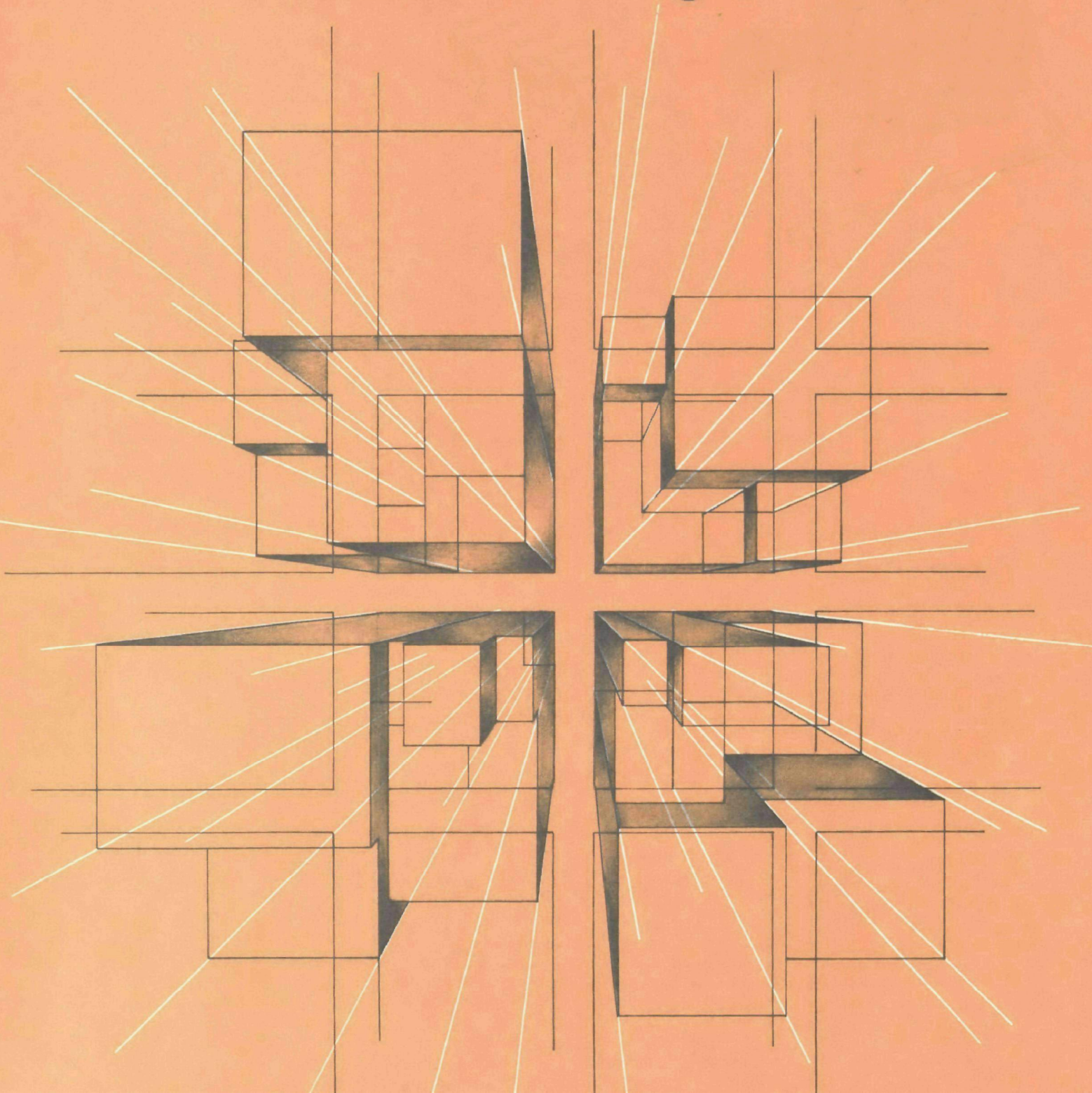




Colorado Springs, Colorado

Case History of a Municipal Noise Control Program



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Case History of a Municipal Noise Control Program

Prepared under:
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Prepared by:
Consumer Dynamics, Inc.
11300 Rockville Pike
Rockville, Maryland 20852

U.S. Environmental Protection Agency
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This report has been approved for general availability. The contents of this report reflect the views of the contractor, who is responsible for the facts and the accuracy of the data presented herein, and do not necessarily reflect the official views or policy of EPA. This report does not constitute a standard or regulations.

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by

Consumer Dynamics, Inc.

Rockville, Maryland.

Under the direction of Hank Cox, Project
Manager, the study was researched and written
by Frederic C. May. The authors would like to
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EXECUTIVE SUMMARY

This technical case study of the noise control program in Colorado Springs, Colorado, was developed to enable noise control administrators and municipal officials from other local communities to benefit from the experience gained in Colorado Springs. This study was prepared under the direction of the Environmental Protection Agency's Office of Noise Abatement and Control.

Colorado Springs was chosen for this study because the city has a vigorous noise control program that receives enthusiastic support from the city government and the populace. As with any local community program for noise control and abatement, it is a unique product of many community factors such as environment, demography, economic growth and business composition, structure and function of municipal government, and especially the interest and resourcefulness of the key individuals responsible for operating the program. Because of these and other variables, it is difficult if not impossible to attribute the program's overall success to any particular aspect of the effort. Rather, this report examines the Colorado Springs program in all of its phases with particular emphasis on those aspects which could be employed successfully by other local communities.

Those who use this report should avoid the oversimplification of attempting to apply the methods used by Colorado Springs in an identical way to their own communities. A successful community noise control program will be a program that is responsive to the particular needs and problems of that community. The significant ingredients of the Colorado Springs noise control effort are the ideas and concepts that can be appropriated from that city and adapted to the needs and problems of other communities. How those ideas and concepts are specifically adapted, however, can be determined only by the noise control administrator or municipal official responsible for developing the program.

Description of the City

Colorado Springs lies below Pike's Peak at the foot of the front (eastern) range of the Rocky Mountains. The location offers city residents easy access to a variety of outdoor activities. In addition to the recreational possibilities, the semi-arid climate and moderate temperatures are added inducements to new industries to locate in the city. This, according to the Economic Development Department (EDD) of the Colorado Springs Chamber of Commerce, is a big reason why the city's population figure of 197,230 is nearly three times that cited by the 1960 census.

The EDD has been conducting an extensive recruiting campaign to entice into the area industries that are nonpolluting and do not use large amounts of water and energy. The Chamber of Commerce sells the city's high quality of life and community concern for the environment in hopes of attracting only businesses which are fully compatible with community needs. Some of those new businesses include Ampex Corporation, Hewlett-Packard, Honeywell, NCR, and TRW-Colorado Electronics.

Nearby Army and Air Force installations employ a large segment of the Colorado Springs work force. Federal, State, and local government are the largest employers in the area, followed closely by retail trade and services. Because of this commercial composition, the most common sources of noise are vehicles -- cars, trucks, and recreational vehicles, especially motorcycles. It was largely because of the growing vehicle noise control problem in Colorado Springs, that initiatives were taken to develop a noise control ordinance.

History of the Noise Control Program

In 1971, in response to a growing number of complaints about noise - particularly vehicle noise - the assistant city manager of Colorado Springs

requested that Boulder's noise administrator send him a copy of the Boulder noise control ordinance. The present Boulder ordinance, which was based upon an EPA model community ordinance, was adapted by Colorado Springs with very little change. Thomas Martin, noise control administrator in Boulder, was then hired to administer the Colorado Springs program. Prior to an essentially unchallenged passage of the city noise ordinance, Martin conducted an extensive program to educate citizens about the hazards of noise and to inform them about the new ordinance and how it works. He also tested noise levels in various sections of the city during peak traffic hours.

From July 1, to August 1, 1971, Martin issued warnings to more than 100 noise violators. After August 1, offenders who were summoned to court were usually dismissed with a warning if they had achieved compliance with the pertinent noise regulations.

Because warnings achieved only very minimal success in abatement of vehicle noise, Martin's successor, Joseph A. Zunich decided that a more rigorous enforcement strategy was necessary. To discourage violators from reinstalling noisy modifications on their vehicles, as they had previously done, he appealed to the presiding municipal judge to rescind the "warning" system. Subsequently, that system was replaced with a more stringent penalty system--when a municipal court order was issued in August 1976. Because police activities were increasing with the rapid growth of the city, there was a shortage of available policemen to assist noise technicians in enforcing the noise ordinance. Since this lack of support compromised their enforcement capability, Zunich and City Safety Director Darrel Barnes met with the police chief and other city officials to work out a solution to a growing problem. They agreed to allow certification of patrolmen as noise technicians, to keep the noise control program separate from the police department, and to allow it to function entirely under the direction of the safety director. Under this system, the city's "noise cops" function primarily in a noise control

capacity, though they are trained and qualified to perform normal police duties.

The establishment of an enforcement mechanism separate from the regular police department and the application of stringent legal penalties for violations have greatly increased the effectiveness of vehicle noise control in Colorado Springs. However, it is doubtful if these innovations would have been successful without the support and cooperation of the city attorney's office and the municipal judges. The close liaison between the noise control administrator and the city attorney's office is a key ingredient in the noise control program's effectiveness.

Current Noise Control Program

Although the original emphasis of the program was on abatement of vehicle noise, under the direction of the second noise control administrator the program has been expanded to include enforcement of other provisions of the ordinance. Substantial effort is expended to prevent future noise problems. For example, whenever a zoning change is proposed, detailed plans of the change must be submitted to the city planning department which solicits input from the noise abatement agency prior to making a ruling. Noise control is included among the considerations of how the zoning change would affect the community.

The noise control ordinance specifies maximum noise levels in decibels for each zone, i.e., residential, commercial, light industrial, and industrial. To assist the community in finding solutions to noise complaints ranging from barking dogs and chain saws to model airplanes in parks on weekend mornings, the noise control officers are available day and night to investigate such disturbances. Once the nature of the noise, i.e., frequency, source, and loudness of the disturbance has been established, the complainant is asked to sign a complaint so that official action can be taken. Often,

Zunich and his staff find that a complaint is being used as part of a neighborhood squabble and that the complainant refuses to sign a complaint. The noise control officers have learned to avoid becoming involved in such situations.

Good community relations play a large role in the success of the Colorado Springs noise control program. Reasonableness in applying enforcement techniques and favorable reporting of noise control activities by the local news media have helped obtain public support and achieve voluntary compliance. While noise control was not always viewed as a necessity by the police department or the community, Zurich has found that voluntary compliance can be nurtured through reasonable enforcement and use of meaningful penalties for violators.

Key Program Components

Some of the more significant concepts contributing to the success of the Colorado Springs noise control program that could be emulated by other cities are:

1. The noise control police officers were placed under the direction of the Director of Safety allowing them to spend most of their time enforcing the noise ordinance.
2. The old system of using a noise technician and a regular police officer was superseded by the system in which the police officer and the noise technician are the same person, yielding greater efficiency.
3. Repeat noise violators must pay increasing fines; first offenders must post bond but are entitled to a partial refund if they subsequently can prove compliance with the

noise ordinance. The purpose of the penalty system is to deter the occurrence of willful noise violations as well as to discourage repeat offenses.

4. The city attorney's office was consulted prior to adapting the ordinance to assure they could enforce it, and a close working relationship between the noise control agency and the attorney's office has been maintained to assure optimum pretrial preparation.
5. The noise control officers receive extensive training to assure efficient and proper enforcement capability.
6. The noise control office maintains good community relations through reasonable implementation of its program and favorable advertisement of the noise control program by local news media.

In summary, there are many factors contributing to the success of the Colorado Springs noise control program. Because many of those factors were directly related to possibly unique situations in Colorado Springs, each contributing factor should be thoroughly evaluated before any attempt is made at applying it to solutions of noise problems in other cities. Zunic developed his program through a process of trial and error that is described in this report. What worked for the Colorado Springs noise control administrator may not work for others. For example, without the close working relationship between the noise control staff, the police department, and the city attorney's office, enforcement of the vehicle noise standards would be less effective. The success of a noise control program does not depend so much on the structure established to enforce it as it does upon the effective communication and cooperation of the officials involved. It is the considered opinion of the authors of this report that the single most important element in devising and operating a

successful noise control program is the development of effective communication among the executive, judicial, and legislative elements of municipal government.

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I. DESCRIPTION OF THE CITY

To understand the need for and implementation of the noise control program in Colorado Springs, it is necessary to first describe the complex combination of environmental, social, economic, and political characteristics of the city. This section describes how those factors affect noise generation as well as noise control.

Environment

There are three physical aspects of the Colorado Springs area which enhance the desirableness of living or working in or near the city: topography, climate, and a relatively pristine environment. The Economics Development Department (EDD) of the Chamber of Commerce uses these characteristics as part of its pitch in inducing industries to move to Colorado Springs.

The city lies beneath Pike's Peak within a zone of topographical transition from the Great Plains Region to the east, to the front range of the Rocky Mountains on the west. Within 12 miles of Colorado Springs, elevations reach 14,000 feet with the average elevation of the front range being about 11,000 feet. To the north, the ground slopes upward to the Palmer Lake Divide at 8,000 feet. To the northeast and east there are rolling prairies with average altitudes above 7,000 feet. To the southeast the terrain slopes downhill dropping at a rate somewhat greater than 1,000 feet per 40 miles. The wide variations in elevation result in some very hilly streets in the city. More vehicle noise is generated in climbing and descending such streets than would occur on more level terrain.

Receiving only about 14 inches of rain per year, the city has a semi-arid climate; rainfall is measurable less than 25 percent of the year. Average snowfall for any one year is 39 inches. Temperatures range from -26°F to 100°F. With almost desert-like temperature ranges, nighttime

minimum temperatures are nearly 30 cooler than daytime maximum temperatures. Temperature extremes, however, are infrequent. Because dry air transmits sound more readily than moist air, effective noise levels may actually be greater in Colorado Springs than in a city with much more humid weather.

During winter months a very strong wind system frequently forms with winds (chinooks) as high as 100 miles per hour. The system is created as a result of a compression caused by air descending the eastern slopes of the mountains toward Colorado Springs. Temperatures, as a result, warm to the mid 60's in January and to the 70's in February. Recreation possibilities such as skiing, hiking, and camping along with a dry moderate climate have enticed many people and industries to locate in the area.

Demography

The population of Colorado Springs doubled from 1950 to 1960 and again from 1960 to 1970. From 1950 through January 1978 the population has quadrupled. This tremendous growth has been a result, in part, of expanding city limits as well as increased migration. Coincidental with this growth has been an increase in vehicles. Table 1, furnished by the Colorado Springs Chamber of Commerce, provides greater demographic detail:

TABLE 1. Census Statistics

POPULATION	City Of Colorado Springs*	El Paso County Metropolitan Area	Metro Colorado Springs Approximate Percentages
1950	45,472	74,542	White - 85.0%
1960	70,194	143,742	Black - 5.2%
1970	135,060	235,972	Mexican/American - 8.5%
1977	191,600	309,000	Other - 1.3%
1978	197,230	317,660	
1980 Projection	204,940	329,530	
1985 Projection	235,930	377,200	
1990 Projection	269,910	429,480	

*(City limits have changed and are changing)

As Figure 1 indicates, the higher income groups in Colorado Springs are located to the north and southwest of the city. It is also into these areas that the greatest growth is occurring.

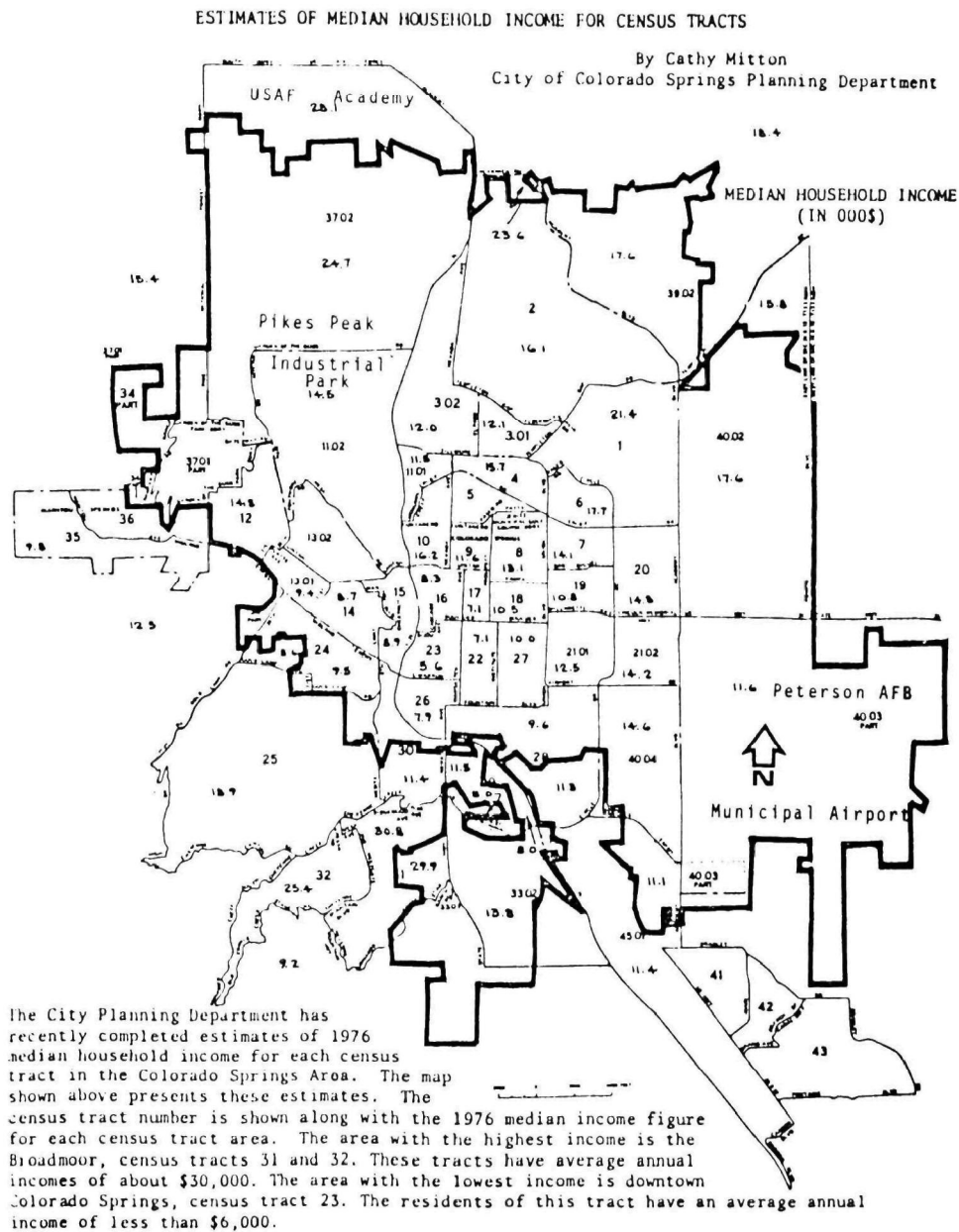


Figure 1. Estimates of Median Household Income for Census Tracts

Associated with income is purchasing power. If it can be assumed that a higher income generates more disposable income, it might also be reasonable to assume that in the higher income areas there would be a greater quantity of manufactured goods. For example, the fact there are more motorcycles in those areas may be attributed to the high level of disposable income also in those areas.

Area Employers

The largest single employer is government: local, State and Federal. Located just north of the city is the U.S. Air Force Academy; just to the south is Ft. Carson; to the east within the incorporated city limits is Peterson Air Force Base; and to the southwest is the North American Defense Command (NORAD). Although government may remain the single largest employer for a few more years, employment in trade and services is rapidly expanding, and a further indication of that growth is the number of companies which have moved to Colorado Springs or experienced major expansion since 1975. Among those companies are (number of employees shown in parentheses): Ampex Corporation (1,400); Denver Equipment Division of Joy Manufacturing Co. (344); Digital Equipment Corporation (300); Honeywell Corporation (258); Litton Data Systems (350); NCR Microelectronics (260); and Schlage Lock Division of Ingersoll-Rand Corporation (430). Much of this expansion since 1975 is credited to the recruiting efforts of EDD.

