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**STATE AND LOCAL
NOISE CONTROL ACTIVITIES
1977-1978**

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EXECUTIVE SUMMARY

By passing the Noise Control Act of 1972, Congress responded to an increasing concern for "an environment for all Americans free from noise that jeopardizes their health and welfare." Section 14 of the Act authorizes EPA to provide technical assistance to facilitate the development of State and local noise control programs. In the interest of speeding up and increasing the level and effectiveness of this assistance, Congress passed the Quiet Communities Act of 1978 which gave the EPA additional authority to assist States and communities in developing noise control programs. As a result EPA's technical assistance program has been expanded to include authority to develop a financial assistance program for State and local noise control programs.

EPA conducted a comprehensive assessment of the State and local noise programs in 1977 and early 1978 to obtain a better understanding of State and local requirements. The major element of the assessment was a survey questionnaire mailed to officials in the 50 States and 2 territories, and to all 824 communities with a population greater than 25,000. This was supplemented with information obtained from other studies and surveys. The goal of the assessment was to:

- Examine critically the status of State and local noise control programs,
- Ascertain the problems these programs are encountering and technical assistance needed to overcome them, and

- Assess State and local progress in developing noise control legislation and in reducing specific noise problems.

Thirty-eight States, 2 territories and 562 communities returned completed questionnaires for an overall response rate of 69%. In contrast to two earlier State and local surveys (1971 and 1973), the 1977-78 survey was expanded to include more questions and additional communities. For example, the 1973 survey was mailed to all communities with a population greater than 75,000.

The findings and conclusions of the 1977-78 assessment have been arranged in six categories:

- Public Awareness
- Legislation
- Implementation
- State and Local Resources
- Program Progress
- Technical Assistance

PUBLIC AWARENESS

Environmental noise is perceived by the majority of both State and local government officials as a problem of growing concern. The survey asked State and local officials to rate 14 different noise sources as to the significance of each as a problem in their State or community. Motorcycle noise was rated the most significant problem (58% for State officials and 68% for local officials). For communities the next most frequently designated noise problems are in order: trucks, automobiles, railroad operations, and buses. Table 1 lists the frequency with which the fourteen noise sources were identified by community officials. These findings agree with those of previous surveys.

Government officials at both State and local levels obtain an understanding of the seriousness of their noise problems principally through formal complaints (38%) and noise surveys (24%-28%). Since the number of complaints filed in a community represents only a fraction of the people bothered by noise, complaints should not be viewed as an accurate barometer of the extensiveness

TABLE 1
 COMPARISON OF COMMUNITY NOISE CONTROL ACTIVITIES FROM THE IDENTIFICATION
 OF A PROBLEM SOURCE TO ITS REDUCTION THROUGH COMMUNITY EFFORT

SPECIFIC NOISE SOURCES	NUMBER OF COMMUNITIES		
	IDENTIFIED AS A SIGNIFICANT PROBLEM	NOISE LEGISLATION FOR SOURCE WITH PER- FORMANCE PROVISIONS	FULL SCOPE IMPLEMENTATION OF NOISE PROGRAMS
MOTORCYCLES	369	165	55
TRUCKS	353	158	46
AUTOS	315	164	48
RAILROAD OPERATIONS	226	49	19
BUSES	188	142	16
AIRCRAFT	188	40	9
ANIMALS	170	102	57
CONSTRUCTION	151	129	44
ENTERTAINMENT	147	149	59
INDUSTRIAL ACTIVITIES	145	166	77
GARBAGE COMPACTORS	124	66	27
RECREATIONAL VEHICLES	79	91	16
HOME POWER EQUIPMENT	69	109	36
PUBLIC SERVICE VEHICLES	63	68	15

of a community's noise problems. In recent years, social-attitudinal and noise monitoring surveys have provided a more accurate assessment of the noise climate. The results of these surveys have been used as guidance in the enactment of recent State and local laws and ordinances, (e.g., Allentown, PA).

LEGISLATION

In discussing types of noise control legislation, there is an important distinction between those that incorporate quantitative criteria (performance standards) as a basis for determining permissible sound levels and those which describe illegal noise in qualitative terms. By 1978, 19 States and 166 communities had adopted quantitatively described noise source legislation. Recreational vehicles are most frequently mentioned sources in such State legislation. Other sources mentioned, in order, are motorcycles, trucks, automobiles, and buses.

