

ELEMENTS OF SUCCESSFUL COMMUNITY NOISE CONTROL PROGRAMS

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INTRODUCTION:

NOISE, a derogatory term applied to Sound which is of an intensity or frequency, or combination of the two properties, which makes it unwanted, unpleasant, or undesired.

Embarking on a program to control Noise cannot be done with temerity. The approach we have found to achieve high order success in Boulder is one of "Problem Solving", in regard to non-vehicular noise sources. In regard to vehicular sources, the approach is one of "Enthusiastic Enforcement", or writing summonses to a large number of the vehicles observed in violation. We then give the first time vehicular offender an opportunity to bring the vehicle into compliance and have a dismissal recommendation made to the Court regarding his or her summons.

These "Problem Solving" and "Enthusiastic Enforcement" methodologies do succeed as long as the major objective of the program is maintained. The objective of the Boulder program is to "Achieve Quiet in the City", not necessarily to collect fines.

This objective is achieved by eliminating noise sources. We do this by bringing some 600 plus noisy vehicles per year into compliance, using the "Enthusiastic Enforcement" method, and by resolving upwards of 500 non-vehicular noise complaints yearly through the "Problem Solving" approach.

To date, (end of 1977) over 4000 noisy Boulder vehicles have been brought into compliance. We have had 21 of these vehicular summonses contested in court and have had 19 Guilty findings handed down. Fines and orders from the Judge to have the vehicle made quiet, accompanied these Guilty findings. Fines ranged from \$25.00 to \$150.00, with the maximum fine of \$300.00 and or 90 days, yet to be assessed.

To date, we have responded to over 3000 non-vehicular complaints and, by using the "Problem Solving" approach, we have had to issue only six summonses. The cooperation we receive has been outstanding. Someone coined a term for our enforcement methodologies of "The Soft Fuzz" approach. The term is applicable. We do use a "Soft Fuzz" approach; however, we are very insistent.

The six summonses issued in the non-vehicular

area, have resulted in compliance and dismissal prior to the arraignment date, with the exception of 2 which were fined. One of these, a fraternity house party, "Kegger" in Colorado University terminology, with an outdoor Rock Group that failed to comply after our first request, resulted in the maximum \$300.00 fine being assessed to the President of the House. This made the News media and did two things for our Noise Control effort:

1. Eliminated further problems with outdoor Rock Groups at Fraternity Parties.
2. Spread the word that our Ordinance was being enforced and was not "Toothless".

An interesting book could be written about some of the very "Ticklish" (funny) and "Ticklish" (not-so-funny) situations encountered in the enforcement of this ordinance; thus, they will not be elaborated on here. We will proceed with presenting the "Elements" of a successful program and try to explain the whys and wherefores of each.

ELEMENT I. PROBLEM IDENTIFICATION:

In order for a community to justify the establishment of a Noise Control Program, a Noise Problem must exist and be identified. Some of the Noise problems that may exist in a community are:

1. Traffic. i.e. Motorcycles, Trucks, Buses, and automobiles.
2. Recreation Vehicles. i.e. Dirt bikes, ATV's, snowmobiles, and motorboats.
3. Barking dogs. (or in one Boulder case, screeching Peacocks)
4. Aircraft.
5. Construction activity and equipment.
6. Garbage compactors and collection operation.
7. Public service or Municipal vehicles.
8. Entertainment activities.
9. Paging/sound systems
10. Railroads.
11. Industrial noise.
12. Home power equipment.
13. Emergency vehicle sirens.

Some communities have a few of these problems and some have all of them. The numbers of the problems you can identify in your community have a direct bearing on the content of your ordinance and/or how comprehensive your ordinance must be.

The number of complaints of noise received by a community Police Department is one place to start. These complaints may be considered the "Tip" of the iceberg, in that the number of complaints voiced is not in direct proportion to the prevalence of noise caused annoyance. When a member of the U.S. Congress receives a reaction from his constituency about a Bill, he usually estimates that he is actually getting a response from 3 to 5 per-cent of those actually interested in the problem, but not quite interested enough to sit down and write.