The EDD projects that by 1980 there will be more companies in the metropolitan area in the areas of air freight, electronics, plastics, water valve manufacturing and micro-film, with a total capital investment of \$14,400,000 and additional employment totalling 2,145.

It should be noted that the EDD's recruiting campaign has been aimed at certain industries. According to Mayor Ochs, "...the type of industry that is being wooed is nonpolluting, non-large users of water or energy." (Colorado Springs, July 1978). And because of the limits on natural resources, especially water, growth in the metropolitan area is not expected to exceed 450,000.

Transportation

The economic pulse of the city is directly related to the flow of goods and services in and out of the city; transportation provides that flow but often at the cost of causing noise problems. According to Shelby Dill, director of the EDD, another important factor new industry looks for in a new area is availability of transportation. Trucking, he points out, is very good--34 trucking companies serve Colorado Springs and offer interstate, coast-to-coast service as well as prompt intrastate delivery. Rail service is provided by four railroads: Rock Island, Denver and Rio Grande, Santa Fe, and Burlington Lines. Air freight is available from the Colorado Springs municipal airport. Although direct passenger service is not as good as could be, according to Dill, service in addition to the present 68 daily flights is soon expected. Bus service to the city is provided by Transcontinental, Greyhound and Continental Trailways, and within the city by Colorado Springs Coach Company. Including commercial air traffic, the greatest source of noise is from vehicles traveling to or from Colorado Springs.

Education

In 1978, approximately 18,000 post-high school students attended the area's 10 colleges and universities and there are many more school-age children attending School District Eleven's 86 elementary and junior highs and 11 high schools. Although the greatest proportion of the vehicle noise

problem can be attributed to violators in the 17 to 30 age group, there is a growing minibike noise problem involving the area's many school-age children.

Local Government

How responsive a city is to the needs of its citizens is directly related to its government functions. In Colorado Springs, government plays a large role in the enforcement success of the noise control program. On July 6, 1920, the city charter granted by the State of Colorado was amended to provide for a council-manager form of government. Because the charter is the city's constitution, it establishes the form, functions and powers of government. The city council derives its power as well as its responsibilities from the charter. Under the council-manager system, the nine council members are elected for four-year terms to serve without pay. At present the mayor is chosen from among the council members, but will be elected by popular vote beginning in 1979. The city manager who administers the policies set by council is appointed by the (nine-member) council. Certain other city officials also appointed by the council include the city attorney, municipal court judges, auditor, and clerk-treasurer. All other city appointments are made by the city manager.

Although the city council has the power to pass ordinances and resolutions dealing with zoning, appropriations, or noise control, voters of the city can decide issues through initiative and referendum. Qualified electors such as the city manager or assistant city manager can propose ordinances to the council. Should the council fail to adopt such an ordinance, electors can put the issue on the ballot of the next election. A council-approved ordinance can also be voted on through referendum procedures.

Several types of council meetings are held. The regular meeting is an all day session held twice a month; the informal meeting is held on the

Monday preceding each regular meeting so the council can advise the city manager on decisions concerning city business. Once a month the council meets as the Board of Public Utilities.

The council can also call public meetings or hearings on issues affecting the community. All council meetings are open to the press and general public except when matters concerning legal or personnel affairs are discussed.

II. HISTORY OF THE NOISE CONTROL PROGRAM

Colorado Springs has experienced tremendous economic and population growth in the past two decades. Accompanying this growth has been a substantial increase in the number of vehicles in and around the city. Because business in the metropolitan area is primarily commercial, light industrial, or military, the predominant source of noise is vehicular. Long-time residents of the area exert a strong influence in environmental matters, and as more information becomes available on the hazards of excessive noise these people have become more conscientious and cooperative in support of the city's noise control efforts.

Passage of the Ordinance

In response to complaints of increasing vehicle noise, Charles Heitman, assistant city manager, requested in 1971 that the noise control administrator of Boulder, Colorado, send him a copy of that city's noise control ordinance. Current city officials recall that the only change made in the ordinance was to change the name of the city from Boulder to Colorado Springs. Zurich said the ordinance was based on the EPA model community ordinance which regulates noise generation by land use and on research conducted by the city of Boulder. As a result the ordinance was judged to be appropriate for Colorado Springs. Heitman submitted the ordinance to the city council which passed it without opposition. According to Darrel Barnes, city director of safety, no one realized the impact the ordinance would have.

Efforts of First Administrator

After the new ordinance was passed but before it became effective, the city hired Boulder's Noise Control Administrator Tom Martin to serve as administrator of the Colorado Springs program. Placed under the jurisdiction of the city police department, Martin initiated in January 1971, the first phase of his noise control program by launching an extensive education program, addressing high school assemblies and interested civic

groups. Also part of his publicity/education campaign, Martin publicized the program in the Gazette Telegraph (GT) (a local newspaper) two months before enforcement activities were to begin on July 1, 1971. (See Appendix H for more detail.)

In May 1971, Martin announced in the paper he would begin the second phase of the program by conducting vehicle noise level testing on weekends during June in the municipal service center area. Testing was set up specifically for those who lacked understanding of the ordinance, and who wanted an opportunity to have their vehicles tested for compliance without incurring a liability.

The third phase of Martin's program--enforcement--went into effect on July 1, 1971. From July 1 to August 1, 1971, however, operators whose vehicles exceeded 80 decibels at 25 feet were only given warnings and "...an order to report to Martin's office for consultation on how best to correct their particular situation." (GT August 9, 1972.) As of August 1, offenders who received summonses, were required to pay a fine of \$20, and could plead guilty, not guilty, or guilty with an explanation. The violation was reduced to a warning, however, if the violator had achieved compliance.

When Martin first undertook his responsibilities as the noise control administrator, he reported to the city police chief. However, this arrangement proved unsatisfactory and Martin was reassigned to the commander of traffic coordination, Lt. Butler. From 1971 through the summer of 1974, the noise control administrator was assigned to the police department while the noise control technicians worked for Darrel Barnes, city safety director. Because of internal police problems and insufficient staff, police officers were often not available to work with the noise technicians. In an attempt to gain better coordination of enforcement efforts between the noise control administrator assigned to the police department and the noise technicians

assigned to Safety Director Barnes, Martin was assigned to Barnes until March 1975.

Establishing the Current Program

When the first noise control administrator began working on the noise program in 1971 from within the police department, Joseph Zunich was administering the city employee hearing conservation program for Safety Director Barnes. Zunich was doubly qualified to assume the duties as the second noise control administrator in April 1975: not only had he developed a strong background in noise and its effects, but he had also been a Colorado Springs parks police officer prior to 1971. He is currently considered one of the noise control officers as well as being the noise control administrator.

After a year of trying to make the old program work, Zunich determined the noise control program required stronger enforcement measures. Early in 1976, Zunich and Barnes approached the police chief and several municipal court judges with some proposed changes. At that time they agreed to the selection of police officers for training in noise control and to the assignment of those specially trained police officers to the director of safety to perform only noise control activities. Although this arrangement has been functioning very well, Barnes predicts the officers will, in the near future, be reassigned to the police department in a move aimed at consolidating all uniformed patrolmen; but both Zunich and Barnes believe that such a move will ultimately create conflicts in enforcement priorities.

At approximately the same time, the 'go ahead' was received from Thomas G. Darneal, assistant city attorney to implement in-vehicle monitoring, i.e., placing a sound level meter inside a patrol car. Previously, the noise technician placed the meter on a tripod and monitored sound levels of vehicles passing in front of the meter's microphone. Both in-vehicle monitoring and use of the "noise cop" were novel techniques in noise control in the State of Colorado.

Not long after the noise control officer program was started, Zunich appealed to the presiding municipal judge Norman Walton for discontinuance of the court's practice of dismissing noise violations with a warning upon presentation of a certificate of compliance issued by the noise control administrator. On August 20, 1976, Judge Walton issued the order and established fines and penalties for repeat noise violators (see Appendix C). This step, in combination with other techniques that had been implemented, has greatly improved enforcement capability.

Controversy and Opposition

Although there was essentially no opposition to passage of the ordinance, some controversy did develop in 1971 concerning what monitoring equipment should be used for enforcement. Bud Edmunds, a local acoustician, had been elected to the Colorado State House of Representatives and was working on the Colorado State Noise Control Ordinance at the time Colorado Springs began purchasing monitoring equipment for enforcement of its ordinance. He suggested the city could save a lot of money by purchasing very inexpensive sound level meters for each police officer to carry. Barnes strongly disagreed with the recommendation based on his own safety experience; readings from a meter which could not be accurately calibrated would be unacceptable as evidence in court proceedings.

To give his point credence, Barnes met with the court administrator and judges. Since one of the judges was Judge Cook, an ex-FBI officer who knew about certification procedures, little difficulty was encountered in convincing all the court members what noise abatement procedures should be followed. During that meeting Judge Cook also learned that sound level meters were available which could be calibrated both before and after routine use; the readings of these instruments could be recorded on strip chart paper. It was agreed at that time that such recordings would be admissible as evidence of a noise violation.

After a few court cases, Safety Director Barnes met again early in 1973 with the court staff to request dropping the strip chart recording requirement. Newer equipment was available which could lock in the digital readout thus making the cumbersome strip chart recorders unnecessary; since the enforcement procedures previously implemented had established satisfactory legal precedents, the court staff agreed to Barnes' request.

Effective enforcement of the noise ordinance in the early 1970's was hampered not only by lack of staff support from the police departemnt but also by a lack of understanding on the part of the police officers themselves; this was reported by police sergeant Bob Hapke who had training in noise control. The officers, he said, were generally against noise violation enforcement, chiefly because they had no appreciation for what the program entailed nor for what useful purpose could be served by it. Through training courses conducted by Hapke and others for other police officers it was explained what noise control technicians' functions were, and what support they could provide in the event an officer lacked sufficient evidence to cite a loud vehicle.

In spite of these efforts only 30 percent of the officers had been convinced noise was a problem. As the success of the program has grown, however, officers have become less skeptical and more responsive to lending their support for the current program.

According to the present noise control administrator, there has been no organized opposition to any aspect of the noise control program; occasionally individuals will complain about the program's apparent lack of effectiveness through open forum-type columns in the Gazette Telegraph. This kind of opposition occasionally arises as a result of personal conflicts with personnel stationed at the nearby military bases.

III. NOISE ABATEMENT AND CONTROL LEGISLATION AFFECTING COLORADO SPRINGS

As mentioned before, the rapid growth of Colorado Springs has produced an increase in the number of vehicles in the metropolitan area. Reflecting the need for control of the resulting traffic noise, the Colorado Springs ordinance emphasizes vehicle noise abatement. Since the ordinance has been incorporated into Appendix A, only the more salient features of the law will be discussed.

Permissible Limits by Zones

The Colorado Springs Noise Ordinance specifies maximum allowable limits by zoning category for periods 7 a.m. to 7 p.m. and the following 7 p.m. to 7 a.m.; any level equal to or in excess of those limits is considered excessive and unusually loud and is, therefore, unlawful. More restrictive noise limits were set in deference to residential needs. These limits may be exceeded by 10 dB(A) for periods no longer than 15 minutes in any one-hour period. Periodic, impulsive, or shrill sounds are considered unlawful when the noise levels reach 5 dB(A) less than those specified in TABLE 2.

TABLE 2. Noise Limits by Land Use Zones

<u>Zone</u>	<u>7:00 A.M. to Next 7:00 P.M.</u>	<u>7:00 P.M. to Next 7:00 A.M.</u>
Residential	55 dB(A)	50 dB(A)
Commercial	60 dB(A)	55 dB(A)
Light industrial	70 dB(A)	65 dB(A)
Industrial	80 dB(A)	75 dB(A)

The areas specifically included within each zone are described in the city ordinance included in Appendix A.

Noise Restrictions On Motor Vehicles

The city ordinance regulates motor vehicle noise by gross weight of the vehicle: there are two groups--those vehicles weighing less than 10,000 lbs. and those vehicles in excess of 10,000 lbs.

Vehicles weighing less than 10,000 lbs. include cars, motorcycles, and light trucks. At no time may vehicles in this weight class exceed 80 dBA except if they are used outside the city limits or where the city has approved their use. The ordinance forbids exhaust modifications (devices capable of making a system louder) from being sold, rented, or installed, and forbids a vehicle fitted with such a device from being operated within city limits. Exhaust modifications apply to both weight classes but are usually found on vehicles in the under 10,000 lb. weight class. In practice, the devices can be sold provided the purchaser signs a statement that he or she is aware of the ordinance.

Vehicles weighing more than 10,000 lbs., including heavy trucks and buses, may not at any time exceed 88 dBA. During the day, between 7 a.m. and 7 p.m. this level applies to travel by these vehicles on all streets, but after 7 p.m. until the following 7 a.m. these vehicles must use designated streets only. Because these vehicles must negotiate a number of steep hills within the city limits, noise in excess of 88 dBA is generated when engine brakes (Jacob's brakes) are applied. The noise ordinance prohibits the use of Jacob's brakes; but during an emergency or inclement weather the ordinance is not enforced. (See Appendix H-12.)

Emergency vehicles are not affected by the provisions of the ordinance. Zurich stated, however, that exhaust systems on all city vehicles and equipment comply with the city noise ordinance.

Construction Projects and Railroad Rights-Of-Way

These two noise sources, construction projects and railroad rights-of-way, must comply with permissible limits specified for industrial zones (80 dBA/75 dBA). The length of a construction project is usually regulated by the construction permit; however, if there is no time limit, or if the project falls behind schedule, the noise control administrator may have to make a decision about what is a reasonable length of time for completing the project based on the noise impact on the community. When construction workers begin work before 7 a.m. or end after 7 p.m., a noise control officer must personally visit the site and issue a summons. This seldom occurs with local construction firms who are familiar with the noise ordinance, but some difficulty has been experienced with out-of-town firms.

Hardship Permits

Hardship permits are granted by the city manager only to persons creating a temporary non-vehicular noise disturbance which cannot in any way be performed in compliance with general provisions of the noise ordinance. The city manager, with advice from the noise control administrator, may place time limitations and noise level restrictions on the permit to minimize adverse effects on the surrounding community.

Comparisons with the State Law

Included among the provisions of the State law are those which declare inapplicability (Federal preemption) as well as those which clearly evoke State jurisdiction. Neither of these types of provisions are in the city ordinance. For example, a provision included in the State law provides that those activities subject to Federal law with respect to noise are preempted from the jurisdiction of the law. Since

in this case it is obvious the city has no jurisdiction, it was neither included nor referenced in the municipal ordinance. Similarly, provisions dealing with State adjudication procedures such as Section 25-12-105, Violation of (State level) injunction, were also omitted from the municipal ordinance.

Other differences between the two ordinances are attributable to the section in the State law which prohibits State preemption of municipal noise laws; the State law can preempt the municipal ordinance only if the municipal ordinance is less stringent than that of the State. The most stringent noise level in the State law is 84 dBA whereas the most stringent level in the municipal ordinance is 80 dBA. Subsequently, the Colorado Springs' ordinance requires that vehicles 10,000 lbs. or less be approximately one-third as noisy as the State law for the same vehicles. Framers of the State law used both the Boulder and Colorado Springs ordinances as models. In addition, noise control administrators from both cities guided the development of the State law. To prevent preemption of municipal ordinances already in effect, they strongly recommended a less stringent State law.

IV. GENERAL PROGRAM ADMINISTRATION AND ENFORCEMENT PROCEDURES

From 1972 until August 1976, vehicle noise violators who returned to court with a compliance slip usually paid a nominal fine and received a warning. But repeat offenders abounded on Colorado Springs streets; noise abatement measures clearly had not achieved noise control. As discussed in the section on History of the Noise Control Program (Section III), Zunich petitioned Judge Walton, in August 1976, to discontinue issuance of warnings; when the court order went into effect that August, repeat offenders had to obey the noise law or incur increasing fines and penalties. Coincidental with more stringent court procedures was the development of more efficient program administration and enforcement. The results have been an 80 to 90 percent success rate in conviction of those cases going to trial, an increase in voluntary compliance, and a quieter community.

Program Administration

The current noise control program receives its appropriations from general city revenues, and is located within the city department of safety. Because the noise control office is physically located in a department of public utilities building, financial support for minor equipment purchases is occasionally received from Utilities. Since the program is under Safety Director Barnes' administrative control, he can ensure that noise control officers spend the majority of their time in noise enforcement activities rather than on general police duties.

Actual administration of daily noise control activities, however, is the responsibility of Joe Zunich, noise control administrator. Unless there are other safety priorities given to him by Barnes, Zunich determines how much time each day should be spent in the investigation and follow-up of noise complaints in vehicle noise enforcement, or in carrying out special

noise programs such as officer training, attendance at seminars on noise enforcement, conducting community attitude surveys, or making presentations on the noise program to civic groups or schools. He is also responsible for program resource management--equipment purchase and maintenance, budgeting, and manpower assessment and allocation. Also, in what may be one of the keys to a successful enforcement program, he coordinates communications on noise cases or problem areas with the city attorney, judges, city council, and community representatives. Because of his experience in running a successful noise control program, Zunich was asked to participate in the ECHO (Each Community Helps Others) program sponsored by EPA, in which local noise officials are sent to assist other local communities develop noise control programs.

Enforcement Procedures

There are two other full-time noise control officers besides Zunich to enforce the noise ordinance in Colorado Springs. Although they do respond to nonvehicular noise complaints, the majority of their enforcement activities are in vehicle noise control.

Routinely, one officer is assigned to a patrol car and the other to a motorcycle. These vehicle assignments cause a division in the type of enforcement activities each is involved in: Richard Bowman patrols city streets in a car equipped with an electronic sound level meter (SLM), while Robert Proctor, on the motorcycle, pursues obvious violators in vehicles fitted with exhaust modifications, or he chases down unlicensed juveniles riding unlicensed motorcycles near residential areas.

The patrol car is the focal point of vehicle noise enforcement and has been one of the main reasons for vehicle noise abatement success in Colorado Springs. In many cities where vehicle noise monitoring is conducted, sound level meters (SLM's) attached to tripods are placed 50

feet from the centerline of vehicle travel. Upon indication of violation from the noise technician doing the monitoring, a patrol car pursues and apprehends the violator. As already discussed, this was the technique used in Colorado Springs until the police officer and a chase car were too frequently unavailable as a result of police department staffing shortages. The staffing problem and vehicle shortage were solved when police officers became certified as noise technicians and were able to use a specially assigned car. The one-man-one-car concept gave the officer more enforcement flexibility. With advances in meter technology, use of strip charts to record dB levels for legal evidence of violation as been phased out; now the officer needs only to lock in the maximum dBA reading reached as the offending vehicle passes the patrol car. Upon request, the violator has the opportunity to see this reading as he would the digital readout on a speed radar gun.

When the officer gets into the patrol car before going on surveillance, he attaches the SLM to a tripod mounted on or in front of the center console in his car. The tripod is permanently secured to lessen vibration. A lead wire, attached to a preamp on the meter, connects the SLM to the windscreen-protected microphone attached to a mast. The mast is supported by a double-legged hanger and hung on the left rear window which, when rolled up, secures the hanger against the top inside edge of the door frame (Figure 2).

After Colorado Springs obtained permission to place monitoring equipment inside the patrol cars with microphone supported on a mast outside, parking a police sedan 50 feet from passing vehicles made the 50-foot monitoring distance requirement in the State laws impractical. The safety director and the noise control administrator decided that the monitoring position should be moved 25 feet closer to the source of traffic noise to facilitate

patrol car maneuverability. The necessary adjustment is made for the resultant increased dB reading to ensure fairness to the motorist under observation.¹

When the officer apprehends the violator, he must use the same caution any other police officer must exercise when approaching a stopped motorist. Many times, another offense is connected with the noise violation and the officer must, therefore, be ready for anything.

Sometimes the officer must decide to cite a violator under the municipal noise ordinance or the State vehicle law. For example, if the individual is stopped for noise but is driving without a license, the State code must be cited. And because both a municipal charge and a State charge cannot appear on the same ticket, the city charge is preempted.