At the community level the noise source category covered by the largest amount of legislation having performance standards is industrial activities (166). Following closely behind are: motorcycles, automobiles, trucks, and entertainment equipment.

Approximately one-half of the communities which reported significant vehicular noise problems (Table S-1) have developed legislation with performance standards in an attempt to control such problems. Thus, there is a substantial gap between the number of communities which reported significant noise problems and those which have developed quantitative legislation to counteract such problems. Furthermore, only about 20% of the communities with significant aircraft and railroad problems have attempted to develop noise legislation in the hopes of reducing these problems. Federal preemption in these areas may have discouraged localities from attempting to handle these sources. However, in cases such as ground operation noise from aircraft, the problem can be dealt with through airport cooperation and operational restrictions.

IMPLEMENTATION

Noise control laws are fully implemented in very few of the 31 States responding to this portion of the survey. The implementing agencies are most often police/safety (33%) followed by a growing number of environmental pollution control agencies (30%). Inadequate manpower and lack of priority are the two major problems which limit the extent and effectiveness of noise control implementation efforts at the State level.

Noise control ordinances also are not fully implemented in all the responding communities. The type of legislation most often implemented (52%) is a municipal ordinance containing a range of specifically prohibited noise offenses, followed by zoning ordinances (17%), and vehicular ordinances (10%). As with State noise control efforts, implementation at the local level is accomplished most often by police/safety personnel. Lack of priority, inadequate manpower, and inadequate instrumentation are the problems frequently identified as causing failure to carry out the intent of legislation.

STATE AND LOCAL RESOURCES

State Noise Control Budgets

Nineteen States and Puerto Rico budgeted funds for noise control activities in 1977-78. Thus, 31 States and the Virgin Islands (including the eight States which did not respond to the survey) did not have any line items in their budget for noise, which is a serious deficiency in a noise control effort. The total amount budgeted by the States was \$3.6 million. Seven States budgeted in excess of \$100,000, led by California's \$1.6 million. On a per capita basis, Hawaii ranks first in planned expenditures at 17.6 cents per resident. Using the \$2 million figure for State budgets in 1973 as a baseline amount, noise budgets have been increasing, on the average at 16% per year over the last four years. However, in comparing the individual State budgets for 1977-78 to those of 1973, budgets for seven States decreased while those of ten States increased.

Local Noise Control Budgets

Noise control budgets were reported by 140 communities. This is a threefold increase in the number of communities since 1973 having noise control budgets. However, the number of communities sampled in the present survey is much larger than the earlier one. The total reported local expenditures have increased from \$1.9 million in 1973 to approximately \$2.7 million in 1977-78. In the earlier survey 20 communities reported budgets for noise control of \$10,000 or more. In the last survey, this figure increased to 55 communities. Overall, for communities responding to both surveys, noise control expenditures increased in 20 communities while decreasing in 16.

Adequacy of Budgets

The total reported State and community budgets for noise control activities increased by 59% in four years, i.e., to \$6.2 million in 1977-78 compared to \$3.9 million in 1973. The obvious lack of adequate funds still remains a major obstacle to the development and implementation of successful noise control programs. Only two-thirds of the States with noise legislation have funds budgeted for noise control. Nearly 300 communities with noise control ordinances lack a noise control budget. In addition, over 150 communities identifying noise as a growing community concern do not have funds budgeted for noise. Here again, there is a serious deficiency between the growth of noise programs and the necessary fiscal commitment to implement meaningful programs.

Personnel

Twenty-eight States reported having personnel working in noise control. However, of these only 16 have personnel spending at least 20 percent of their time on noise control. Since 1973 the number of States reporting noise control personnel increased from 19 to 28.

The total number of noise control personnel working in State programs in 1977-78 was 275. Of these, 54 persons spend at least 20 percent of their time and 221 persons spend less than 20 percent of their time on noise control activities. Thus, many States apparently view noise control as a part-time activity to be added to an employee's existing duties. The

kinds of personnel employed by State noise control programs may be an indication of the direction State programs are taking. The sharp decline in inspection positions and the increase in pollution control positions since 1973 may point to a greater emphasis by States in providing technical assistance to local governments, as opposed to direct involvement with noise issues at the local level.