One fairly valid way to establish whether or not a noise problem exists, and to what extent a community's population is actually annoyed by noise, is through the establishment of a Noise Committee and coordinating with them to perform an attitudinal survey. This technique was used in Boulder in 1969, 1973, and again in 1975. The first one established the need for the Noise Ordinance and the Enforcement Program. The second and third Boulder surveys further justified the program in Boulder by showing the problems were being addressed, although not eliminated. The surveys also gave evidence of some needed new direction for our enforcement program. An amendment to the ordinance lowering the "one level" (residential, commercial, and industrial property line maximum levels) was one of these items. Another, the increasing the visibility of the program by the use of a specially marked Noise Control Patrol Car, also resulted from a survey. The survey also pointed out that 87 per-cent of the respondents were in favor of the program and supported an increase in our noise control activity.

A survey of this type was recently (1977) conducted by the Environmental Committee of Norman, Oklahoma, chaired by June (Mrs. Oliver) Benson. Copies of this survey and those done in Boulder are available upon request. The Norman, Oklahoma survey resulted in the identification of that community's noise problems and quantified the citizen support of the program and the need for a rather comprehensive ordinance. Additionally, the committee was provided with the level of funding that the public would support for the Noise Control Program.

ELEMENT II. ORDINANCE DEVELOPMENT:

The Boulder Ordinance began as a rather simple measure addressing only traffic noise and non-vehicular sources of very extreme levels. It has been amended several times, since it originally passed in 1970, to be as comprehensive as required to address Boulder's problems.

The Norman, Oklahoma Ordinance, which was passed unanimously on August 23, 1977, was modeled after the very comprehensive and successfully enforced Salt Lake City, Utah Ordinance.

Dick Ranck and his staff are doing an excellent enforcement job in that area.

If I were asked to recommend an Ordinance that a community could use as a model, I would direct one to the following:

1. The Salt Lake City, Utah Ordinance.
2. The Norman, Oklahoma Ordinance.
3. The U.S.E.P.A. Model Community Noise Ordinance.
4. The soon to be in print Community Noise Ordinance Workbook, compiled by Robert A. Simmons of the U.S.E.P.A. Region VIII Noise Office and Dr. Robert Chanaud, Acoustical Consultant, and published by the U.S.E.P.A.

All of these sources provide excellent guidelines for reference during the development of an ordinance; however, most community needs will differ slightly in Ordinance content. An ordinance should be "Tailor Made" to meet

the specific identified needs of a community.

ELEMENT III. ENFORCEMENT:

Objective:

The objective of a community's Noise Ordinance Enforcement Activity should be to achieve quiet in the community. This is to be accomplished by quieting the various sources of noise. This cannot be accomplished by merely levying a fine on the violator and permitting the noise source to continue.

Even though our Boulder "compliance and dismiss" technique has been termed the "soft fuzz" approach, it must be noted that second vehicular offense fines increase at somewhere near the logarithmic rate of sound pressure levels. Our primary noise problem in Boulder is the vehicle. After a stiff fine and compliance for a second offense, a third time vehicular offender has a mandatory appearance before the Judge, a very stiff fine, and must, once again, bring the vehicle into compliance.

Coordination:

Continuation of the enforcement activity with all community agencies with whom it will interface is absolutely necessary. These agencies need to know what is being done and the program's objective of "quiet in the community". To achieve this coordination, a "show and tell" session is highly recommended. We had occasion to establish a program within the Police Department in Sioux City, Iowa. As part of this function, and to establish the desired coordination with the Municipal Court, we took all of the Municipal Court Judges out on-the-street with the noise monitoring equipment. In very heavy traffic, along a multi-lane one-way street, Northbound out-of-town, at 5:10 p.m. the Presiding Judge observed an 84 dBA violation on the meter. He said, "I'd issue him a Summons", I countered, "which one was it in the pack, Judge?", he responded, "the green and white Chevy pick-up, it's obvious!"; whereupon I said "Thank you your Honor, demonstration over."