Another aspect of the noise control officer's job depends on the officer's ability to obtain complete and accurate information concerning the noise violation. He must learn how to obtain this information so that he can adequately prepare both himself and the prosecuting attorney should the violator choose to go to court and contest the citation. Being adequately prepared to win a case often depends on how well the arresting officer can recognize an exhaust modification or any other type of vehicle or nonvehicle noise-producing equipment. When an officer not trained in noise control writes a citation, cases are often lost--according to Deputy

¹Research on this relatively new method of monitoring traffic noise has been conducted by James D. Foch, USEPA Region VIII and Mary Beth Carlson, Minnesota State Noise Control Program. A copy of the joint report, "Vehicular Noise Monitoring From a Microphone Mounted on a Patrol Car," is available through Region VIII Noise Office, 1860 Lincoln St., Denver, CO. 80295.

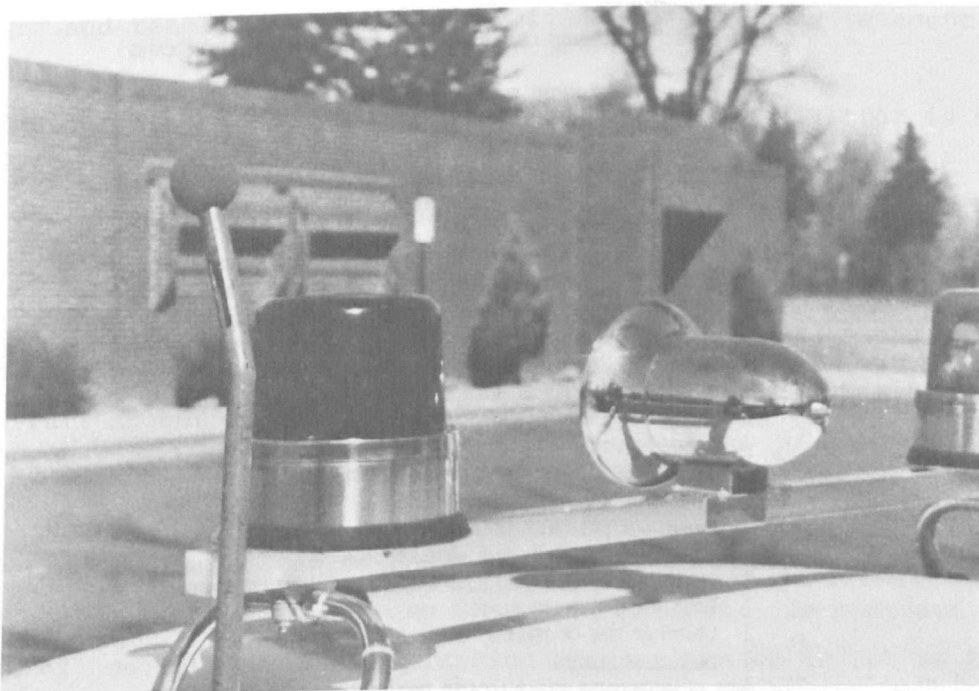


Figure 2. Pictures Showing Mast

City Attorney Clara Cafaro; she believes that the city would not get the degree of enforcement it currently does without the specially trained noise control officers assigned to Zurich.

The noise problems handled by the attorney's office cause neither a burden on the attorneys' time nor on their resources primarily because they know what questions to ask to get the desired responses. With assistance from the city attorney's office, Zurich developed a set of questions to ensure that both officers and prosecuting attorneys present the best possible case. These are those questions:

NOISE ABATEMENT WITH METER

1. NAME, OCCUPATION, NUMBER OF YEARS, SPECIAL TRAINING, EXPERIENCE
2. SO EMPLOYED ON _____?
3. DUTIES ON DATE AND TIME
4. ANYTHING UNUSUAL, DESCRIBE
 - A. DISPATCHED PER COMPLAINT
 - B. LOCATION VERUE
 - C. OBJECTIVE (TO DETERMINE LEVEL OF SOUND EMITTING FROM BUILDING LOCATED AT _____)
 - D. DID YOU USE ANY EQUIPMENT TO DETERMINE SOUND LEVEL?
 1. NATURE OF EQUIPMENT
 2. TRAINING ON USE OF EQUIPMENT
 - E. WHERE OFFICERS POSITIONED IN RELATION TO NOISE SOURCE
 1. IF NOISE SOURCE LOCATED WITHIN PUBLIC RIGHT OF WAY, AT LEAST 25 FEET FROM IT
 2. IF NOISE SOURCE ON PRIVATE PROPERTY OR OTHER THAN PUBLIC RIGHT OF WAY, 25 FEET FROM PROPERTY LINES ON WHICH NOISE SOURCE LOCATED
 3. EFFECT OF DISTANCE ON METER READING
 - F. EFFECT OF ATMOSPHERIC PRESSURE ON METER READING? ATMOSPHERIC PRESSURE READING TAKEN? IF NOT, WHY NOT? IF SO, HOW? RESULTS?
 - G. EFFECT OF WIND VELOCITY ON METER READING? WIND VELOCITY READING TAKEN? IF NOT, WHY? IF SO, HOW? RESULTS?
 - H. WARM-UP OF EQUIPMENT PRIOR TO USE? LENGTH OF TIME?
 - I. METER CALIBRATED? HOW? WHEN? (PRE-AND POST-USE) RESULTS OF CALIBRATION?
 - J. NOISE SOURCE ACOUSTICALLY ISOLATED? IF NOT, WERE YOU ABLE TO DETERMINE THE AMBIENT NOISE LEVEL? HOW? RESULTS?
 - K. HOW DID YOU USE METER ON _____? (POINTED IT AT NOISE SOURCE)
 1. DESCRIPTION OF NOISE SOURCE
 2. LENGTH OF TIME OF READING
 3. RESULTS OF READING
 - L. AREA IN WHICH NOISE SOURCE LOCATED (RESIDENTIAL, COMMERCIAL, LIGHT INDUSTRIAL, HEAVY INDUSTRIAL)
 - M. HIGHEST PERMISSIBLE LEVEL FOR NOISE SOURCES FOR THAT TIME OF DAY
5. WHAT DID YOU DO THEN? ID
6. STATEMENTS

Prior to prosecuting a noise violation case, the city attorney will confer with the officer who wrote the citation to ensure that information is accurate and complete. Again, the key to a successful prosecution is having fully informed and prepared officers and prosecuting attorneys.

Once an officer writes a citation for either a vehicular or non-vehicular noise violation, the noise offender has several choices in getting that citation resolved (a more detailed explanation is included in Appendix C):

1. Pay the fine but do not comply with the noise ordinance;
2. Refuse to pay the fine and go to court; or
3. Pay the fine, obtain a compliance slip from Noise Control, and receive a rebate on the fine without going to court.

Zunich pointed out, however, that although the violator is supposed to go first to City Hall with the ticket and post a \$25 bond for the first offense, a violator will most often go directly to a muffler shop, get the exhaust system fixed, and obtain a compliance slip from Noise Control. The violator then goes to the violations department at City Hall with the ticket and compliance slip and pays only \$10 without having to pay the full amount of the bond. Zurich indicated he was hopeful that better procedures for handling violations would be worked out.

For cases that do go to court, the percentage of convictions for vehicle noise offenses is between 80 and 90 percent. In contrast, the rate of convictions in "complaining witness" cases is not as high because past personal problems accentuate the actual seriousness of the noise complaint.

V. NOISE CONTROL OFFICER SELECTION AND TRAINING

Without well trained noise control officers, the most elaborate noise enforcement schemes enjoy only a modicum of success. Likewise, without the cooperation of the police department, courts, city attorney's office and informed citizens, even the best trained noise control officer is reduced to a data gatherer. The fact remains that most communities which do not have noise-certified police officers, and have only noise technicians without police power, cannot possibly benefit from maximum enforcement of their noise ordinance. This is because: 1) noise technicians who are not police officers must wait for a police escort; and 2) successful prosecution of noise violations is low because unqualified police officers lack the knowledge of how to gather noise violation data admissible as legal evidence. Colorado Springs' noise control officer program is unique to the State of Colorado if not to most of the country.

Officer Selection Criteria

In the city of Colorado Springs, "Employment Announcement," posted May 19, 1978, is the announcement for a noise control officer:

Duties and Responsibilities

1. Patrols the city of Colorado Springs using a noise enforcement vehicle.
2. Responds to citizen noise complaints by monitoring with sound level equipment and issues summonses as appropriate.
3. Monitors traffic noise; issues summonses.
4. Provides information to individuals and groups regarding noise and noise control.
5. Prepares a variety of routine and special forms and reports.
6. Performs related work as required.

Education Requirements

Must be a high school graduate with a minimum of two years higher education in engineering, math or physical science and three years of technical experience in same or a combination of education and experience.

Required Special Knowledge or Skills

1. Must have knowledge of acoustical physics, higher mathematics, and instrumentation.
2. Requires knowledge of the City's geography and skill in operation of a motor vehicle.
3. Have the ability to observe situations, record them and react quickly and calmly; ability to exhibit imagination, initiative and problem solving to cope with a variety of enforcement situations.
4. Must deal effectively with the public.
5. Must be able to follow written and oral instructions and write quality technical reports.
6. Must be in good physical condition.

Other Requirements

Candidate will be expected to successfully complete Police Academy Certification Training and pass a polygraph test and a written test.

Salary

\$891 - \$1032

Once the officer candidate satisfies the selection criteria, he or she must first attend a 12-week course at the police academy. There the officer candidate learns everything from proper wear of the police uniform to arrest procedures. The next step after becoming a police officer is to gain certification as a noise technician. He or she spends four weeks with the noise control administrator learning how to handle telephone complaints and every enforcement procedure, including how to testify in court.

On completion of the four-week noise training program, each officer is given both oral and written exams prior to certification. Here are a few selected test questions and the answers from those exams:

From the Written Test

2. You are dispatched to investigate a "loud music" type of complaint in a residential zoned area. You receive the complaint at 10:46 p.m. (2246 hours) you arrive at 11:01 p.m. (2301 hours). You have also been informed that other officers have been dispatched to the same location earlier that evening and other complaints have been reported in the past at the same location. Explain your course of action.
 - 2) Judgement answer i.e., answer should include reference to dBA levels with measurement made as prescribed in the ordinance at 25 ft. using sound level meter. If a violation is recorded by the meter above ambient levels, a summons should be issued since the parties had been previously warned.
4. A request for a zone change for a new commercial business has been requested from the planning department. The location is zoned commercial and requested by the developer to change the zone to light industrial. You take eight (8) noise level readings at various locations adjacent to the planned new industry. The day readings are as follows: Location A, 68 dBA; B, 69 dBA; C, 71 dBA; D, 71 dBA; E, 62 dBA; F, 75 dBA; G, 69 dBA; H, 71 dBA. Figure the ambient noise level and state if you would or would not recommend the request for the zone change.

Answer:

4) Total of readings = 556

Average reading = $\frac{556}{8} = 69.5$ dBA

Zone change should be recommended.

From the Oral Test

1. Do you feel there is a noise problem in Colorado Springs? Explain.
2. Are you familiar with noise measurements? A. Wind velocity. B. Building obstructions. C. Ambient traffic noise. D. Loud cars together. E. I.S.O. requirements. F. "A" scale, one third octave.
3. Do you object to working overtime at a last minute notice?
4. How do you feel in regard to wearing a weapon? Being called a pig or other names? Made fun of in front of other people? Obeying all rules and regulations dealing with your position? Attending school on days off or changing shifts to attend class? Attending classes for updating professional status, i.e., D.D.C.; Multi-Media First Aid; Seminars; Professional organizations; Safety Classes, etc.

After completing the necessary training for certification, the mayor of the city of Colorado Springs appoints the individual to noise control officer on a permanent basis (see Appendix E for appointment certificate). Before performing duties alone, each new officer must ride with an experienced officer five weeks.

VI. SPECIFIC PROGRAM ASPECTS

Vehicular Noise

Much of the vehicle noise program in Colorado Springs has already been discussed in previous sections since the emphasis in the noise control ordinance is directed at abatement of vehicle noise. In this section, there will be discussion of Noise Control's administrative procedures for resolving vehicle noise complaints and violations, and of methods for handling noise problems generated by trucks and motorcycles.

In Colorado Springs there are three methods for identifying vehicles that do not comply with the noise ordinance. One is by electronic meter surveillance using an SLM; another, by detection of exhaust modifications by any police officer, and third, by following up on complaints of noisy vehicles. Since the first two methods have been discussed in a previous section, only complaint procedures will be discussed in this section.

When a complaint is received by the noise control office that a particular vehicle seems excessively noisy, a warning is sent to the registrants (Figure 3).

If the first warning is ignored and is only followed by another complaint, a more strongly worded warning is sent to the offender (Figure 4).

When a vehicle noise complaint is not voluntarily resolved, an officer may have to conduct an on-the-spot compliance check using static test procedures explained on page 31. If the vehicle is found in violation of the 80 dBA (cars) or 88 dBA (vehicles over 10,000 lbs.) limits, a citation or summons is issued.

CITY OF COLORADO SPRINGS
NOISE CONTROL OFFICE

411 W FONTANERO PO BOX 1575
COLORADO SPRINGS, COLORADO 80901



TO: _____

DATE: _____

A complaint has been received by the Noise Control Office, that a vehicle registered in the name(s) of:

1

(Year) (Make of Vehicle)

May be in violation of the City of Colorado Springs Noise Ordinances. It is possible that if this vehicle is found in violation by either the Colorado Springs Police Department or Noise Control Office, a summons could be issued for one of the following Ordinances:

6-22-6. Exhaust Systems - Every motor vehicle shall at all times be equipped with an adequate exhaust system in constant operation and properly maintained to prevent any excessive or unusual noise, smoke or flame, and no person shall operate a motor vehicle anywhere in this City which is not so equipped, or is equipped with a muffler cutoff, by-pass, or similar device. It shall be unlawful for any person to operate a motor vehicle with an exhaust system that has been modified in a manner which amplifies or increases the noise emitted above that emitted by the exhaust system originally installed on the vehicle, and such original exhaust system shall comply with all the requirements of this section.

8-38. Noise Prohibited - A. The making and creating of an excessive or loud noise, or a noise which is unreasonable and objectionable because it is impulsive, continuous, rhythmic, periodic or shrill within the City of Colorado Springs as heard without measurement or heard and measured in the manner prescribed in Section 8-39, is hereby declared to be unlawful; except when made under and in compliance with a permit issued pursuant to Section 8-49. In proof of a violation of this ordinance evidence of noise heard and measured in the manner prescribed in Section 8-39, which is less than that required for a conviction by use of test or measurement as set out in Section 8-39A and 8-39B may be offered to prove a violation of this ordinance as heard without measurement. The time and location of the noise as well as the above mentioned characteristics of noise shall be considered in reaching a decision under this Article. B. It shall be unlawful for any person to operate or to allow to be operated any type of vehicle, machine, motor, airplane or device or carry on any other activity in such a manner as would be a violation of Section 8-40, 8-46, 8-47 or other applicable Sections contained herein.

The Noise Control Office offers compliance testing for noise levels on vehicles. If you wish to have the above vehicle checked, please contact the Noise Control Office at 471-6610 for an appointment. Compliance checks are conducted on Monday, Wednesday, and Friday at 10:00 a.m. and 1:00 p.m. The Noise Control Office hours are from 8:00 a.m. to 5:00 p.m. daily, except Saturday and Sunday.

Any vehicle brought in for voluntary compliance test will not be cited during test.

Noise Control Officer
City of Colorado Springs

Figure 3 Vehicle Complaint Form

CITY OF COLORADO SPRINGS
NOISE CONTROL OFFICE
411 W FONTANERO PO BOX 1575
COLORADO SPRINGS, COLORADO 80901



TO: _____

DATE: _____
FILE# _____

This is to advise you that the vehicle being operated by you is in violation of the City of Colorado Springs and State of Colorado ordinances and traffic codes. The vehicle you are operating is in violation of:

6-22-6. Exhaust Systems - Every motor vehicle shall at all times be equipped with an adequate exhaust system in constant operation and properly maintained to prevent any excessive or unusual noise, smoke or flame, and no person shall operate a motor vehicle on the streets and highways of this City which is not so equipped, or is equipped with a muffler cutoff, by-pass, or similar device. It shall be unlawful for any person to operate a motor vehicle with an exhaust system that has been modified in a manner which amplifies or increases the noise emitted above that emitted by the exhaust system originally installed on the vehicle, etc.
8-38. Noise Prohibited - A. The making and creating of an excessive or loud noise, or a noise which is unreasonable and objectionable because it is impulsive, continuous, rhythmic, periodic or shrill within the City of Colorado Springs as heard without measurement or heard and measured in the manner prescribed in Section 8-39, is hereby declared to be unlawful, etc.

42-4-222. Mufflers-prevention of noise (C.R.S. 1963) - Every motor vehicle subject to registration and operated on a highway shall at all times be equipped with an adequate muffler in constant operation and properly maintained to prevent any excessive or unusual noise, and no such muffler or exhaust system shall be equipped with a cut-off, bypass, or similar device. No person shall modify the exhaust system of a motor vehicle in a manner which will amplify or increase the noise emitted by the motor of such vehicle above that emitted by the muffler originally installed on the vehicle, and such original muffler shall comply with all of the requirements of this section.

If this vehicle continues to operate without correction of the violation checked, a summons will be issued by the City of Colorado Springs Noise Office or the Colorado Springs Police Department. Please take necessary action to bring this vehicle into compliance. If you are not the owner of the vehicle in violation, please advise the person to prevent a summons.

The Noise Control Office is offering a compliance test for noise levels on vehicles. If you wish to have the vehicle checked, please contact the Noise Control Office at 471-6610 for an appointment. Compliance checks are conducted on Monday, Wednesday, and Friday at 10:00 a.m. and 1:00 p.m. The Noise Control Office hours are from 8:00 a.m. to 5:00 p.m. daily, except Saturday and Sunday.

Any vehicle brought in for voluntary compliance test will not be cited during test.

Noise Control Officer
City of Colorado Springs

(Year) (Make of Vehicle)

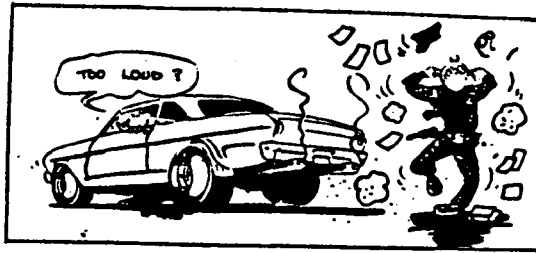
Figure 4 Vehicle Violation Form

Along with the noise ticket a violator receives an instruction sheet (Figure 5A) explaining step-by-step how to correct the vehicle noise problem. The sheet tells the violator to determine the cause of the violation, post a bond for \$25 at City Hall, get the problem fixed, and then schedule a time to go to Fontanero Street to have a compliance test performed by Noise Control.

When a compliance test is run by the noise control office, it is a static test, i.e., a passby test in which the vehicle being tested passes in front of the patrol car outfitted with the same equipment, and in the same perpendicular position relative to the line of travel of the offending vehicle. The static-testing procedure was upheld by the Colorado Springs municipal judges although in many other cities noise compliance testing is conducted quite differently. In other cities, testing is performed by holding the sound microphone 20 inches from the exhaust pipe, with the hood open, and using a tachometer to determine sound level readings at various engine speeds, 3000 rpm's usually being the test speed. Dr. Foch, a sound expert who advises the city on noise problems, was instrumental in obtaining approval for the static testing; he believes that placing a microphone only 20 inches from the vehicle does not allow adequate sound wave propagation and is, therefore, an inadequate sound level measurement of an exhaust system.

Figures 5C and 5D are compliance forms issued to a violator upon satisfactory completion of compliance testing. Presenting these forms along with the ticket to the violations department at City Hall will entitle the violator to a \$15 rebate on the original \$25 bond. The form shown in Figure 5B is maintained by the noise control office to readily identify repeat offenders.

Generally violators do not regard noise enforcement measurements as an infringement on their civil rights, according to Zunich. In fact, he said, some violators are often relieved when they learn a noise ticket cites them only for an equipment violation and does not assess points against their driving records.