At the local level, only 67 communities of 562 responding have personnel working 20% or more of their time on noise control activities. Public health specialists, engineers and environmental technicians/inspectors filled most of the program positions. There are another 218 communities with nearly 5500 part-time staff members working less than 20% of their time on noise related activities. By far, the largest number of these 5500 are police officers. They are enforcing motor vehicle noise laws and responding to nuisance complaints as a part of their normal police duties.

Most State and local programs, therefore, are staffed by a larger number of part-time than full-time people. These part-time people have their major responsibility in areas other than noise control. Also, another sizable related problem is the number of personnel enforcing noise laws without training in acoustics. Although over half of the State and local noise control personnel are either engineers or environmental scientists, only 10 percent have experience in acoustics. This may impede their effectiveness unless supplementary training is provided.

EQUIPMENT

Only 24 States and 174 communities possess one or more sound level meters, the basic instrument for making noise measurements. More States and communities are purchasing, however, sophisticated pieces of equipment such as outdoor monitoring systems, frequency analyzers, and graphic level recorders. Such equipment is being used for noise monitoring surveys and to substantiate enforcement cases in court.

Although a number of communities have noise legislation, many of these lack noise measurement equipment for enforcement. Analysis of survey responses in 1977-78 also reveals 133 communities enforcing their noise legislation without any noise measurement equipment. Without measurement capability, enforcement efforts remain minimal. The 1977-78 survey results clearly demonstrate that unless existing legislation is supported by measurement capability, current programs cannot be effectively carried out.

PROGRAM PROGRESS

Progress toward achieving noise abatement and control is not easily defined. Before community noise can be noticeably reduced, legislation must be enacted, resources appropriated, and implementation and enforcement carried out. Although there is no single evaluation system for rating program progress, the main program elements must at least be in place before there can be any significant reduction in environmental noise.

Enforcement emphasis at the State or local level depends on government jurisdiction at that level. States, for example, concentrate enforcement actions against motor vehicles of all types, since they control the licensing of such vehicles. On the other hand, many communities have noise ordinances aimed at controlling animals, an area of obvious local jurisdiction. This segregation of enforcement by jurisdiction also involves the Federal government. For example, there is often confusion as to whether Federal laws preempt the jurisdiction of local ordinances regulating airport/aircraft noise. Noise from commercial aircraft accessing an airport is controlled by FAA; but noise from equipment and operations at the airport itself is the responsibility of the airport proprietor, which, in many cases, is the local government.

The importance of obstacles facing noise control efforts was ranked by State respondents as:

- Lack of manpower,
- Inadequate budget,
- Lack of political support, and
- Lack of effective legislation.

Community respondents ranked their obstacles as:

- Inadequate budget,
- Lack of manpower,
- Untrained personnel, and
- Lack of effective legislation.

TECHNICAL ASSISTANCE

Responses to the 1977-78 noise control program assessment confirm the need of States and communities to have comprehensive technical assistance programs. The Quiet Communities Act of 1978 authorizes EPA to develop assistance programs in a more comprehensive manner than was permitted by the Noise Control Act of 1972.

When asked which areas of EPA assistance would be of significant value in meeting legislative and programmatic needs, the number of replies was:

- (a) at the State level:
 - Personnel Training/Workshop (25)
 - Noise Measurement Instrumentation (21)
 - Effective Noise Control Methods (21)
 - Manpower (19)
 - Public Information Materials (18)
- (b) at the community level:
 - Effective Noise Control Methods (303)
 - Personnel Training/Workshops (300)
 - Noise Control Program Guidelines (285)
 - Noise Measurement Instrumentation (277)

In summary, both State and local noise control programs require:

- Comprehensive in-depth Federal assistance, and

- The development of and access to Federally developed technical and research data, tools, and information relating to noise abatement and control.

A comparison of the results of the 1973 survey and the 1977-78 surveys reveals that there has been little significant change in these requirements. However, EPA anticipates that significant progress in noise reduction will be made in the immediate future. The added authority which the Quiet Communities Act gives to EPA in the area of financial and technical assistance should help to achieve this objective.