The equipment was successfully demonstrated, the methodology clearly understood by the Judge, and the reasonableness of the levels being enforced was proven. The Judges became very supportive of the program. This "real world" approach to coordination at all levels, before the fact, is much preferred to doing an entire "show and tell" each time a not guilty plea is entered before a new Judge. The use of this approach has also been known to reduce the number of not guilty pleas entered. A suggested list of those with whom one should coordinate a new program is given below:

Mayor, Council, City Manager, Judges, Attorney/Prosecutor, Court Clerk, Violations Bureau, Health Department, Police Department, Purchasing Department, Transportation Department, and Planning Department. Others for coordination include various civic organizations for their support and for public relations purposes.

Administrative Placement:

Administrative placement of the enforcement activity should be where it will work most effectively and have the best chance for succeeding in a community.

We have assisted in the inception of programs in many other communities. We have had very successful ones placed on the City Manager's Staff, in the Police Department (with a specialist responsible for the program), the Department of Health, the Building and Zoning Code Enforcement area, and others. To repeat, the program should be placed, administratively, where it will work best in an individual community.

Personnel:

The individual selected to enforce a noise control program should have a relaxed, informal approach in dealing with people and be able to communicate extremely well. Additionally, the enforcement person should be able to handle himself well in what could best be described as "stressful" situations. One description of the author of this paper characterized him as being a combination of Hewlett-Packard, Andy Granitelli, Sigmund Freud, and Cowboy Bob all rolled up into one amiable package. This is in reference to the Electronic, Physics, and Acoustic expertise required; the necessary knowledge of autos and engines, and the ability to handle people psychologically in "Free Form" situations. Being an easy going Westerner also has proven advantageous.

Training:

The levels to which the enforcement person can be trained are as follows:

1. Operator: An individual competent to set-up the equipment and make accurate sound level readings.
2. Technician: An individual having the abilities of the operator plus the level of expertise to provide the prosecuting attorney with the acoustic knowledge needed for successful prosecution.
3. Engineer: An individual with the abilities of 1. and 2. plus the ability to apply engineering level solutions to acoustic problems encountered in the community.

Training programs are available for community noise enforcement personnel through the U.S. E.P.A. Echo Program (each community helps others). Instructor/Advisors are provided travel and expense funds to come to a community and assist in establishing such activities. Noise Ordinance Enforcement Seminars are also conducted by various organizations throughout the nation. Additionally, cities which have on-going noise enforcement programs, usually welcome other community personnel to work with them in an "on-the-job" training situation. We have done this a number of times in Boulder.

Public Relations:

An active effort in Public Relations is one key to a successful program. The point where the most critical and successful public relations effort is applied is that one-on-one situation during the issuance of a vehicular summons; or in the contact with a party on whom a noise complaint has been received. If the ordinance is thoroughly explained and the objective of "Quiet in the Community" is emphasized, along with the alternative of compliance resulting in dismissal, then the "point of contact", or one-on-one public relations effort has an excellent chance of being successful. In our Boulder activity, approximately 90 per-cent of the vehicular summonses issued are brought into compliance and are dismissed prior to arraignment. As previously mentioned, over 2000 non-vehicular complaint responses have necessitated the issuance of only six summonses. The public relations effort is very worthwhile.

It is recommended that the noise enforcement program have a high visibility in the community. This is accomplished in Boulder by the placement of signs at each entrance to the city denoting "Noise Ordinance Enforced". These signs are accompanied by the symbol of a silhouette of a person with their hands over their ears, being bombarded by sound waves. The visibility of the program is also enhanced by the use of a specially marked patrol car with 4 inch high letters on each side proclaiming "NOISE CONTROL". The Boulder car is equipped identically to the standard black and white Police car with the exception of it carrying the sound level monitoring equipment and being painted a brilliant (some have said "nutrid") green and white. When this vehicle is on-the-street, it is very obvious and it is known to be at work.