A NOISE SUMMONS

Colorado Springs noise ordinances set maximum sound levels for all vehicles being driven or moved on all public streets and thoroughfares in order to achieve a quieter Colorado Springs. Every motor vehicle shall at all times be equipped with an adequate exhaust system in compliance with the ordinance. It shall be unlawful for any person to operate a motor vehicle with an exhaust system that has been modified in a manner which amplifies or increases the noise emitted above that emitted by the exhaust system originally installed on the vehicle, etc.

It is unlawful for any vehicle under 10,000 pounds gross vehicle weight (GVW) to emit noise in excess of 90 decibels.

A person charged with violation of the Colorado Springs Noise Control Ordinance may post a \$15 bond at the Violations Bureau, 915 of which will be refundable if they bring in a compliance certificate within 30 days. This is for first-time violators only.

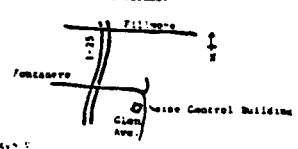
WHAT DO I DO NOW?

Step 1:
Determine the cause of the violation.
Examples: Faulty muffler, modified exhaust system, improper vehicle operation, etc.

Step 2:
Take your summons to the Violations Bureau, located in the basement of City Hall within 1 week of the violation date. Let them know that you plan to correct your vehicle. You are then required to post a \$15 bond.

Step 3:
Get on and implement a means of correcting the vehicle.
Examples: Install a new muffler, correct the modified exhaust system, etc.

Step 4:
Make an appointment to have your vehicle compliance tested at the Noise Control Office at least 72 hours prior to the date set by the Violations Bureau. If operational or mechanical repairs have to be made, it is to your advantage to have done so prior to testing. Bring your vehicle to the Noise Control Office at your appointment time. We will then test your vehicle using a sound level meter. If your vehicle meets city noise standards, a compliance testing form will be issued.



COMPLIANCE CHECK SCHEDULE TIMES

SUNDAY 10:00 a.m. - 1:00 p.m.
TUESDAY 10:00 a.m. - 1:00 p.m.
FRIDAY 10:00 a.m. - 1:00 p.m.

***Compliance Testing Location**
 City of Colorado Springs, Noise Control Bldg.
 411 W. Fortson Ave.
 871-0610

Step 5:
Bring the compliance form to the Violations Bureau with the compliance form. They will then refund \$15.00 of your bond.

For further information, please contact the City of Colorado Springs Noise Control Office at 871-0610.

*Compliance testing is open to everyone. Vehicles will not be cited if in violation during testing. For free testing of your vehicle make an appointment with the Noise Control Office. 871-0610

Figure 5A Instruction Sheet

Type of Violation (Cause)		Date
		Summons No.
Name	Middle	Last
Address		SS# if Military
Date of Birth		
License #	State	Year
Car Color	Model	Make
Court:		

Figure 5B Repeat Offender Form

**NOISE CONTROL OFFICE
CITY OF COLORADO SPRINGS**

VEHICLE NOISE COMPLIANCE CERTIFICATE

Name: _____

Address: _____

Date Rechecked: _____ Summons Number: _____

Ordinance Number: _____ Date Summons Issued: _____

Vehicle Lic. Number: _____ Vehicle Make/Year: _____

Additional Comments: _____

This person has taken corrective measures to correct the vehicle noise and the vehicle now meets city noise standards.

Certified By: _____

Noise Control Officer
City of Colorado Springs

Figure 5C Compliance Form

NOISE COMPLIANCE CHECK: RELEASE FROM LIABILITY

I, _____, residing at _____ (Print Name) _____ (Local Address), hereby release and discharge, and by these presents do for my heirs, executors, administrators and assigns release and forever discharge the City of Colorado Springs, a municipal corporation, its agents and employees, of and from all claims, demands, damages, actions, causes of action or suits at law or in equity, of whatsoever kind or nature, for or because of any matter or thing done, omitted, or suffered to be done by said City, its agents and employees arising from a noise compliance check conducted on _____ (Date) _____ (Vehicle Make & Year).

(Signature)

(Date)

WITNESSED BY: _____

What did you do to bring your vehicle into compliance? _____

Figure 5D Compliance Form

When asked who most noise offenders are, Safety Director Barnes replied that they were in the 17-30 age group. Many are military personnel from Ft. Carson. Although they register their vehicles in other localities, they do not make any attempt to comply with noise ordinances (if any) in their home states or towns and do not think that Colorado Springs' ordinance applies to them, especially not if they are only going to be stationed in the area temporarily. Barnes cited an example of a Canadian citizen on a brief assignment with NORAD (north American Defense Command). Since the individual was going to be with NORAD only a few months, he did not feel he should have to comply with the Colorado Springs Noise Ordinance. His car did not pass the monitoring test; nevertheless he was required to comply, and did so by purchasing a standard muffler before returning to Canada.

Faulty exhaust systems or sound-producing modifications attached to an exhaust system account for nearly all the violations issued on vehicles under 10,000 lbs. Retailers of the devices, after negotiations and agreements with Noise Control, now require the purchaser to sign a statement saying that he or she is aware that such modifications are illegal within the city limits. This action absolves the retailer from any liability connected with the use of the product.

Zunich cited an example of a local car dealer who sold a car with a modified exhaust system. Just after purchasing the car, the new owner received a noise summons. At Zurich's request, the car dealer installed a new standard exhaust system at no charge to the customer. Since the dealer had only been asked and not coerced into making the change, it is further evidence that local merchants are making a voluntary effort to comply with the noise ordinance.

Truck Noise

Only brief mention has been made up to this point about noise from vehicles weighing in excess of 10,000 lbs. Because of the magnitude of

difference in noise generated by vehicles under 10,000 lbs. and those over that weight, regulation of noise from heavy trucks includes more than the exhaust noise only regulated for vehicles in the lower weight category. Engine noise can contribute as much to overall truck noise as exhaust noise. This is particularly the case when trucks frequently have to downshift to negotiate streets in hillier parts of the city. Although the use of Jacob's brakes (engine braking) is prohibited by ordinance, Zurich pointed out that enforcement of the provision is less strictly enforced during inclement weather.

In 1973, truck routes through the city were first established, and have since been updated. A committee selected by the city manager was set up to periodically review both old and proposed truck routes. The committee includes at least one private citizen, commercial truck owners, and teamsters' representatives. The city traffic engineer and the noise control administrator act as advisors to the committee. Recently, the traffic engineer surveyed all major retail and wholesale businesses in Colorado Springs to determine how their materials were delivered and by whom. Then, over 3000 maps of designated truck routes were sent to city businesses and to inter- and intracity truckers regularly servicing those businesses. Figure 6 shows a much reduced version of the map they received.

Exceptions to the truck route ordinance do occur--when truckers get lost or must use an undesignated street for access to a construction project. Whenever a truck is found on a nondesignated street by the noise control officers or other police officers, it is usually only necessary to advise the trucker that he has strayed from the designated route, show him a map of the noise abatement designated streets, and warn him to check with his dispatcher concerning the streets he should be using. Zurich gave an example of an exception in which cement and other construction vehicles must enter an established residential area to reach construction sites of new homes. He usually receives complaints when such a situation occurs. His reply to



Figure 6. Truck Route Map

complaints in such a case is that the situation is temporary, and as long as the trucks take the shortest possible route through the community and return the same way, there is no problem. But recently two cement truck operators were issued summonses and were suspended by their company for failure to cooperate with the city's noise control program. However, a grievance was filed against the company by the teamsters union local. The issue is pending.

A problem involving trash trucks was solved largely through the combined voluntary compliance efforts of both truck drivers and owners.

Residential noise limits restrict noise levels to 50 dBA or below from 7 p.m. to 7 a.m. As a result of past complaints of trash pickup at 4 and 5 a.m., the noise control administrator met with the trash and garbage haulers. The understanding reached at the meeting, was that haulers would be able to go into commercial areas but not into residential areas from 7 p.m. to 7 a.m. and, under the terms of the ordinance the drivers, not the owners or managers of the hauling companies, would receive the fines; only the person responsible for making the noise can be cited. Zurich recalled the case in which this was tested. When a trash truck driver who had received a summons pleaded guilty, Judge Fischer denied the plea and requested the owner of the truck to appear in court. Section 8-38, paragraph B of the noise ordinance states, "It shall be unlawful for any person to operate or to allow to be operated any type of vehicle, machine, motor...in such a manner as would be a violation of...(those sections pertinent to permissible noise limits and vehicles). Judge Fischer applied a literal interpretation of that section to the case and fined the owner. This action was opposed, however, by the other judges and the city attorney because they believed it set a bad precedent.

The trash trucks continued to go into commercial areas as agreed. One problem arose when a pickup was made at a convenience store adjacent to a residential area. Because the resulting noise exceeded allowable limits, drivers received summonses. Trash truck owners and operators had been previously told by Zurich's predecessor that they could make pickups from commercial establishments adjacent to residential areas. Angered at the apparent inconsistency, it was necessary for Zurich to call another meeting with them and the city attorney. It was resolved at this meeting that their routes would have to be changed to comply with the ordinance; they agreed, and Zurich says there have been no complaints since. One of the collectors, however, has not complied. Zurich attributes this contrariness to the individual's apparent lack of environmental concern for the community. At the meeting this person threatened a walkout but was not

supported by any of the other truckers. Although summonses are still issued to this trucker, he has not entirely complied, and Zunich could not give an answer as to how he will deal with him in the future. Even though complete cooperation has not resulted, this example illustrates how some degree of voluntary compliance can be achieved through simple negotiations.

Motorcycle Noise

Of all the vehicle noise in and around Colorado Springs, motorcycle noise is causing the most community concern. Motorcycle noise not only bothers residents but also chases wildlife away and the cycles tear up the sparse ground cover. Most of the offenders are juveniles who have neither operating permits nor registrations for their motorcycles. Riding is usually on private lands adjacent to residential areas.

In most cases, citations given to motorcycle riders in the fields are for zoning violations. Sixty to 70 percent of these offenders are juveniles and the citations must be written on a juvenile summons. The offender appears before a juvenile hearing officer and, according to the noise officers, usually given nothing more than a slap on the wrist. However, when the officer writes a citation for lack of a recreational permit on the vehicle, the offender must appear in traffic court and is treated as an adult. Noise Control Officer Bob Proctor stated that the citation for this offense is a bit more effective than a citation for a zoning offense. Beyond receiving a citation for a zoning offense, neither unlicensed motorcyclists or minibike riders nor their parents are held liable for a noise violation. The only time a parent can be legally held accountable for an offense is if an officer's chase vehicle is damaged when pursuing a youthful offender. This was the case when Officer Bob Proctor's motorcycle was recently damaged during pursuit of a juvenile

riding on private property. The extent of the parent's liability was confined to reimbursement of repair expenses. The only other liability that can and has occurred is the loss of an unregistered motorcycle through confiscation. Noise control officers confiscated so many that the city's impound lot rapidly became crowded with the vehicles. Presently, however, only occasionally is a motorcycle confiscated.

In spite of nearly 600 complaints of motorcycle noise received in 1976, Safety Director Barnes reported that the only pressure encountered against noise control had been from local motorcycle riders and dealers. The opposition came in response to a proposed ordinance, known as the Stockton Ordinance, in which a motorcycle rider must have a permit signed by the owner on whose land the motorcyclist is riding. When the noise control administrator presented the ordinance to the city council in September 1976, he was advised to form a committee of bike riders, interested citizens, and property owners. After six months, the special committee chaired by James Quackenbush, a local resident, had reached an impasse on the implementation of the Stockton Ordinance; they recommended to the city council that if the Stockton Ordinance could not be implemented that a more stringent ordinance than they now had would have to be passed. At that meeting two motorcycle dealers were present and asked for further delay to submit a proposal for a motorcycle park. Because a consensus of opinion had not been reached on the implementation of the Stockton Ordinance, the Council granted the delay and recommended that Quackenbush outline proposed guidelines for further committee study.

But even though a motorcycle park was discussed as an alternative to a stricter noise ordinance, no action has been forthcoming from either the city or the special committee. In September 1978, a \$10 million park plan was unveiled but no plans for motorcycle trail or park were included. Barnes stated that although no finances had been specifically allocated for the motorcycle park, a plan was still being developed.

Meanwhile Zunich is continuing a program to arouse voluntary compliance among parents of youthful offenders. Whenever a minor is apprehended or contacted by a police officer, a letter is sent out from Noise Control (Figure 7).

When EPA's draft of the "Sound Level Test Method for Motorcycles (F76)" (including noise level standards) was published, Zunich responded to EPA's request for review of the proposed EPA standards by State and local agencies. His reply included an appeal that EPA standards be set at least as stringent as existing municipal laws, that testing procedures be simplified, and that there be a regulation on replacement motorcycle exhaust systems. (See Appendix D for more detail.)

Planning and Zoning

The Colorado Springs Noise Ordinance specifically defines limits for four categories of land use as already discussed. The objective of this provision is not only to control noise levels of current sources but also to prevent the location of new noise sources that would be expected to exceed levels in or near noise regulated areas. This latter part of the objective depends on the effectiveness of the city planning department. How the noise control administrator influences the decision of the planning department as well as how that department functions with regard to noise control are the subjects of discussion in this section.

The planning committee consists of representatives from several city departments and serves as a focal point of on-going city and community cooperation for determining the best use of land areas. The planning department receives recommendations from the planning committee and makes the final decisions on zoning and land-use changes. In addition to Noise Control, the planning committee also includes these members:

CITY OF COLORADO SPRINGS
NOISE CONTROL OFFICE
411 W FONTANERO PO BOX 1575
COLORADO SPRINGS, COLORADO 80901



TO: _____ DATE: _____

Dear Parent:

This is to advise you that your child or a minor under your supervision was contacted operating a motorcycle in violation of State and City of Colorado Springs Ordinances.

The problem of illegal motorcycles, especially those being operated by minors, has created excessive problems in the community. Motorcycles not properly muffled being operated in vacant lots causing excessive noise, erosion to property, and use of private property without permission are the leading complaints. The younger riders are perhaps not aware of these problems, but you as a citizen and neighbor, are.

The issuing of summonses to minors has not been the policy of this office and the Colorado Springs Police Department; however, due to the amount of complaints and disregard of previous warnings, it is difficult to maintain this policy. Minors who operate a motorcycle without a valid operators license, proper registration, use of proper safety equipment required by law, can result in a summons to the operator. Parents who permit, allow, or cause a minor to operate a motor vehicle, in this case a motorcycle, can be issued a summons also.

The purpose of this letter is to request your assistance in reducing this problem. If you have purchased a motorcycle or mini-bike for your child, do you know where it is being ridden? Is it noisy? Is it a problem in your neighborhood? In most complaints received, the individual usually knows the name of the child and where the motorcycle is kept and demands some action be taken. Please assist us in reducing the complaints. If you have any questions or require information, please call the Noise Control Office at 471-6610.

Figure 7. Parent Warning of Motorcycle Violation

- 1) A representative from the police department who is concerned with potential patrolling problems which would result from a zoning change;
- 2) A representative from the fire department who is interested in ensuring adequate access for pumping trucks or fire plugs;
- 3) A representative from the public utilities department who can identify problems with gas, water, electrical power, or sewerage systems;
- 4) A representative from public works who is concerned with drainage, streets, repair, and catch basins;
- 5) A representative from El Paso County who serves as a liaison to convey to the county what potential environmental economic impacts a proposed zoning change might have; and
- 6) The traffic engineer concerned with traffic flow, and access to city streets and major arterials running through the city.

To assist in planning, Noise Control conducts noise surveys at strategic points potentially affected by any new noise sources; it also conducts community attitudinal surveys among residents potentially affected by noise associated with a change in land use.

Typically, the individual or group desiring a zoning or subdivision approval change must go to the planning department to submit an application. The application package, including a plat on which proposed changes are indicated, is forwarded to the joint planning committee for their comments on the third Wednesday of every month. Comments by each member are recorded on the form (Figure 8).



- ☐ DEVELOPMENT TECHNICAL COMMITTEE
- ☒ MINOR LAND SUBDIVISION COMMITTEE
- ☐ PLANNING DEPARTMENT REVIEW
- ☐ _____

DATE October 23, 1978

- ☐ PUBLIC WORKS DEPT.
- ☐ T. ENGR. DEPT.
- ☐ PARK DEPT.
- ☐ UTILITIES

- ☐ POLICE DEPT.
- ☐ FIRE DEPT.
- ☒ NOISE
- ☐ SCH. DIST. # _____

- ☐ REG. BLDG.
- ☐ PPACG
- ☐ COUNTY
- ☐ MTN BELL _____
- ☐ _____

MESSAGE

MLSC V78-36: Request by Walter Drake and Sons, Inc. for approval of a vacation of Walter Drake Subdivision Filing No. 3 located north of Edison Avenue between Wooten Road and Murray Boulevard (PIP-1 zone).

Barry Holmes, X6692

REPLY

☐ STANDARD COMMENT

OTHER CONCERNS:

COMMENTS MUST BE RECEIVED PRIOR TO November 9, 1978

city of colorado springs form

Figure 8 Planning Department Comment Form

The plat on which the proposed changes are to occur serves as an important evaluation tool for Noise Control. In Figure 9, areas were designated to assist in the development of a noise contour plot of the affected area. At these areas or "receptor points," the current ambient noise levels are measured and compared with standards already in effect for the zone(s) surrounding the proposed development.



Figure 9 Receptor Points

If, as a result of its survey, Noise Control finds that additional amounts of noise resulting from the zoning or land-use change would not raise present ambient levels, they usually indicate approval.

Several groups in the city have combined to exert an influence on the noise control considerations of city planners. The Council of Neighborhood Organizations (CONO), including the Sierra Club, League of Women Voters, Springs Area Beautiful Association, and the Citizens Lobby

took up the issue of noise pollution controls at a meeting of the CONO in July 1974; several possible noise control measures were recommended. Among the suggestions was that for setting noise limits on certain types of zoning categories including land presently platted, land platted in the future, and both new and existing streets. CONO's objective in developing a new noise ordinance using these categories was to reduce all street noise to 55 dB. In a meeting in September 1974, CONO defended a scheme for a mass transit system in lieu of the city planning department's "advocacy of an enlarged arterial system for this city because of the increased traffic congestion." In spite of these and other community efforts to control highway noise, construction of new arterials is continuing in order to accommodate the tremendous upsurge in vehicle traffic since 1974.

Nonvehicular Noise

Enforcement of nonvehicular noise ordinance provisions is achieved through a complaint process. Complaints of noise from barking dogs, outdoor concerts or advertisers, model planes and boats or other such noise sources, is received by either the police department or Noise Control. Using information cards containing facts about the nature of the noise and the complainant, complaints are scheduled into each day's activities after a determination of which complaints require the most urgent responses. When a complaint is received that requires immediate attention, one of the noise control officers will respond day or night. Having investigated the complaint and attempted to effect a solution, Zurich will advise the complainant of the status of the complaint. He believes followup is an important aspect of maintaining good community relations and in promoting voluntary compliance.

To illustrate how the complaint program works, Zurich related the case of a woman who signed a complaint against what she believed was excessive noise made by nearby church bells. She not only wanted to sign

a complaint but she also wanted to take the pastor of the church to court. At six a.m. on a Sunday morning, Zurich took measurements at her property line and recorded 58 dBA which is 8 dB over the allowable residential limit for 7 p.m. to 7 a.m. He met with the pastor and a lay group from the church, and conducted an attitudinal survey in the community to determine level of annoyance. In a followup telephone call to tell the complainant his findings, Zurich first asked the complainant about her sister who had taught at the church school and had been fired. When asked about this, the woman hesitated, and replied she no longer wanted to pursue the matter. Zurich had even gone so far as to propose an amendment to the noise ordinance that would have exempted church bells, regulated the time they could be played, or abolished bell ringing in the city. But since the woman had been the only individual annoyed by the bells, and since noise from church bells or church music was not covered in the ordinance, the case was closed.

In view of this example, and with respect to investigating noise complaints, Zurich believes he has to be constantly aware of the circumstances surrounding a complaint. If he discovers the situation involves a feud between neighbors, he will require one of the parties to sign a complaint. If the complainant declines, Zurich drops the case. As pointed out previously, court cases involving "complaining witnesses" yield poor conviction rates because the complaint is usually based on personal intanglements rather than on bona fide noise problems.

