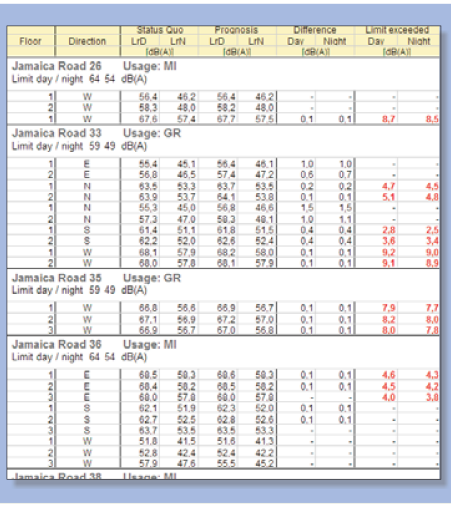
www.soundplan.com

Road/Rail Noise

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 Documen-tation, Spreadsheet and in the Graphics.

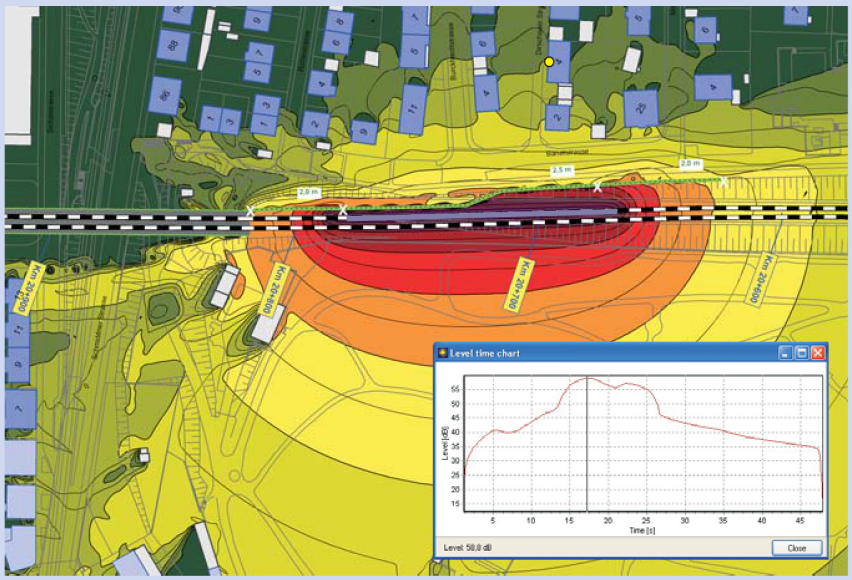
Wall Design optimizes the height or cost of noise protection barriers. The optimization delivers the least expensive noise protection wall that properly shields the receivers.

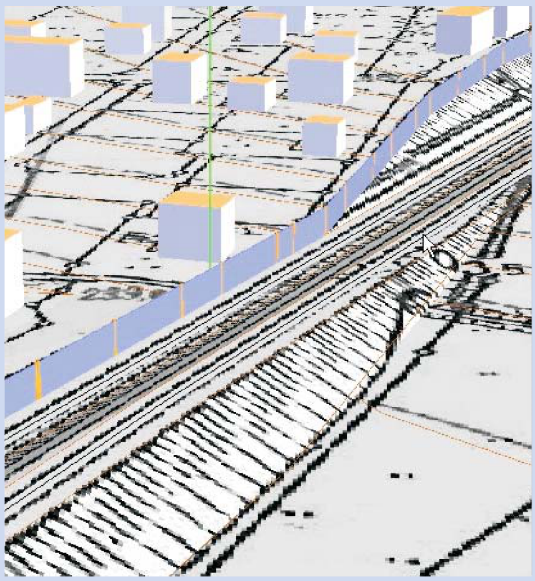


Floor	Direction	Status Quo LrD [dB(A)]	Status Quo LrN [dB(A)]	Prognosis LrD [dB(A)]	Prognosis LrN [dB(A)]	Difference Day [dB(A)]	Difference Night [dB(A)]	Limit exceeded Day [dB(A)]	Limit exceeded Night [dB(A)]
Jamaica Road 26 Usage: MI Limit day / night 64 54 dB(A)									
1	W	56,4	46,2	56,4	46,2	-	-	-	-
2	W	58,3	48,0	58,2	48,0	-	-	-	-
1	W	67,6	57,4	67,7	57,5	0,1	0,1	8,7	8,5
Jamaica Road 33 Usage: GR Limit day / night 59 49 dB(A)									
1	E	55,4	45,1	56,4	46,1	1,0	1,0	-	-
2	E	56,8	46,5	57,4	47,2	0,6	0,7	-	-
1	N	63,5	53,3	63,7	53,5	0,2	0,2	4,7	4,5
2	N	63,9	53,7	64,1	53,8	0,1	0,1	5,1	4,8
1	N	55,3	45,0	56,8	46,6	1,5	1,5	-	-
2	N	57,3	47,0	59,2	48,1	1,9	1,1	-	-
1	S	61,4	51,1	61,8	51,5	0,4	0,4	2,8	2,5
2	S	62,2	52,0	62,6	52,4	0,4	0,4	3,6	3,4
1	W	68,1	57,9	68,2	58,0	0,1	0,1	9,2	9,0
2	W	68,0	57,8	68,1	57,9	0,1	0,1	9,1	8,9
Jamaica Road 35 Usage: GR Limit day / night 59 49 dB(A)									
1	W	56,8	56,6	56,9	56,7	0,1	0,1	7,9	7,7
2	W	57,1	56,9	57,2	57,0	0,1	0,1	8,2	8,0
3	W	56,9	56,7	57,0	56,8	0,1	0,1	8,0	7,8
Jamaica Road 36 Usage: MI Limit day / night 64 54 dB(A)									
1	E	58,5	58,3	58,6	58,3	0,1	0,1	4,6	4,3
2	E	58,4	58,2	58,5	58,2	0,1	0,1	4,5	4,2
3	E	58,0	57,8	58,0	57,8	-	-	4,0	3,8
1	S	62,1	51,9	62,3	52,0	0,1	0,1	-	-
2	S	62,7	52,5	62,8	52,6	0,1	0,1	-	-
3	S	53,7	53,5	53,5	53,3	-	-	-	-
1	W	51,8	41,5	51,6	41,3	-	-	-	-
2	W	52,8	42,4	52,4	42,2	-	-	-	-
3	W	57,9	47,6	55,5	45,2	-	-	-	-
Jamaica Road 38 Usage: MI									

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)





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Certified according to ISO 9001:2008

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