Other approaches to boosting the program are community quiet weeks, carrying out free noise tests on vehicles in shopping centers throughout the community, and active use of news media coverage. Most local radio and T.V. stations have no-cost Public Service Announcement time which can be utilized to spread the word about a noise control program. One we used in Boulder stated, "The following is a word from your Noise Control Officer about the City of Boulder's Noise Ordinance - - Shhhhh!! This has been a public service announcement". Announcements of this type are most effective.

Enforcement Equipment:

The equipment employed should be rugged, maintainable, and accurate. The availability of service, repair, and calibration facilities is one prime consideration. The turn around time of the service and calibration facility is also an important factor in getting the equipment returned to enforcement activity as soon as possible.

The use of A.N.S.I. Specification Type One equipment, the most accurate, is preferred. No less than Type Two equipment is recommended. Calibration of the enforcement equipment is recommended on a three month cycle. In the

City of Boulder, we calibrate our equipment monthly with traceability to the National Bureau of Standards. Accuracy of the evidence we collect is just reinforced by doing so.

Several manufacturers produce good quality sound level meters for use in an enforcement activity.

Preparation for Court:

Any Officer is going to be faced with the presentation of their evidence in court. In preparing to defend the evidence you have collected, and it's accuracy, the following items should be available to you and your prosecuting attorney:

1. Certification of Calibration.
2. Set-up procedure sheet.
3. Level observed in violation.
4. Copy of summons issued.
5. Details of summons issuance.

Additionally, a thorough briefing of your prosecuting attorney is recommended. The function of the noise ordinance enforcement person is, to correctly interpret the noise ordinance, and to collect accurate evidence pertaining to violations of same. The person collecting the evidence should be prepared to prove it's accuracy in court.

ELEMENT IV. PROGRAM COSTS:

Costs for an Environmental Noise Control program will vary from community to community by the amount of impact that is desired on the problem. Ranges in cost per capita of from 1.8% for a City like Chicago, to 44% as in Boulder, and higher have been noted.

The Boulder program has a total budget of \$2,000,000 for 1976 operating cost. This covers all personal service costs, all non-personal services such as office supplies, telephone, car, and so forth. Employee benefits are included; however this figure does not include any capital expenditure funds. The monitoring equipment is a capital item and is usually amortized over a three to five year period. From 2,000 to 3,000 dollars per year are returned to the General Fund from fines.

The City of Norman, Oklahoma's program is budgeted at 20% per capita, which includes all portions of the program and the purchase of the initial monitoring equipment system. One respondent to the Norman Attitudinal survey named her 10% to the bottom of the form in order to help get the program going.

In very small communities, a noise control program can be initiated within an existing enforcement body for only the cost of the sound level monitoring equipment and the training necessary to get the staff up to the qualified operator level of competence.

Communities having on-going Noise Control

programs are usually very willing to assist another in getting their personnel trained. Also, an organization of which I am Chairman, The Community Noise Control Association, has a Noise Seminar planned for early October in Boulder. This will be a one week long course in cooperation with the University of Colorado and other organizations. Information will be available on request.

CONCLUSION:

Noise ordinance development and experience in noise ordinance enforcement can be gained through benefiting from the experience of others, or by trial and error. We have tried both paths. In noise enforcement in Colorado, we are known to steal freely, from one another, those program elements which will be of added benefit to our own. It is hoped that the elements covered herein will be helpful in eliminating some of the trial and error. It may be necessary to develop other techniques to suit the needs of an individual community; however, it should be kept in mind that a noise control program can succeed with the proper manner, enthusiasm, and funding.