Another type of complaint involves a growing noise problem in Colorado Springs. It concerns individuals who recognize the problem but not the obvious solution. The motorcycle noise problem in restricted residential areas draws more complaints in those communities than for any other noise problem. Zurich reported it was so bad in one affluent neighborhood that the residents drew up a petition to get the city to take action. He points out that it is ironical, however, that it is the sons and daughters of the petitioners who are the noise offenders.

But the complaint program does work. Safety Director Barnes recalled an example of what seems to be a typical response by people in the community. A councilman owns several hardware stores in the city; in an alley behind one of the stores chain saws and lawnmowers were being operated. A lady living across the same alley kept a small child who slept during the day. When she complained about the noise, the councilman discontinued equipment testing outdoors--an immediate and effective resolution.

Resolving a complaint often requires a response from a city agency. To prevent problems before they start, Zurich maintains a close liaison with the department of parks and recreation on the matter of issuing permits for a noisy activity to be held in a park. However, the permit is issued jointly by Parks and Recreation and Noise Control only when sound amplifying equipment is to be used at an event in a city park. Then there are situations where use of a park does not facilitate the use of permits. In the city there are a large number of model airplane enthusiasts who flock to the parks on weekends. To prevent the high-pitched-drone noise from these planes from impacting the same area every weekend, the city requires that the use of parks be rotated each weekend to another park in another part of the city.

With the rapid expansion of the city has come a different kind of complaint--that involving industrial noise. And even though there is no heavy industry locating in Colorado Springs, any new noise in a previously quiet area evokes the ire of nearby residents. This was the case when Dr. Robert Stabler and members of the Holland Park Homeowner's Association protested to city council regarding the continuance of the current (1973) noise variance allowed Western Forge Corporation, a manufacturer of hand tools. For 25 years, Dr. Stabler had been a resident of the Bluffs overlooking the plant. He stated in an article which appeared in the Gazette Telegraph on May 18, 1973, that covenants protecting the industrial park

were being violated by Western Forge. The forging operation, he claimed, had grown so big and so noisy that it exceeded the noise limitations set forth in the covenants. The limitations Dr. Stabler referred to were those cited in the article:

No noxious or offensive trade or activity shall be carried on, nor shall anything be done thereon which may be or become an annoyance or nuisance in said (Pike's Peak) Industrial Park thereby restricted by reason of unsightliness or the excessive emission of odors, dust, fumes, smoke or noise.

Before the first noise control administrator had been hired, Safety Director Barnes received the noise complaints of the residents living in the Holland Park area on the Bluffs. The plant subsequently erected an earthen berm along one side of the plant. But in the face of continuing complaints, Jim Manella, plant engineer for Western Forge, hired Bolt, Baranek and Newman, a Cambridge, Massachusetts consulting firm, to conduct a noise study in and around the plant to determine noise levels. Based on BBN's recommendation, insulation and various other engineering controls were installed in the plant to reduce overall noise emissions.

In addition to installing engineering controls, the working hours were varied in deference to community needs so that stamping operations were discontinued by 10:30 p.m.

Robert L. Nass, Plant Safety Engineer, claims that routine noise monitoring indicates that traffic from nearby I-25 generates more noise at the plant boundary lines than does the plant itself. But Manella believes the \$120,000 spent for noise control measures was not wasted even though noise levels inside the plant have not been substantially reduced; both workers and residents appreciate the noise control efforts. And some of the abatement solutions implemented in the Western Forge Corporation have been adapted by other forging operations around the country.

Although most complaints are handled verbally, the present noise control administrator was required to devise a different system to handle complaints against owners of noisy pets or animals. Of those complaints received by Noise Control for January through August 1978, approximately 5 percent were for noisy animals alone. In an article Zurich wrote for the Gazette Telegraph on June 23, 1976, he said that barking dogs (in particular) become an even more difficult problem than noise caused by loud music, motorcycles, or general traffic. The sharpness of a dog's bark can considerably increase the noise level in a neighborhood, he said.

In most cases, dog owners are uninformed about why their dogs' barking can become a nuisance. By sending an informational brochure to the offending animal owners along with a letter (see Appendix G for brochure and letter) warning that another complaint could result in a summons, many barking dog problems are resolved. However, if a second complaint is received, a noise control officer goes out to the offender's residence or wherever the animal is creating a disturbance. When a dog is tied up and the owner is gone, the officer obtains a court order and has the humane society pick up the animal. The dog owner is then served with a summons to appear in court.

Aircraft Noise

The Colorado Springs municipal airport, located to the south and east of the city, is the major commercial aircraft facility; Peterson AFB shares some runway access but is located to the northeast of the municipal terminal. Although Zurich could not recall if there were any problems from commercial or private aircraft noise within the city limits, citizen complaints about noise from low-flying aircraft precipitated action from the Federal Aviation Administration in 1975: Colorado Springs pilots were asked in a letter from FAA to voluntarily avoid noise sensitive areas or to fly higher over them. Since that time, Zurich stated

that he helped to establish specific overflight patterns which would ensure minimal disturbance of residents by commercial aircraft noise. He added that military flights out of Peterson AFB followed the same patterns as commercial aircraft. Occasionally private light aircraft on training flights would descend below the 1000 foot ceiling over residences.

The only other aircraft operating in the area are training flights out of a field adjacent to the Air Force Academy north of the city, and periodic overflights of helicopter sorties on training missions out of Ft. Carson. The summer helicopter exercises are announced in the paper advising the community on the length of time the aircraft would be maneuvering over the city. The problem, apparently, is not with the helicopter exercises but with the routine dawn training flights made by Air Force cadets.

A few years ago it was decided by Air Force personnel that cadet flight training could take place at the Air Force Academy provided a longer runway were built; on completion of the runway, Zurich said that overflights by military T-41 aircraft routinely occurred over the Rockrimmon neighborhood where many of the city's more expensive homes were being built. One of the residents would routinely call him and put the phone out of the window so he could hear the planes flying overhead. On one occasion, Zurich and another noise control officer stood at the side of the road overlooking the runway. They tried to count the number of aircraft making touch-and-go landings but they soon lost count. The magnitude of the problem, as related by Zurich, was downplayed however, by the Public Information Officer at the Academy.

To compound the noise control problem at the Academy, the U.S. Supreme Court has ruled that the city of Colorado Springs would not have any police jurisdiction at the Academy in spite of the fact that overflights from the Academy were over city residential areas. Because of that ruling, and a reportedly hot political climate created by the

situation, Noise Control now refers complainants to the U.S. Environmental Protection Agency.

Current Public Relations Efforts

Without substantial community support, Zunich believes a noise control program cannot be succesful.

Because there are no funds available to support any organized public information efforts, the greatest amount of exposure for the program is through the largest paper in the community, the Gazette Telegraph (GT). Several articles have appeared in the paper (see Appendix H) to remind people about the noise control program as well as to announce more stringent enforcement of the ordinance. Another type of newspaper coverage occurs in a letter-to-the-editor type of column called, "Tell it to the GT," in which the response is included with the complaint. Whenever a complaint concerning noise is to be published in the column, the editor contacts the noise control office for the response.

Presentations are routinely given to civic groups. Zunich has produced a slide show during which he acquaints his audience with the ordinance, enforcement procedures, and other noise control program details. A representative text of his program is included in Appendix F.

As previously pointed out, the majority of noise offenders are in the 17-30 age group; the single largest group of individuals that age are military members stationed at Ft. Carson. In September 1978, at the request of the post, Noise Control Officer Richard Bowman visited Ft. Carson to answer questions on the State and local noise laws and to inspect vehicles for compliance with those laws. This effort was much reduced in scope from that attempted previously. Zunich had tried to develop an organized on-going program with the post to train Military Police on how

to use the noise meters and how to apply the ordinances. But that program, and every other organized public relations program with community groups has been short-lived because of an apparent lack of sustained interest in such a program. He also stated that after he makes his presentation, he receives complaints from the audience about the kid up the street--an attitude of 'solve my problem, but I don't care about yours'.

When asked if the city makes any presentations on noise to schools, Zunich said the only time typically allotted is during a study hall period at the end of the day near the end of the school year. He did not foresee a way for the city to coordinate the development of a meaningful program with any individual or group from School District 11, the largest school district in El Paso County and the only one in the city.

School children in School District 11 have had some opportunity to learn something about noise and the need to control it. John Peterson, speech therapist for School District 11, has developed a noise awareness presentation for 5th, 6th, and 7th grade children. In support of his efforts, the noise control office has loaned Peterson two sound level meters, slides, and tapes. Part of his pitch to students is to promote safety equipment they can buy for their parents for birthdays or Christmas to protect their hearing against the noise of chain saws or lawnmowers. He also gives the meters to the kids to watch as he conducts a carefully controlled demonstration of how noise can affect a person. He instructs them to be very quiet. When they are absolutely still, and intently watching the meters, he shoots off a 22-caliber starter pistol loaded with a half-charged blank. While the pistol is being fired, they can watch how the noise affects the meters. According to Zunich, he also tells the kids that the time to call their older brothers and sisters bad names is when they come home from the disco's with ringing ears.

He makes them aware of noise and its effects in terms they can relate to. Zunich pointed out that Peterson's program has not been expanded beyond his occasional presentation to these students.

In checking with Driver Education programs in the schools, or with private Driving Schools, little is included in the training programs about noise or its abatement other than a mere mention that there is a noise ordinance in effect in Colorado Springs.

Although there are no other organized noise programs in the schools in the area, interest in noise is shown on an individual basis from college students. Zunich receives many requests for books and equipment --particularly, he says, near the end of the college semester when term papers are due.

VII. PROGRAM STATUS AND ABATEMENT RESULTS

Other than to say that city streets seem quieter, or there are fewer barking dogs, or fewer court convictions of noise violators, it is difficult to assess abatement results without developing a complex trend analysis. Because those kinds of data were not readily available, this type of analysis was not performed. To illustrate the types of activities the noise control program is engaged in, the August 1978 activities report is included (see following pages).

Each month the noise control administrator files a report that includes a brief summary of abatement trends and program activities. For August 1978, this report was filed:

CITY OF COLORADO SPRINGS COLORADO	
--	
<u>INTER - OFFICE MEMORANDUM</u>	
Date:	September 8, 1978
To:	Darrel Barnes Safety Director
From:	Joseph Zunich, Noise Control
<u>SUBJECT: AUGUST ACTIVITY REPORT</u>	
<p>Please find attached the activities of the Noise Control Office for the month of August.</p> <p>A noticeable upsurge in complaints was received for noise complaints on motorcycles and trash trucks.</p> <p>On August 19, 1978, Officer Proctor was assigned to Car #138 of the Police Department along with the newly acquired trail bike. This assignment required the patrolling of the high complaint areas. This action resulted in the towing of over fifty (50) unlicensed, loud or nuisance type of motorcycles with thirty-one (31) citations issued by this office. On August 27, 1978, Officer Bowman was injured in the apprehension of a Mr. Fred Decker who resisted arrest. Charges on Mr. Decker are pending. Both Officers Proctor and Bowman have worked this assignment in cooperation with the Traffic Division totaling over ninety (90) hours of patrol time. The assignment appears to continue during the month of September and October.</p> <p>Special complaints which this office handled involved special followup for disposition. Early morning grass cutting at Patty Jewett Golf Course was resolved. Due to the increase of motorcycle complaints, the revision of the motorcycle ordinance this office attempted to introduce to the City Council in 1976 has been revised and will be addressed to the informal meeting of the City Council in September.</p> <p>A special meeting was conducted with all trash pickup owners to resolve some of the problems realized due to excessive complaints received during the summer months. The proposed ordinance to restrict hours of collection has been withdrawn.</p> <p><i>Joseph Zunich</i> Noise Control Administrator</p>	

Figure 10. Monthly Activity Report

NOISE CONTROL ACTIVITIES

Month of August
1978

	<u>Jan/July</u>	<u>August</u>	<u>Total</u>		<u>Jan/July</u>	<u>August</u>	<u>Total</u>
Telephone Calls	1229	242	1471	Special Studies	19	4	23
Burglar Alarm	2	1	3	Employee Hearing Checks	89	10	99
Loud Car	39	2	41	Employee Noise Complaints	11	2	13
Motorcycle	96	33	129				
Loud Music	35	7	42	Summons Issued			
Train Noise	3	2	5	Noise	205	57	262
Animal	29	11	40	Other	120	23	143
Trucks	15	3	18	Zoning	15	7	22
Trash Trucks	12	27	39	Signed Complaints	2	0	2
PA Systems	13	4	17	TOTAL SUMMONSES ISSUED	342	87	429
Carnival	2	0	2				
Construction	14	6	20	Warnings			
Fireworks	2	0	2	Traffic	265	21	286
Aircraft	3	2	5	Others	83	6	89
Other (loud children, toys, voices, etc.)	10	3	13	Letters	60	19	79
Misc. Neighborhood	189	0	189	(Motorcycle Warnings and Vacant Lot)	69	72	141
Anonymous	38	6	44				
PD dispatched	96	22	118	Court Appearances			
TOTAL COMPLAINTS YEAR TO DATE	598	129	727	City	28	6	34
				County	3	0	3
Vehicle Checks	134	29	163				
Motorcycle Checks	28	6	34				
Planning Documents	189	82	271				
Letters of Assist	52	11	63				

Total Hours Noise Control:

Patrol	265 Hours
Administration	409 Hours
Complaint Followup	60 Hours
Court Attendance	8 Hours
	<u>742 Hours</u>

Time Distribution:

23 Working Day-4 Employees	736 Hours
Less 48 hours-Vacation	688 Hours
Overtime Hours-Vacant Lot	54 Hours
	<u>742 Hours</u>

TABLE 3. Monthly Noise Control Activities

Budget

To finance the program, Zunich has received an annual budget of approximately \$60,000 for each year he has been administrator. In 1971 this amounted to about 40¢ per city resident while in 1978 this represented about 30¢ per city resident. This year's noise budget represents approximately 0.14 percent of the total city budget for 1978. That percentage of the city budget fluctuates significantly when allocations are budgeted for large ticket items, several of which, it was reported, were included in this year's budget. Salaries as well as funds for equipment purchases and maintenance come out of this appropriation.

Equipment

A strong point in enforcement of the noise control program is the amount and quality of the equipment. Very little of the equipment on the inventory is superfluous, though some of it--such as the Simpson strip chart recorders--are no longer necessary. This is a complete list of the equipment either purchased by or donated to Noise Control (Figure 11):

- Three walkie-talkies and one paging unit (one police unit and two open channel two-way radios for communication between noise control officers at two locations and pager for use in case of being short-handed; cost: police unit, \$1,800, and \$1,300 for the two other units; for the pager, \$800. Total for radios, \$3,900.
- Simpson strip chart recorders (2) \$3,500 each = \$7,000
- GR (General Radio, Inc.) 1981 - \$985; GR 1981b - \$1,300 with digital readout, 1981's = \$2,285
- Survey sound level meter, GR 1565b, \$400; (3) calibrators, \$600 each = \$1,800. Total, \$2,200.
- GR (General Radio, Inc.) 1933's (2) \$4,000 each = \$8,000
- Personal dosimeter with readout, from Dupont, with memory cells and microphone, \$1,200

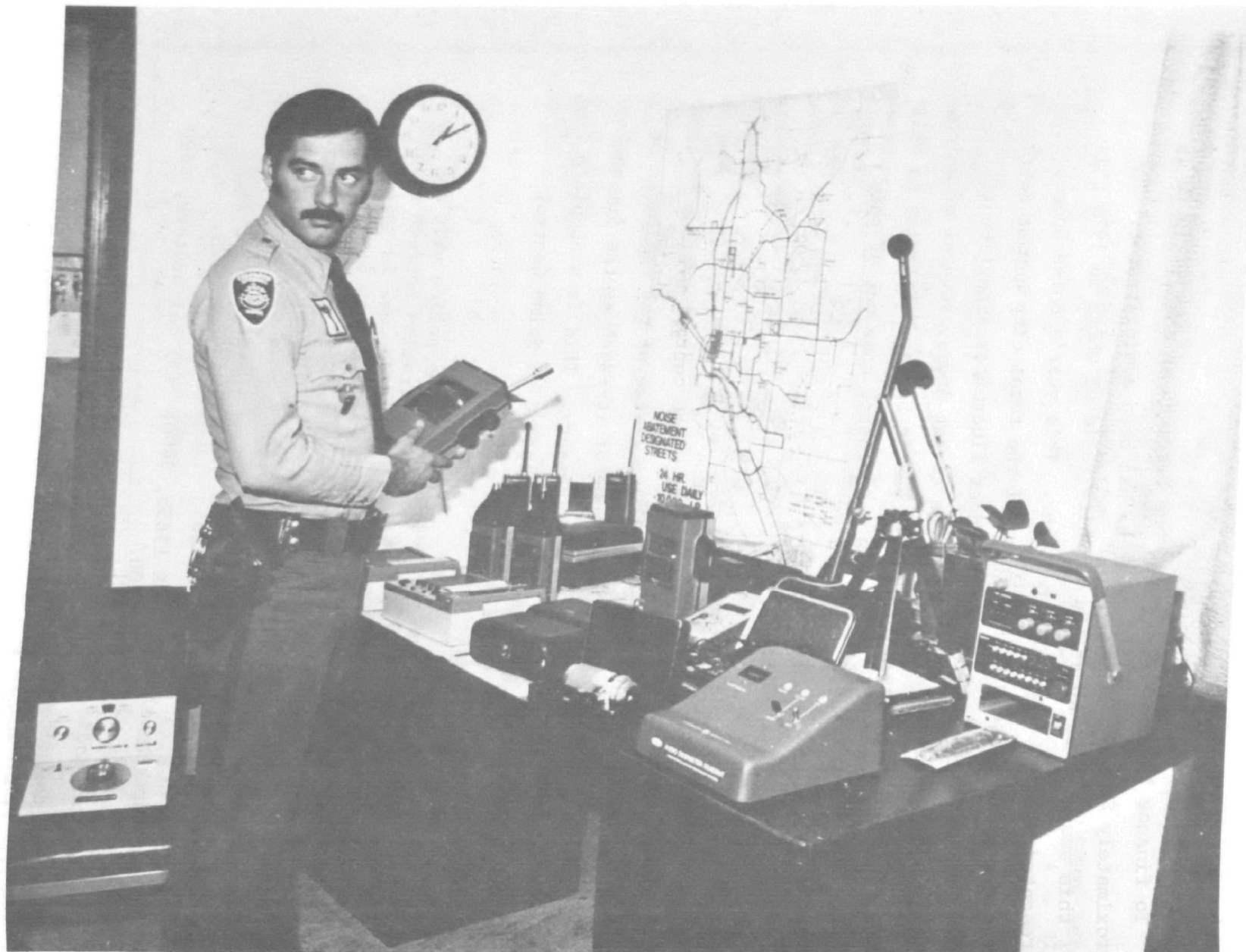


Figure 10. Officer Richard Bowman Taking Inventory of Noise Control's Noise Surveillance Equipment.

- GR 1945, Community Noise Analyzer with mike, \$5,000
- Two course meters, approximately \$200 each = \$400
- Audiometer, Bausch and Lomb = \$600
- GR 1565a (Survey Sound Level meter), gift from Colorado Interstate Gas, value approximately \$400

Total purchase value of noise surveillance equipment is approximately \$30,900.

Other equipment: Police sedans, including -

- Lights and bar \$200
- Speakers \$100
- Electronic siren \$300
- Spotlights \$200
- Labor for installation (not quoted)

Because equipment has a limited-use life, Zunich believes he will have to replace the GR 1981 every three to four years. The GR 1981 is the meter used for in-vehicle monitoring.

When ordering replacement equipment, a match for existing equipment is requested; this practice helps to justify the expenditure of municipal funds for equipment.

For each instrument, factory calibration is required once per year. The equipment is out of the office two days per year for calibration; calibration costs \$75 for each instrument.

If the city proceeds with its annexation plans next year (1979), all equipment will have to be duplicated if several other noise control officers are added to the staff.

