# **SoundPLAN**<sup>®</sup> PROPAGATION SOFTWARE



## **Action Planning**

**Tiling system** to easily manage data entry and calculation of huge projects

Intelligent hotspot calculation shows the number of people annoyed or over threshold levels

**Built-in statistics of the annoyed people** and exposures in hospitals, schools and kindergartens

**Clear management of different scenarios** to find the best measures without having redundant data

**Display of difference and conflict maps** with user defined formulas to show different aspects



### **Action Planning**

After completing the noise mapping phase, action plans must be made for the communities affected by environmental noise.

SoundPLAN provides all the tools vou need for meaningful action plans at an affordable price:

We offer useful and flexible import interfaces for example for adding additional properties to existing imported objects, excellent data handling with clearly structured scenario organization and a tiling system for big projects, intelligent algorithms to filter dense elevation data while maintaining the needed accuracy, fast and accurate calculations, tools to derive noise control measures according to the aspects cost/benefit analyses for residents, tables and statistics to compare the efficiency of different measures and expressive maps to easily show the administrations and the public the effect of the proposed noise control measures.

Name	Intervals	Number of affected Inhabitants	
		All communities	50 - 55
55 - 60	2800		10306
60 - 65	1300		11900
65 - 70	300		17300
70 - 75	100		6000
> 75	0		
Community Arbenrath	50 - 55	600	200
	55 - 60	300	100
	60 - 65	200	(
	65 - 70	0	(
	70 - 75	0	
	> 75	0	
Community Geisdorf	50 - 55	1800	800
	55 - 60	1000	300
	60 - 65	400	100
	65 - 70	100	
	70 - 75	0	
	> 75		
Community Reichendorf	50 - 55	200	300
	55 - 60	400	100
	60 - 65	100	
	65 - 70	0	
	70 - 75		
	> 75	(a)	5
Community Wiesenach	50 - 55	2000	1100
	55 - 60	1100	400
	60 - 65	600	100
	65 - 70	100	(
	70 - 75	0	
	> 75		

#### IN SOUNDPLAN INTEGRATED TOOLS TO FIND THE BEST MEASURES:

#### Finding conflict zones

The hotspot calculation is based on the the dose response relationship and the sleep disturbance according to the formulas in the position papers 2002/2003. Buildings with highly annoyed people can be highlighted separately.

#### **Developing measures**

Wall Design dimensions noise protection walls and berms according to cost vs. Benefit. BA Outside optimizes the component properties of facades, windows and fans in order to reach acceptable indoor levels.

#### Validating measures

The economic follow-up costs of noise in the environment can be calculated based on a model of the willingness to pay, so each noise protection measure can be checked according to ist potential to reduce the costs of noise.



### For further information please contact:

BRAUNSTEIN + BERNDT GMBH

Etzwiesenberg 15 D-711522 Backnang phone +49.7191.9144-0 bbgmbh@soundplan.de

SOUNDPLAN INTERNATIONAL LLC

80 E Aspley Lane, Shelton WA 98584, USA phone +1.360.432.9840 marketing@soundplan.com

www.soundplan.com







Distribuidor oficial del modelo SoundPLAN en España y Portugal Parque Tecnológico de Álava Leonardo Da Vinci, 14 - 78 E-01510 Miñano (VITORIA-GASTEIZ) Tel. (+34) 945 29 82 33 - Fax. (+34) 945 29 82 61 Correo e.: aac@aacacustica.com Web: www.aacacustica.com Razón Social: AAC Centro de Acústica Aplicada SL