Program Development

The possibility of city annexation of a portion of El Paso County just south of the city line will create a substantially increased work load. To some extent the area has been surveyed for the presence of large numbers of dogs, modifications on car exhausts and any other potential noise sources. If and when annexation does take place, Zurich will require additional staff to implement an effective noise control program in that area.

One of Zurich's goals for noise control is to effect a change in the vehicle inspection law in the city to maintain a constant vigilance of the small local vehicle maintenance garages. Currently, there are about eight garages that take vehicles to the noise control office to be checked, but there are many more in the city which are installing exhaust systems and not attempting to comply with the noise ordinance. Zurich would like to see a sticker system implemented which would readily identify those vehicles which have been inspected.

The noise control administrator also intends to continue to accept complaints and requests for noise surveys. On occasion, he will do a survey for a private sector company or survey the police pistol range. To assist voluntary compliance efforts, he has, in the past, checked vehicles on Saturday morning, and will honor such requests in the future, if the demand is sufficient.

Another target area for expansion of effort is the development of a program with the regional building department and the city planning department to require better home insulation in high density living areas. Zurich would also like to see the building codes changed to include better sound attenuation in walls of offices, hotels, and other types of buildings where many people must come together to work or live.

VIII. PROGRAM ASSESSMENT AND SUMMARY

The success of any noise control program depends on the combined effectiveness of enforcement, education, and engineering. Aspects of these three elements as they applied to specific program areas were discussed throughout this report. In summary, enforcement is the legal detection of a violation, apprehension of a violator, and adjudication of the noise offender who does not voluntarily achieve compliance with the noise ordinance; engineering is the installation of a sound dampening device, or isolation of a noise source through the use of barriers; and education is the conveyance of information to municipal residents about the nature of noise, and what the noise control program entails. How well the noise control administrator in Colorado Springs has implemented the municipal noise ordinance depends on the degree of success that has been achieved with respect to enforcement, engineering and education. Concepts and ideas that were developed into viable programs to implement the noise ordinance will be discussed briefly with respect to each element.

Enforcement

The keystone of the noise control program in Colorado Springs is the success of the enforcement program. Most communities making any attempt at enforcing a noise ordinance use a noise technician accompanied by a police officer. Noise surveillance equipment is typically mounted on a tripod and operated from outside the police cruiser. Colorado Springs, however, has found that effective enforcement can be achieved by certifying a police officer as a noise technician, assigning him or her a personal vehicle, and assigning that noise control officer to a supervisor outside of the police department to primarily perform duties in noise control.

Without close communication and cooperation between the noise control office and the city attorney's office there would not have been the necessary support to initiate and promote an efficient enforcement program in Colorado Springs. This coordination was evident from the time the noise control administrator and the city attorney conducted a joint review of the proposed ordinance. And to ensure effective prosecution of noise violation cases, Zurich, in conjunction with the attorneys and other court staff, developed a list of questions to aid in pre-trial preparation of both the arresting officer and the prosecuting attorney.

Because it is impossible for a single officer to operate monitoring equipment standing on a tripod and then immediately pursue a vehicle noise violator, Zurich obtained approval of in-vehicle monitoring. Mounting the GR 1981b, a digital readout SLM, at eye level inside the police sedan facilitates apprehension of the violator and also enables the noise control officer to obtain admissible evidence.

Many communities rely totally on voluntary compliance to achieve noise abatement. Because Zurich had been a police officer prior to becoming noise control administrator, he had developed the capacity to understand the psychology of the noise offender. Subsequently, it didn't take him long to find out that vehicle noise violators given only a warning, had little incentive to avoid repeat offenses. With the implementation of a graduated penalty system, the number of repeat vehicle noise offenses declined. And there were few, if any, repeat offenses involving nonvehicular noise violations; this attests to the general cooperative spirit of the community.

Last but not least of the reasons why enforcement of the noise ordinance has gained growing support in the city is that the noise control program in Colorado Springs is fair and reasonable. The degree to which

abatement is pursued is in proportion to the seriousness of the violation. When an obstacle to abatement is encountered, a flexible approach is taken to reaching a resolution.

As much success as Colorado Springs' noise control administrator has had in enforcement, unresolved problems remain. One of those problems is an increasing concern to residents: unlicensed juveniles riding unregistered minibikes and motorcycles. The biggest problem seems to be in how to get parents to control their children. It may be possible to place the onus of enforcement on the parents. For many offenses committed by minors, the parents are held liable; perhaps uncontrolled minibike riding should be included among those offenses for which parents should be held accountable.

In many parts of the country, military bases or posts require military personnel traveling to and from their work stations to undergo mandatory inspections of their personal vehicles. This is not being required at any of the bases or posts around Colorado Springs and would greatly enhance local vehicle noise abatement efforts.

Greater enforcement power is needed to control repeat commercial violators such as the trash truck driver who refuses to observe restrictions on pre-dawn pickups in or near residential areas. If the problem is a serious one, the solution should also be serious; whether the city contracts hauling services or only issues permits for hauling, it could cancel the contract or revoke the permit if city ordinances are not obeyed.

Engineering

The most efficient means of controlling any type of pollution including noise is to prevent emission at its source. In most cases, noise

control devices are less expensive to install than the cost of relocating of highways or factories. Because of the strong cooperation between Noise Control and the city planning department, future industrial facilities or highway arterials can be engineered and constructed to minimize potentially harmful noise emission.

Planning and zoning in Colorado Springs includes consideration of the noise impact on adjoining residences. Zoning itself embodies the engineering control technique of isolation--restricting certain types of activity to a certain time of the day to minimize sound levels in and around residences and in quiet zones where hospitals and schools are located.

When highways cannot be constructed to minimize undesired noise impacts, it is often necessary to construct earthen barriers or berms. Berms can also be constructed near industrial property lines to reduce noise emanating from operations performed inside the facility; Western Forge constructed such a berm close to one of its property lines.

Sometimes it is neither technologically nor economically feasible to control noise emission through engineering. Administrative controls are often necessary as the department of parks and recreation discovered when attempting to deal with noise from model airplanes. To minimize the noise impact on residences close to city parks where model plane enthusiasts flock on weekends, the parks department has rotated the use of parks around the city. Similarly, noise from an industrial operation not reduced through engineering controls must often be reduced by limiting the hours of operation in deference to community needs. Other examples of how administrative controls have been applied in Colorado Springs include the development of truck routes on which heavy trucks must travel from 7 p.m. to 7 a.m., and reducing maximum allowable noise levels by land use from 7 p.m. to 7 a.m.

One of Zunich's goals to control light-vehicle exhaust noise is to implement a mandatory periodic municipal vehicle exhaust inspection system. The effect of this ordinance would be to reduce repeat violations: A much stiffer penalty would face the violator who displayed a current inspection sticker.

Another of the noise control administrator's goals is to engineer out noise in buildings by amending the building code to include a requirement for installation of sound-reducing insulation in public office buildings, motels and hotels, and multiple occupancy apartment buildings.

Education

An inseparable part of an ongoing noise control program is the persuasive conveyance of information about the benefits of noise abatement. Voluntary compliance is the most effective means of achieving abatement, and regardless of the type of law, the degree of voluntary compliance depends on how well people are sold on the idea that the law will achieve its purpose. In Colorado Springs, where people are concerned about preserving the quality of the environment, the idea of noise control was relatively well received; in 1971 people were becoming more disturbed about the increased noise impact from the growing number of vehicles in the city. Information about the noise control program was mainly disseminated through the Gazette Telegraph. But, in spite of this general acceptance of the program, there has been only limited success so far in getting and keeping any organized group interested and involved in the noise program.

The reason for little more than a passive response to such public relations efforts may be due to the average citizen's lack of basic understanding of what noise is. Available slide programs deal almost entirely with techniques used by noise control officers to achieve compliance with

the noise ordinance. What is needed are more convincing arguments about the health effects of noise. Unless the hazardous effects of environmental noise are pointed out to us, we tend to assimilate it into our lives and ignore its damaging effects.

John Peterson, the speech therapist of School District 11 approaches the subject of noise from a convincing angle: He allows his audience to relate actual noise levels with meter readings. And it is meter readings which determine compliance. If someone reading the Colorado Springs Noise Ordinance is unable to relate what health impact 88 dB has, it is unlikely he or she has an appreciation of why the limit was set at that number. Conveying that understanding to the general public goes a long way towards development of voluntary compliance.

It is unfortunate that coordination of any activity involving Noise Control with School District 11 has been nearly impossible. It is important to note that children old enough to ride minibikes are also old enough to learn how noise effects their hearing, and how it disturbs neighbors and the environment. Driver Education students could also benefit from some of the persuasive arguments of John Peterson's presentation.

Successful enforcement of a noise ordinance requires not only close communication and coordination of efforts between members of the city government, it also requires persistence in conveying the message that noise causes damage to hearing, causes stress, and makes life miserable for everyone.

A P P E N D I C E S

ARTICLE 5

OFFENSES AFFECTING THE ENVIRONMENT

8-38. Noise Prohibited -

A. The making and creating of an excessive or unusually loud noise, or a noise which is unreasonable and objectionable because it is impulsive, continuous, rhythmic, periodic or shrill within the City of Colorado Springs as heard without measurement or heard and measured in the manner prescribed in Section 8-39, is hereby declared to be unlawful; except when made under and in compliance with a permit issued pursuant to Section 8-49. In proof of a violation of this ordinance evidence of noise heard and measured in the manner prescribed in Section 8-39, which is less than that required for a conviction by use of test or measurement as set out in Section 8-39A and 8-39B may be offered to prove a violation of this ordinance as heard without measurement. The time and location of the noise as well as the above-mentioned characteristics of noise shall be considered in reaching a decision under this Article.

B. It shall be unlawful for any person to operate or to allow to be operated any type of vehicle, machine, motor, airplane or device or carry on any other activity in such a manner as would be a violation of Sections 8-40, 8-46, 8-47 or other applicable Sections contained herein.

8-39. Classification, Measurement of Noise - For purposes of determining and classifying any noise as excess or unusually loud

as declared to be unlawful and prohibited by this Article, the following test measurements and requirements may be applied; provided, however, a violation of Section 8-38 may occur without the following measurements being made:

A. Noise occurring within the jurisdiction of the City shall be measured at a distance of at least twenty-five (25) feet from a noise source located within the public right-of-way, and if the noise source is located on private property or property other than the public right-of-way, at least twenty-five (25) feet from the property line of the property on which the noise source is located.

B. 1. The noise shall be measured on the "A" weighing scale on sound level meter of standard design and quality and having characteristics established by the American National Standards Institute.

2. For purposes of this Article, measurements with sound level meters shall be made when the wind velocity at the time and place of such measurement is not more than five miles per hour, or twenty-five (25) miles per hour with a wind screen.

3. In all sound level measurements consideration shall be given to the effect of the ambient noise level created by the encompassing noise of the environment from all sources at the time and place of such sound level measurement.

8-40. Permissible Noise Levels - A noise measured or registered as provided above from any source other than as provided in Section 8-49 at a level which is equal to or in excess of the db(A) established for the time period and zones listed in this Section, is hereby declared to be excessive and unusually loud and is unlawful.

<u>Zone</u>	<u>7:00 A.M. to Next 7:00 P.M.</u>	<u>7:00 P.M. to Next 7:00 A.M.</u>
Residential	55 db(A)	50 db(A)
Commercial	60 db(A)	55 db(A)
Light Industrial	70 db(A)	65 db(A)
Industrial	80 db(A)	75 db(A)

8-41. Definitions - For purposes of this Article, the aforementioned zones shall be defined as follows:

A. "Residential" means an area of single or multi-family dwellings where businesses may or may not be conducted in such dwellings. The zone includes areas where multiple unit dwellings, high-rise apartment districts, and redevelopment districts are located. A residential zone may include areas containing accommodations for transients such as motels and hotels and residential areas with limited office development, but it may not include retail shopping facilities. "Residential zone" includes educational facilities, hospitals, nursing homes, and similar institutions.

B. "Commercial" means:

1. An area where offices, clinics and the facilities needed to serve them are located;
2. An area with local shopping and service establishments located within walking distances of the residents served;
3. A tourist-oriented area where hotels, motels and gasoline stations are located;
4. A large integrated regional shopping center;
5. A business strip along a main street containing offices, retail businesses, and commercial enterprises;
6. A central business district; or
7. A commercially dominated area with multiple unit dwellings.

C. "Light Industrial" means:

1. An area containing clean and quiet research laboratories;
2. An area containing light industrial activities which are clean and quiet;
3. An area containing warehousing; or
4. An area in which other activities are conducted where the general environment is free from concentrated industrial activity.

D. "Industrial" means an area in which noise restrictions on industry are necessary to protect the value of adjacent properties for other economic activity, but shall not include agricultural operations.

E. Adjacent Zones - When a noise source can be measured from more than one zone, the permissible sound level of the more restrictive zone shall govern.

8-42. Permissible Increases - Between the hours of 7:00 a.m. and 7:00 p.m., the noise levels permitted in Section 8-40 may be increased by ten db(A) for a period of not to exceed fifteen minutes in any one hour period.

8-43. Periodic, Impulsive Noises - Periodic, impulsive, or shrill noises are hereby declared unlawful when such noises are at a sound level of five db(A) less than those listed in Section 8-40 of this Article.

8-44. Construction Projects - Construction projects shall be subject to the maximum permissible noise levels specified for industrial zones for the period within which construction is to be completed pursuant to any applicable construction permit issued by proper authority, or if no time limitation is imposed, then for a reasonable period of time for completion of project.

8-45. Railroad Rights-of-Way - All railroad rights-of-way shall be considered as industrial zones for the purposes of this Article, and the operation of trains shall be subject to the maximum permissible noise levels specified for such zone.

8-46. Vehicles Weighing Less than 10,000 Lbs. - A noise measured or registered as provided above from any vehicles weighing less than 10,000 lbs. in excess of 80 decibels in the "A" weighing scale in intensity shall be and is hereby declared to be excessive and unusually loud and unlawful.

8-47. Vehicles in Excess of 10,000 Lbs. -

A. A noise measured or registered as provided above from any vehicle weighing more than 10,000 lbs. in excess of 88 decibels in intensity on the "A" weighing scale shall be and is hereby declared to be excessive and unusually loud and unlawful.

B. Between the hours of 7:00 a.m. and 7:00 p.m., the above decibel levels shall apply to all streets within the City.

C. Between the hours of 7:00 p.m. and 7:00 a.m., the above decibel levels shall apply only to designated streets within the City. Traffic on other than designated streets during these hours shall be subject to the decibel level as provided in 8-46 above.

8-48. Designated Streets - Designated streets shall be named by the City Manager or his duly authorized representative by July 1, 1973. In determining what streets shall be designated, the City Manager or his duly authorized representative shall attempt to preserve low decibel noise levels within residential zones and give primary consideration to major arterial streets which allow travel to commercial areas requiring evening access.

8-49. Hardship Permits - Applications for a permit for other than vehicular traffic for relief from the noise level designated in this Article on the basis of undue hardship may be made to the City Manager or his duly authorized representative. The noise abatement officer shall make recommendations or comments to the City Manager regarding hardship permits before any permit is granted. Any permit granted by the City Manager or his duly authorized representative hereunder shall contain all conditions upon which said permit has been granted and shall specify a reasonable time that the permit shall be effective. The City Manager is authorized to designate a fee which reasonably covers administrative costs incurred for the issuance of said permit. The City Manager, or his duly authorized representative, may grant the relief as applied for if he finds:

A. That additional time is necessary for the applicant to alter or modify his activity or operation to comply with this ordinance; or

B. The activity, operation or noise source will be of temporary duration, and cannot be done in a manner that would comply with Sections 8-40, 8-42, 8-43 and 8-44.

C. That no other reasonable alternative is available to the applicant; and

D. The City Manager with the advice of the noise abatement officer, may prescribe any conditions or requirements he deems necessary to minimize adverse effects upon the community or the surrounding neighborhood.

8-50. Emergency Vehicles Excepted - The requirements, prohibitions and terms of this ordinance shall not apply to any authorized emergency vehicle, when responding to an emergency call or acting in time of emergency. The terms of this Section

shall not apply to those activities of a temporary duration, permitted by law and for which a license or permit therefor has been granted by the City, including parades and fireworks displays.

8-51. Jacob's Brakes Prohibited - It shall be unlawful for any person to operate what are commonly referred to as Jacob's Brakes in the City. The City Manager or his duly authorized representative is hereby authorized to place signs at locations about the City as he shall deem appropriate; such signs to notify operators of motor vehicles of this Section.

8-52. Modifications Prohibited - It shall be unlawful for any person to sell, lease, rent or install any device or sell, rent, lease, or operate any vehicle, engine, motor or mechanical device with a device which when attached to or placed on any vehicle, engine, motor or other mechanical device, modifies such vehicle, engine, motor or other mechanical device so as to amplify or increase the noise emitted by it above that emitted by the vehicle, engine, motor or mechanical device in its original factory design. This Section shall not apply to devices sold for racing or pleasure purposes and used outside the City or in areas properly authorized by the City for pleasure or racing. It shall be unlawful for any person to operate such modified vehicle, engine, motor or device within the City and not in a properly authorized area.

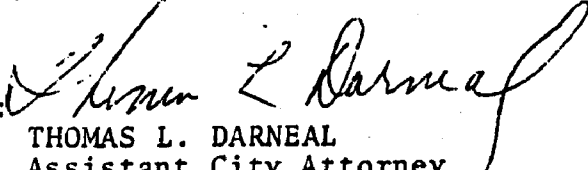
CITY OF COLORADO SPRINGS
COLORADO

INTER - OFFICE MEMORANDUM

To: Joseph A. Zunich, Noise Control Administrator *Date:* June 30, 1976
From: Thomas L. Darneal, City Attorney's Office
Subject: In-Vehicle Monitoring

I have reviewed the Noise Ordinances of the City Code of Colorado Springs, Sections 8-38 et seq., and can find no legal basis for prohibiting traffic noise monitoring from within a stationary vehicle. Proper engineering techniques must still be adhered to and monitoring must be done at the distance specified in the Code.

GORDON D. HINDS
City Attorney

BY: 
THOMAS L. DARNEAL
Assistant City Attorney

TLD/bac

August 4, 1976

The Honorable Judge Norman Walton
Presiding Municipal Judge
City of Colorado Springs
P. O. Box 1575
Colorado Springs CO 80901

Dear Honorable Judge Walton:

Since 1972, the City of Colorado Springs has applied Section 5, "Offenses Affecting the Environment," 8-38 "Noise Prohibited," to 8-52 "Modifications Prohibited." Proper advisory signs have been posted at all main highways entering the city limits. Also, many articles have appeared in the daily newspapers and other forms of news media in regard to the establishment of the ordinances. The enforcement of 8-38 "Noise Prohibited," and 6-22-6 "Exhaust Systems Modified," have been done on a continuing basis for excessively loud motor vehicles.

In the past years, the intention of the Municipal Court was to reduce violations to warnings if the violator brought the vehicle into compliance of the ordinances. This has been done for the past years with little or no impact on the problem of loud vehicles in the community. The local military has attempted to share the responsibility with the City of Colorado Springs, but due to manpower adjustments and other reasons, their program has not met its expectations. As a result, the complaints of loud vehicles continue.

From contact and discussion with violators and other individuals, they state that the violations they receive for noise violations are of little consequence. The change from modified to stock system is done for the compliance recheck and the dismissal of the summons; however, in some cases the modified system is reinstated and the vehicle is again on the street with a remote chance of being apprehended again for quite some time. It appears, as stated by most violators, the summons has little effect as they indicate the "ticket" will be dismissed. The Noise Control Office is appreciative to the court when a repeated offense is noted.

The Noise Control Office requests that a re-evaluation of court procedures for the noise violations be considered. After the past years of experience

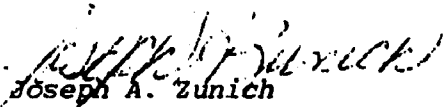
The Honorable Judge Norman Walton
August 4, 1976

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of warnings and cautions, it is suggested that a "fine" schedule should be discussed to add strength to the program and ordinances.

If this office can be of assistance, please contact us. Thank you for your attention in this matter.

Respectfully,


Joseph A. Zurich
Noise Control Administrator

vp

cc: Thomas Darneal
Asst. City Attorney

MUNICIPAL COURT
OF THE
CITY OF COLORADO SPRINGS

COURT JUDGES

MICHAEL C. ABRAHAM
LINDSAY E. FISCHER
R. DENNIS LAMBRECHT
MATT M. HAILEY
NORMAN E. WALTON
SPOTTWOOD W. H. WILLIAMS

COURT ADMINISTRATOR

DON M. NELSON

CITY HALL
COLORADO SPRINGS, COLO. 80903

August 20, 1976

Joseph A. Zunich
Noise Control Administrator
Noise Violations
411 West Fontanero
Colorado Springs, CO 80907

Dear Mr. Zunich:

I am enclosing copy of an Order I propose to sign to help solve some of the problems outlined in your letter of August 4, 1976. I would be interested in your comments and any suggestions you might have. If you suggest any changes, please give me a call at 471-0922.

Yours truly,


NORMAN E. WALTON

NEW:lc

Enclosure

IN THE MUNICIPAL COURT WITHIN AND FOR
THE COUNTY OF EL PASO AND STATE OF COLORADO

ORDER

RE: NOISE ORDINANCE

The policy of dismissing noise violations with a warning upon presentation of a certificate of compliance with the Noise Abatement Officer, is hereby discontinued.

Such violations may continue to be reduced to a warning subject to the accused paying \$10 in costs upon furnishing the compliance certificate. This shall apply to first violations only.

Second offense shall be a fine of \$50 plus \$10 costs. Third offense shall be a mandatory Court appearance with a \$75 bond. For purposes of this policy, prior warnings noted on the accused record shall be considered an offense.

VIOLATION'S BUREAU POLICY.

An accused charged with violation of 2-38 "Noise Prohibited" and 6-22-6 "Exhaust Systems Modified" may post a \$25 bond at the Violation's Bureau, \$15 of which will be refundable if the accused brings in a compliance certificate within thirty (30) days. In such cases, an appropriate notation shall be made on the Summons and Complaint or an attachment thereto and certified to a court appearance date, which the accused need not attend, for an appropriate order of a Judge approving the refund. On a second offense, the accused may pay a fine of \$50 plus \$10 costs, none of which is refundable and the accused shall be notified that a subsequent offense will result in a mandatory Court appearance.

Nothing herein shall be construed as prohibiting a Judge from imposing a greater or lesser fine and costs as the circumstances warrant and nothing herein contained shall be construed as preventing the noise abatement officers or police from requiring an accused to appear in Court for any noise violation offense. An aggravated situation where Court appearance is deemed necessary, the appropriate officials shall write on the face of the Summons and Complaint the word "COURT".

DONE AND ORDERED this _____ day of _____, 1976.

CITY OF COLORADO SPRINGS.
411 WEST FONTANERO • P. O. BOX 1103 • COLORADO 80907

DARREL BARNES
SAFETY DIRECTOR

Dec. 6, 1976

JOSEPH A. ZUNICH
NOISE CONTROL ADMINISTRATOR

Charles L. Elkins
Deputy Assistant Administrator
Office of Noise Abatement and Control
U. S. Environmental Protection Agency
Washington, D. C. 20460

Dear Mr. Elkins:

The EPA recently published the first draft of the "Sound Level Test Method for Motorcycles (F76)" and asked for review of the proposed standards by state and local agencies.

This office has studied the proposal and would like to submit the following comments.

Since the new EPA standards will preempt state and local laws for motorcycles, these standards should have the levels set lower, or at least the same as, existing state and local in-use standards. Difficulties in enforcement on the state and local level will occur if manufacturing and design standards allow for louder vehicles than set out in state and local ordinances.

The procedures of F76 may be satisfactory for extensive testing, but the procedures are too long and complicated for practical use. If state and local agencies use this procedure for compliance testing, numerous problems will arise. Ability to read and interpret on-board instrumentation and familiarity with the test procedure is nearly impossible to achieve with the test rider, as he is normally a violator and seldom is technically qualified. The test rider needs a simple procedure to follow that is easily understandable and does not require monitoring the instrumentation on the vehicle.

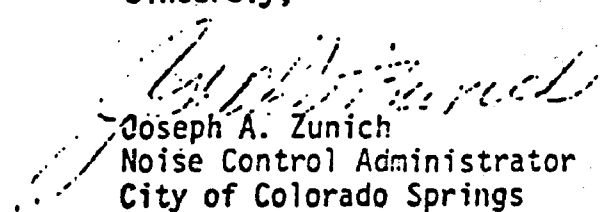
A regulation for replacement motorcycle exhaust systems is also necessary. These systems should also meet the criteria placed on new motorcycles. In addition, some restrictions must be enacted that prohibit the use of mismatched exhaust systems. For example, a replacement system for a low engine output motorcycle should not be installed on a higher output engine, the muffling effect will probably exceed standards.

Charles L. Elkins
December 6, 1976

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This office hopes that our comments will be considered in the adoption of the new motorcycle standards. Whatever is finally adopted, any standard should be easily adaptable by state and local agencies, and levels should be set at least as stringent as existing state and local ordinances.

Sincerely,



Joseph A. Zunich
Noise Control Administrator
City of Colorado Springs

vp

attachment

7/23/78

Park Plan Unveiled; Tab Set at \$10 Million

By GLENN URBAN
GT Staff Writer

A long-range development program for the El Paso County Park Department that includes close to \$10 million in capital improvements through 1990 was unwrapped Wednesday.

The report was made by Robert Hall, one-time member of the Park Board Advisory Committee, on a special \$10,000 contract.

Hall's program, unveiled before the Board of County Commissioners, would include:

- Three more parks, the first to be in the northeast metropolitan Colorado Springs area, the second in the southwest metro area, and the third in the east area.

The northeast park would be approximately 300 acres, and the southwest park 400 acres. Hall left the dimensions of the third park open.

He estimated the land for the southeast park might cost \$1,300 an acre, and for the southwest park about \$3,222. He made no estimate for the cost of land for the third park.

- Acquisition of the strip of land through the north part of the county that is owned, but no longer used, by the Santa Fe Railroad. The strip would be developed into a hike — bike

trail running from the north side of Colorado Springs to Monument, with a connecting trail between Monument and Palmer Lake. The trail would, with federal approval, eventually run through the Air Force Academy.

- Development of an equestrian trail from Fountain to the Equestrian Center in Bear Creek Park.

- Development of a Cottonwood Creek Trail and of a Kettle Creek area. Those two creeks are north of Colorado Springs, but probably will be part of the city before 1990.

No plans for a motorcycle trail or park were included.

Hall did not lay out a funding plan, but said federal funds and the county's one-

mill parks levy, which the county commissioners apparently plan to continue this year, would provide a base for financing the plan over the next 12 years.

He said other funds would also be needed but did not suggest sources for the funds.

Hall recommended his plan be studied each spring and specific recommendations be made to the county commissioners based on the yearly studies.

Commissioner Chairman Thom Foulks said he saw nothing in the long-range plan that needed to be changed.

The other two commissioners, Charles Heim and Leo Ververs, also accepted the plan.

8/6/78

Approves Of Motorcycle Action

As a landowner in and around this town, I would like to thank the council for handling the motorcycle problem. The frustration the landowner felt at not being able to do much about trespassing riders had been great. But another point is the destruction done. Littering, breaking down soil and root systems, erosion and noise are all part of it. If someone wants to ride a motorcycle, he should buy forty acres of land and then buy a bike.

Appointment, Oath and Notice

To the Mayor of the City of Colorado Springs:

I hereby recommend that you appoint _____
to the office of Noise Control Officer
of the City of Colorado Springs. The appointment is Permanent
Dated _____

George H. Lellner
City Manager.

The foregoing appointment is hereby approved. If the appointment is temporary it becomes permanent 60 days from this date unless withdrawn.

Dated _____
Lawrence Black
Mayor.

READ CAREFULLY

No employee shall resign, except upon giving to the City Manager or the head of the Department ten days' notice in writing. The official authorized to fill the vacancy may accept such resignation to take effect before the expiration of the ten days. A violation of this ordinance may subject the offender to a penalty of not exceeding \$800.00 and forfeiture of salary due.

State of Colorado, }
County of El Paso. } ss.

I, _____, do solemnly swear,
by the ever living God, that I will support the Constitution of the United
States and of this State, and that I will faithfully perform the duties of
Noise Control Officer of the City of Colorado Springs,
Colorado, so help me God.

Subscribed and sworn to before me this _____ day
of _____, 19____

OS 426-76

Lawrence Black
Mayor.

Mr. Zunich's Presentation

Mr. Zunich has produced a slide presentation during which he hands out copies of the ordinance and other visual aids.

Slides accompany these explanations:

- History of noise abatement - Why the program is under safety instead of in police department
- Shows standard community noise signs which are located at city lines on all major thoroughfares and secondary roads leading into the city--max noise level, cars 80 dB, trucks 88 dB (in excess of 10K lbs)
- Ordinance applies to cars and trucks - stresses weight differences--applies to any motor driven vehicle over 49cc
- Explains flight patterns of commercial and light planes; at cruising speeds, they are required to fly 5 mi from tower and 1000 ft. above residential areas; military aircraft for the most part follow the same flight patterns as commercial aircraft
- Explains complaint procedures and requests for information
- Explains qualifications of officers
- Explains Colorado Springs type of monitoring: positioning microphone 4½ to 6' from tail pipes; most testing methods use ground level for height
- Explains the use of monitoring masts
- Contrasts the use of one patrolman - one car concept with the use of one technician plus one patrolman
- Discusses various aspects of the GR 1981 SLM and its use inside the patrol car with respect to operation and vibration, etc. - points out that it is at eye level, out of the way
- Talks about problems with "choppers" and "muscle cars"
- Shows pictures of glass pack mufflers such as "threshes" and "cherry bombs," and how the glass breaks down to powder from contraction by temperature extremes, particularly in winter
- Explains ticket and citation procedures

- Explains that officers look under the car to find out what kind of exhaust system is on the vehicle; this information is noted on the ticket
- Explains that the noise officer must be prepared to encounter any situation, and it is for this reason he must be equipped the same as any officer
- Explains ISO (International Standards Organization) testing procedures, i.e., 20 mph in low gear, accelerate heavily in an area of no traffic
- Identifies Bill Brown, Chuck Jones, and Bob Hapke, the police officers with whom the noise control officers coordinate efforts in noise control
- When issuing citations, Mr. Zurich explains that there may also be another violation, e.g., driver is driving with an invalid or outdated license, or is wanted for driving a stolen vehicle; in such cases the noise control officer must go to "ID" to use the computer for an interstate search
- Shows slide of the violations department and explains fines and abatement procedures
- Shows noise control officer with Clara Cafaro, deputy city attorney going over pretrial problems
- Shows court scene with attorneys and presiding judge, Norman Walton
- Explains the planning and nonvehicle noise programs
- While showing a slide of an earthen berm, he explains noise control measures around industrial facilities
- Talks about temporary noise sources at construction sites
- Shows procedures illustrating how city equipment is checked:
 - o Puts noise sticker with dB level and date on vehicle window;
 - o Keeps record in a card file of all equipment checked;
 - o Explains how city employees bring equipment to Noise Control if mufflers or noise control equipment deteriorates
- Shows slide of GR 1945 Community Noise Analyzer and explains how Noise Control conducts community noise surveys
- Explains how audiometric examinations are administered to city employees

- Talks about the role of training and education in keeping up to date on equipment and monitoring techniques changes
- Shows pursuit equipment
- Talks about the motorcycle program

(He also shows an EPA slide show on noise entitled, "Let George Do It.")

CITY OF COLORADO SPRINGS
NOISE CONTROL OFFICE
411 W FONTANERO PO BOX 1575
COLORADO SPRINGS, COLORADO 80901



DATE _____

TO: _____

A complaint has been received by the City of Colorado Springs, that a dog(s) may be in violation of the City Ordinance No. 74-114, Article II-116, at the above location.

The ordinance states, "Noisy Pet or Animal - It shall be unlawful for any person to own or keep any pet or animal which by barking, howling, baying, yelping, crowing, crying or other utterance disturbs the peace and quiet of the neighborhood and the same is hereby declared a public nuisance and prohibited. Further, upon a second conviction entered, the Court, in addition to any punishment, may order the owner, possessor or keeper of such pet or animal to abate such nuisance within five (5) days. Failure to abate such nuisance within five (5) days shall be deemed a separate offense under this section. For the purposes of this section, "neighborhood" shall be defined as the area within five hundred (500) feet of the exterior boundaries of the premises where the pet or animal resides; "disturb" shall mean to unreasonably annoy, perturb or interfere with the quiet enjoyment of another's premises."

The complainant was instructed that if the problem continues to exist, they could sign a summons with the Colorado Springs Police Department, and the owner(s) of the dog(s) may have to appear in Municipal Court.

The Noise Control Office does not wish to have this type of action taken, so to avoid this problem, please find enclosed a brochure which may be of assistance. As a good neighbor, citizen and pet owner, the city is requesting your help in the barking dog noise problem.

Thank you for your time in reading this notice and brochure. If you need further information, please call 471-6610, Monday through Friday, 8:00 a.m. to 5:00 p.m.

Noise Control Officer
City of Colorado Springs

City budget covers large, small items

By Doyle Trent
Staff Writer

The Colorado Springs city government budget for 1977 provides for — aside from the huge expenditures — such items as a stepped-up battle against the Dutch Elm disease, more control over motorcycle riding in vacant lots, new buses and bus shelters and more street lights.

The budget calls for expenditures totaling \$35.5 million, excluding any federal money the city might get for capital improvements. This is about \$2.1 million over the 1976 budget.

A higher total valuation of taxable property in the city and an expected increase in sales tax collections allowed the city administration to leave the property tax rate at 11 mills.

Sales tax collections are expected to grow by 5 per cent next year to an estimated \$12,382,000. This is 34.86 per cent of the budget.

Property-tax revenue is expected to make up 17.17 per cent of the budget.

Federal revenue-sharing money for 1977 is estimated at \$2.9 million, which is \$100,000 less than the city got in 1976.

The number of city employees will grow by one, but the amount budgeted for salaries is up \$1.5 million, to \$15.5 million, reflecting a 7.9 per cent pay raise.

Higher-than-expected sales tax revenue in 1976 gave the city \$1.2 million to rebudget.

Aside from the largest, and highly publicized items, such as administration, police and fire protection, street maintenance, and parks and recreation, the budget provides:

- An increase of \$30,000 for 750 more street lights, 200 of them in residential areas.

- One more employee to check out complaints of motorcycle and mini-bike riding in vacant lots. Joe Zunich, noise abatement officer, said his staff tries to get the offense stopped without police action and usually succeeds.

Barking called noise pollution 6/23/76

A dog's bark may sometimes be more fierce than its bite, according to Noise Control Officer Joseph Zunich.

He says that with the advent of warmer weather, barking dogs become an even more difficult problem than noise caused by traffic, motorcycles and loud music.

Because of the normally quiet environment of most residential areas, Zunich said the sharpness of a dog's bark can boost the decibel count level of the neighborhood considerably—enough to bite into the nerves of all within earshot, and enough to cause ill feeling between neighbors.

Because of the problem, Zunich has outlined ways to deal with barking dogs:

- First, a dog is the responsibility of its owner, and that owner should do everything pos-

sible to keep the dog from excessive barking, he said.

- Many times a dog just needs to be fed, or it needs a little more care and attention.

- It is possible to have a dog's voice box removed surgically, Zunich said, "although it is much more desirable in most cases to use less severe preventative measures."

He said the Noise Control Office in Colorado Springs will assist the community with any of its noise control problems. Information and assistance may be obtained by calling 471-6610 between 8 a.m. and 5 p.m. Monday through Friday.

WHAT SHOULD YOU DO FOR ASSISTANCE AND INFORMATION?

- Try first to contact the owner of the dog and work out a solution.
- If this doesn't work, call the Police Department at 471-6611. You must give your name, address and information regarding the complaint.

You should be willing to sign a formal complaint against your neighbor for being in violation of City Ordinance #74-114, Article 11-118 which states that, "It shall be unlawful for any person to own or keep any animal which by barking, howling, baying, yelping, crowing, crying or other utterance disturbs the peace and quiet of the neighborhood. Neighborhood shall be defined as the areas within 500 feet of the exterior boundaries of the premises where the pet or animal resides."

- Contact a Vet if you think the dog may be ill.
- Contact the Humane Society if a dog or dogs are loose and running at large or if they are barking. The phone number is 473-1741.
- For additional information call the Noise Control Office at 471-6610.



**BE A
GOOD
DOG OWNER
AND A
GOOD
NEIGHBOR!!**
Have a
Quiet Day!!

PC 499-76

Have a Quiet Day!!

CITY OF COLORADO SPRINGS
NOISE CONTROL OFFICE
411 WEST FONTANERO STREET
COLORADO SPRINGS, COLORADO 80904

WE HAVE A DOGGONE PROBLEM

City of Colorado Springs !
NOISE CONTROL OFFICE



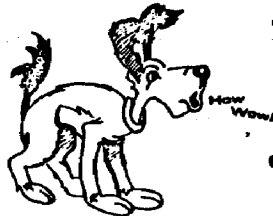
WHAT IS GOOD ABOUT A BARKING DOG?

- Warns residents of intruders
- Helps keep intruders from entering a residence
- Alerts people of potential problems
- It's a defensive measure for dogs



WHAT IS BAD ABOUT A BARKING DOG?

- Persistent barking aggravates neighbors
- At night barking dogs keep people awake
- A barking dog usually starts other dogs barking



- A barking dog, if reported, can mean a summons for the owner
- Continuous barking can be harmful to the dog

WHAT ARE THE EFFECTS OF BARKING DOGS ON PEOPLE?

- Disturbs the neighborhood since one barking dog often starts others barking
- Keeps people from sleeping
- Upsets people who are ill, night workers, etc.
- Barking dogs can create neighborhood resentment, arguments, etc.
- Your neighbors can request Police action



WHAT CAN BE DONE ABOUT A BARKING DOG?

- Determine what is causing the dog to bark, such as
 - Another dog or other animal in the area
 - The dog is lonely
 - The dog may be ill, cold, hungry, wet, tangled, injured
 - People coming or going from cars
 - Passersby such as mailman, bike rider, children
- Remove any visual barriers so dog can see
- Train your dog to respond to a command to be quiet
- If it is outdoors, bring the dog inside. Better you lose sleep than your neighbors.
- Your dog may be lonely . . . perhaps for another dog



- If barking persists, see a veterinarian
- Don't leave the dog unattended for long periods . . . hiring a "dog sitter" may help solve the problem

These articles included in Appendix H were copied from
the Gazette Telegraph with minor editorial changes

PSYCHOLOGICAL CONDITION STRONGLY INFLUENCED
BY AMOUNT OF NOISE

*Editor's Note: Following is the third of five articles dealing with
"Noise Pollution" problems.*

Mounting scientific evidence is beginning to show a strong correlation between noise and man's psychological well-being.

The results of a study conducted by AMF Beaird Sound Systems, Inc., in 1970 showed that steel workers who worked under the noisy conditions of a steel plant day in and day out were "more aggressive, distrustful and even paranoic than were men who worked in quieter circumstances. The noise exposed workers also were found to be far more likely to quarrel constantly with their superiors. The effects of the disquiet spilled over into their home life too. The workers exposed to prolonged periods of noise on the job had twice as many family problems as did the similar men who worked in hushed surroundings.

Most psychologists would agree that noise can be especially detrimental to persons already under stress and can lower their ability to cope with emotional problems. Other conclusive documentation in regard to the harmful effects of "noise pollution" is offered in a 1969 English study which showed that people in a noisy environment (living in the vicinity of London's Heathrow Airport) suffered a higher incidence of mental illness than did people who lived in a quieter environment a few miles away.

Colorado Springs Noise Abatement Officer Thomas Martin expresses concern over the effects of noise in the lives of school-aged children. He is especially critical of the open-space classroom concept of education, claiming that the system does the most harm to the students who need the most help.

"The higher IQ individuals can function quite well in the open-space situation," Martin said, "but it's the kid on the lower end of the intelligence scale who gets hurt." The open-space concept came into prominence a few years ago and works on the team-teaching principle, allowing a single instructor to lecture as many as three times the number of students as would normally be possible in a contained classroom.

Citing statistics on the subject, Martin said distractions lasting only a few seconds, can result in up to 42 seconds of nonlearning time for the average student. Students higher on the intelligence scale lose an average of only 14 seconds of learning with the interruption, he reported.

Colorado Springs, the State of Colorado and the U.S. are late starters in the noise pollution race. Martin estimates that several European countries, including Sweden, Switzerland and England are anywhere from 25-30 years ahead of Americans in investigating, evaluating and doing something constructive toward curbing noise pollution.

Great Britain for example has been developing its newer communities on the idea of separating the industrial, commercial and residential entities. Each area is separated by stretches of greenways.

"This is an area in which we have to start thinking about revolutionizing our building codes," Martin insists, adding that as long as the mixture of commercialism, industrialism and residential living is allowed neither this city nor any other will achieve a quiet environment.

The country of Switzerland has gone so far as to declare illegal the importation of approximately 50 per cent of all mechanical goods produced in the U.S. The Chevrolet Corvette, equipped with a racing engine, the Porsche 911, the Ford Mach I, are typical examples of modified sports cars which may be operated anywhere in this country, but are outlawed by Swiss law.

Sweden, another leader in war on noise, recently forced the Saab Motor Co. to quit making its noisy three cylinder engine model.

On the other hand, firms such as Harley Davidson, which produced the "74" with a super quiet muffler, the BMW motorcycle and the Japanese Kawasaki Manufacturing Co., are examples of three world-wide firms making a supreme effort to build products with people in mind.

"If automobiles were left as they were when manufactured we wouldn't have to worry about auto noise pollution. But headers, glass pacs and the likes create ghastly noise problems," Martin said.

Martin believes that Detroit should become more concerned over the exterior noise emitted by their creations rather than placing so much emphasis on the interior quiet; a feature which Ford and other manufacturers capitalize on in advertisement presentations.

Currently holding the unofficial title of the "quietest city in the U.S." is Memphis, Tenn. Officials in the southern metropolis have empowered police to haul persons into court for unnecessary blowing of horns, harbor-ing over-pitched appliances and screaming, whistling or shouting on city streets between 11 p.m. and 7 a.m.

In Colorado, Denver, Colorado Springs, Boulder and Aspen have made beginnings in the area of noise pollution which at least here is starting to show results, says Martin.

In addition to the city's new noise ordinance, the state backs the local law with State Senate Bill No. 197 which has established maximum permissible noise levels and noise abatement procedures. The State law gives local government the option of adopting resolutions or ordinances compatible with their jurisdiction.

(NEXT: The City Ordinance)

* * *

106 VEHICLES STOPPED FOR EXCESS NOISE

Noise Abatement Officer Tom Martin said Monday that 74 cars and 32 motorcycles were stopped last month for excessive noise under the noise abatement ordinance.

All but seven had some type of muffler problem. Five were in trouble because of excessive acceleration and two were due to engine noise.

Statistics from the University of Tennessee indicate a possibility that a child on a minibike or a small cycle motorcycle has a 10 per cent chance of serious hearing loss by the time he gets to the 9th grade, Martin said.

Measurements by Martin's office indicate levels above 90 decibels exist at the ear of the driver of a minibike or small motorcycle. The 90 decibel level is considered to be a point where 20 per cent of the population is susceptible to hearing loss.

Underage cycle drivers violate the State noise code if operation of the vehicle is closer than 900 feet (three football fields) to a residential area. About 1,200 feet or farther is indicated as more desirable by the Motorcycle Industry Council. Martin said use of a residential vacant lot is illegal in most cases.

All property belonging to School District No. 11 and the city park and recreation department are off limits to vehicular traffic. Roads and parking lots are also included as being off limits to unlicensed drivers and their vehicles.

* * *

From: Gazette Telegraph, August 8, 1972

LOUD MUFFLERS GRATE ON NOISE CONSCIOUS EARS--AND ARE ILLEGAL

Editor's Note: Following is the fourth of a five-part series of articles discussing the problems of noise pollution and some of the attempts being made to solve them.

Armed with city ordinance 4132, a lot of initiative and faith in people, Noise Abatement Officer Thomas Martin has set out to rid Colorado Springs of the pandemonium of howling motorcycles, screaming modified automobiles and trucks and, in general, noisy citizens.

Martin's legal tool, as outlined in the ordinance entitled, "prohibiting certain noises," states that "noise above a certain level is physically harmful and is detrimental to individuals and to the community as a whole; and whereas, the noise level within the city of Colorado Springs has increased, due to a greater number of vehicles, industry and other noise sources, the city council is of the opinion that steps should be taken to control and restrict the noise level."

Council took that step earlier this year and on July 1, Martin with the cooperation of the Colorado Springs Police Department, launched an all out campaign to snare, warn and prosecute, if necessary, the violators.

During the first month of life for the new ordinance offenders cited for operating a vehicle over the maximum decibel (dB) level, as established at 80 dB at 25 feet and 88 dB for trucks between 7 a.m. and 6 p.m. received only warnings and an order to report to Martin's office for consultation on how best to correct their particular situation. Police hauled in more than 100 persons in violation of the ordinance during the first 30 days.

As of Aug. 1, the law stiffened with offenders summoned into municipal court and fined an across the board assessment of \$20, as levied by Judge Harold Cook of the city court. Offenders have the option of pleading either guilty, not guilty or guilty with an explanation. An explanation may or may not help in getting the fine reduced, according to a spokesman for the court.

Prior to enactment of the new ordinance, Martin conducted an extensive education program, addressing high school assemblies and interested civic groups. Later he conducted testing periods at which time he checked noise levels in various sections of the city during peak traffic hours. The actual enforcement is the third phase of the program.

"The objective of the program is to stabilize, then lower the ambient noise level locally so it does not become a real health hazard," Martin explained. He is of the opinion that salvation from noise can come to Colorado

Springs if determined enforcement of the ordinance continues. "But if we falter we could be in trouble here," Martin added.

Section 8-8 of the ordinance prohibits the making and creating of excessive or unusually loud noise within the city as heard without measurement or heard and measured on the "A" weighting scale of a sound level meter or like device above 80 dB. In the next paragraph of the ordinance, the operation of any such type of vehicle, machine or device is outlawed.

The ordinance states that all noise shall be measured at a distance of at least 25 feet from its source when located on a public right-of-way and at least 25 feet away from the property line if located on private land.

Part D of section 8-8 provides for violations by persons engaged in a partnership, association or corporation, stipulating that said violator be fined no more than \$300 and court costs.

The city manager may accept applications for a permit for relief from the noise level designated in the ordinance on the basis of undue hardship. Any permit so granted would be subject to a time-in-effect clause.

The ordinance does not apply to authorized emergency vehicles, when responding to an emergency call.

Noise complaints should be directed to Thomas Martin through the Colorado Springs Police Department phone number, 634-6661. The noise abatement officer said he will check out all legitimate complaints as time allows.

From: Gazette Telegraph, August 9, 1972

NOISE KNOWLEDGE RELATED TO VIEW OF EXCESS SOUND AS SERIOUS HEALTH PROBLEM

Editor's Note: Following is the final part of a five-part series discussing the problems of noise pollution.

A noise pollution survey conducted recently at the University of Colorado, Colorado Springs and other locales showed strong evidence that the more knowledgeable an individual is on the subject of noise, the more likely he was inclined to agree it is a serious health problem.

The study was conducted using 100 subjects ranging in age from 12 to 72 with the mean age of the group, 28.5 years. The participants were asked to fill out a 10-question data sheet, giving their age, sex and occupation. Included on the survey were four-true-false questions to test the person's knowledge and six questions on attitude.

The attitude questions asked were the following: "Is noise a serious health problem in Colorado Springs?" "Do screaming motorcycles and mini-bikes irritate you?" "Does noise make it difficult to concentrate?" "Is noise as serious a health problem as is water and air pollution?" "Is noise at stock car races enjoyable and entertaining?" "Does a person need some noise around him in order to concentrate?"

Each of the first four attitude questions were assigned a score of between one and five; five was assigned if those questioned strongly agreed with the statement, four-if they agreed, three-if they were neutral, two-if they disagreed, and one-if they strongly disagreed. The last two questions of the attitude portion were statements expressing pro-noise-feelings and they were weighted the opposite way: five-for strongly disagree, four-for agree, and so on.

Interpreting the statistical results of the survey it was found that on the average those polled agreed that noise is a serious problem in Colorado Springs.

On the question regarding loud motorcycles, most either agreed or strongly agreed that noise from motorcycles is irritating. On the question asking if noise makes it difficult to concentrate, most agreed or strongly agreed with the statement.

Fewer of the 100 subjects felt that noise constitutes as serious a health problem as do water and air pollution. On this question that subject fell between agree and neutral. Likewise, on the stock car races question the majority fell somewhere between neutral and agree.

Differences between subject occupation did not have a significant bearing on how the individual responded to the questions. The job descriptions were broken down into professional, white collar, blue collar, student and other categories.

On the general knowledge questions 83 percent of those polled were correct when asked if teenagers today have poorer hearing than did their counterparts of 20 years ago due to the popularization of amplified rock music. On the other hand only 15 percent of the subjects knew that 30 percent of the mental patients in Swedish mental hospitals are there as a result of "noise neurosis." Seventy-five percent of the subjects answered correctly on the statement "High noise levels after a prolonged period can kill tissue."

There was no correlation between the subject's sex and his batting average on the knowledge questions. The average correct figure was 2.2 per person.

From: Gazette Telegraph, August 10, 1972

CITY HAS PROGRESSIVE NOISE LAWS

The city of Colorado Springs has one of the most progressive noise ordinances in the country, according to Thomas Martin, noise abatement officer.

City council, at its last meeting, unanimously approved a noise abatement ordinance based on known health standards.

This ordinance declares illegal, transportation noise for automobiles and motorcycles over decibels at 25 feet. For trucks over 10,000 pounds, this level is increased to 88 decibels at 25 feet. Use of the so-called Jacob's Brake is illegal unless during an emergency or inclement weather.

Martin said the ordinance makes it illegal for any person to sell, lease, rent or install on any vehicle, engine, motor or mechanical device, with another attachment or modification, so as to amplify or increase the noise from the original factory design. Any patrolman can now issue a summons numbered 8-52 for any vehicle louder than the original equipment.

The noise abatement officer said Volkswagons with an extractor can be stopped. The easily detected vehicle with gaspacs is now in violation of the noise ordinance.

Of major importance, Martin said, Section 8-47, Paragraph C, is the ordinance which limits trucks to designated streets between the hours of 7 p.m. and 7 a.m. These streets will be designated by July 1, 1973. This will eventually remove trucks from residential streets at night.

Another major item is Section 8-40. Martin said this establishes a zoning code based on noise levels. The levels are based the same as those in the State noise code. Levels for residential streets from stationary sources are 55 decibels from 7 a.m. to 7 p.m. and 50 decibels from 7 p.m. to 7 a.m. Levels increase to a maximum of 80 decibels for industrial parks.

Martin said this approach is superior to the New York code because it does not prohibit activity at any time but restricts activity to specific noise levels.

He added that this type of zoning legislation could impact on zoning, and planning and could introduce a new factor for consideration. The issuing of certain business licenses could also come under review.

Martin said it must be understood that time to organize the administration of enforcement will take time and possible additional funds. The organizational problems are presently being analyzed by the administration and city-county health department officials.

From: Gazette Telegraph, September 20, 1972

LAW PROHIBITS REMOVAL OF NOISE EQUIPMENT

Noise Abatement Officer Tom Martin reports that one of the provisions of the recently enacted Federal noise control act of 1972 includes the prohibition to remove or render inoperable any Federal approved item on new vehicles.

He explained that items which have been approved relative to a given noise standard may be introduced in interstate commerce.

But he said that a glaspac muffler, for example, cannot be attached to a vehicle after its approval. This glaspac addition could raise the noise level above the original decible level.

Martin said that practically any item that makes noise must be approved by the Environment Protection Agency. In the transportation field, this provision will eliminate glaspac and extractor mufflers.

It will be illegal, Martin added, for a manufacturer to distribute an unauthorized item in interstate commerce.

If this provision is enforced, it will be a boon to reducing transportation noises.

Martin said he envisions State legislation to support this Federal program. Federal legislation better supports city ordinances in an effort to eliminate excessively loud mufflers.

From: Gazette Telegraph, November 9, 1972

MARTIN TO TAKE SURVEY IN COUNTY

City Noise Abatement Officer Tom Martin said today he is gathering data from county residents to determine if they want noise abatement control and if they are willing to pay for it.

Martin, who is in charge of controlling noise in the city said he is not sure whether county citizens want the protection.

He said anyone living in the county who wishes to express his or her feelings on the topic of noise pollution should write to Tom Martin, c-o Colorado Springs Police Department.

"I would just like to take a little survey, then analyze it and decide whether people outside of the city limits are interested," Martin said.

From: Gazette Telegraph, November 24, 1972

RESEARCH UNDERWAY BY NOISE ABATEMENT OFFICER

Colorado Springs Noise Abatement Officer Tom Martin has been doing some research to determine the effect of noise on human health and work efficiency.

There seems to be no comprehensive evaluation of the matter at this time. The variety of factors in industry, for example, make it difficult to single out and evaluate the extent of noise effect on work efficiency.

One of the persons Martin has contacted in the matter is a Russian who he became acquainted with at a meeting concerning noise abatement.

The Russian is D. Matelinonok, who is a deputy director for research at a research institute for labor protection in Leningrad. In a reply to a letter from Martin, the Russian had these comments to make:

"It has been found that a very noisy environment affects vigilance, reduces the rate of work, extends the time of reaction to sound and light stimulation, causes changes in muscular performance and visual analysis system."

Matelinonok said convincing laboratory data has been obtained "which proves an adverse affect of noise on work efficiency," but added the many factors in industry makes it difficult to pin down the problem absolutely.

He did tell Martin that field experiments have shown "for mental workers the efficiency is reduced by 3.8 percent for the sound level of 70 decibels; by 5.2 percent for 80 decibels, and by 12.2 percent for 90 decibels."

Matelinonok went on to say that in mechanized sorting of paper, a noise increase from 75 to 90 decibels results in an increase of the number of errors made by personnel by 12.5 percent.

He also went on to say that data on the matter is still unfortunately very limited.

Martin is curious as to how noise affects highway accidents; for example, there is about an 80 decibel noise factor on freeways about 18 hours of the day and about 70 decibels on a relatively quiet arterial street about eight hours of the day.

Martin also said that noise inside a diesel truck runs up to 90 decibels; the same noise factor applies to an average motorcycle rider.

Martin said he will continue his research in the matter since he feels excessive noise has far-reaching effects.

From: Gazette Telegraph, February 2, 1973

PRELIMINARY SELECTION OF 'NOISE' STREETS COMPLETED

A preliminary selection of so-called "Noise" streets has been made, it has been reported by Tom Martin, the city's noise abatement officer.

These streets are those which can be used by trucks over 10,000 pounds in weight on a 24-hour a day basis.

Generally speaking, Martin said, these "noise" streets include the major arterials and major commercial areas in Colorado Springs. Commercial areas include the downtown and major shopping centers.

When this proposal is fully implemented and in effect, it will mean that trucks which exceed a noise factor of 80 decibels at 25 feet will be eliminated from residential streets from 7 p.m. to 7 a.m. Trucks over 10,000 pounds have been found to exceed 80 decibels at a 25-foot distance.

Martin said trucks would be able to use all streets in the city from 7 a.m. to 7 p.m. provided they do not exceed the noise level of 88 decibels at 25 feet.

This designation of noise streets is being accomplished under a section of a city ordinance. The designation must be accomplished by July 1 of this year.

Martin stressed that the "noise" street designation is preliminary in nature and citizen input is requested in writing. He said he feels that constructive criticism is desired and necessary to finish a workable plan. Letters should be sent to Tom Martin, Noise Abatement Officer, Police Department, Colorado Springs, Colo. 80901.

Martin said the purpose of the ordinance is to improve the quality of life in residential areas of the city.

It will allow a person to better use his property for mental and physical relaxation and recreation."

He said the basic intent is to remove those activities which awaken or disturb people during their rest and relaxation period. The ordinance will better protect the sleep environment for a large number of persons in residential areas.

A national cooperative highway research program report dealing with "Highway Noise," says 30 per cent of persons observed were awakened at 70

decibels of noise, and that some awakened at 50 decibels. There was a sleep change for about 10 per cent of those observed at 40 decibels.

Martin said he would be glad to present the plan to any group prior to June 1.

From: Gazette Telegraph, April 22, 1973

DISCIPLINARY ACTION SET ON NOISY VEHICLES

A crackdown on noisy vehicles will begin July 1, according to Tom A. Martin, the city's noise abatement officer.

Martin said a city ordinance requires vehicles to produce less than 80 decibels, measured at a distance of 25 feet.

He said Colorado Springs has obtained necessary sound level meters and will be in position to effectively maintain a "positive program."

In addition to the new city ordinance, State Statute 13-5-105 will be enforced. This statute makes it illegal to drive a vehicle which, if the muffler has been modified, is louder than the original equipment.

Original equipment does not include optional equipment. If the vehicle is loud because optional equipment has been installed, it is illegal. Many excessively loud optional items can be installed at the factory, but have been illegal in Colorado since 1956, Martin said.

"Mental and physical problems associated with noise dictate the immediate pursuit of reducing this environmental pollutant," he said.

From: Gazette Telegraph, April 10, 1972

ABATEMENT OFFICER TO CONDUCT TESTS

The city's noise abatement officer plans to conduct a series of noise level testing on weekends during the month of June, according to public officials.

Tom Martin said the testing would be conducted from 1 p.m. to 4 p.m. on Saturdays and Sundays in the municipal service center area.

More specifically, he said, the testing site would be on North Glen Avenue between the Coty Park and Recreation Department building and the service center proper.

Martin said this testing would be conducted for any individual who feels a lack of understanding of the new noise control ordinance.

He said that motorists can bring their cars or motorcycles to the test area so that the noise levels of the vehicles can be tested.

Owners of vehicles making excessive noise will be notified so that corrections can be made. "No license numbers or names will be taken," Martin said.

The testing is to get people acquainted with the noise ordinance so that corrective steps can be started.

The quickest way to get to the test site will be to get off Interstate 25 at Fontanero, then turn south on Glen Avenue toward the City Park and Recreation Department.

From: Gazette Telegraph, May 14, 1972

ANTI-NOISE PLAN STARTS SATURDAY

The city's noise pollution program of electronic monitoring begins Saturday, Tom Martin, noise abatement officer, reminded today.

Motor vehicles should be quieter than 80 decibels at 25 feet, which is the noise level that interrupts normal conversation.

Martin said vehicles exceeding that noise level will be stopped, and the offender will be stopped, and the offender will be given seven days to correct the problem before legal action starts.

He was quick to add that the program "is designed to improve the quality of life in Colorado Springs, not to collect fines" in municipal court.

Martin suggested that those who have a problem with their vehicle in the noise category should get it corrected prior to Saturday.

For the past four weekends, Martin has been stationed north of the city park and recreation department offices in the municipal service center to give free electronic tests in checking noisy vehicles.

But Saturday is the time that enforcement of the noise ordinance starts.

Those who want further information and assistance may call the Colorado Springs Police Department and ask for the noise abatement section. The number is 684-6661, Ext. 275. Martin's office is located in the park and recreation department building, 1400 N. Glen Ave.

From: Gazette Telegraph, June 28, 1972

NOISE VIOLATORS TO BE CITED
BEGINNING JULY 1

The city will begin enforcing its noise pollution ordinance on July 1, Noise Control Officer Tom Martin said Wednesday at a Press Club News Conference at the Five Hoods Downtown.

Martin said noise is becoming a serious pollution problem "and its time to get down to dedicated enforcement and education in this area."

Martin, accompanied to the news conference by three Palmer High School students, who have prepared a study on noise pollution, said the worst noise offenders are modified automobiles.

"It is against the law to sell, modify or use glass pack mufflers, big daddies or cherry bombs on vehicles." He added that motorcycles constitute only two per cent of the noise pollution, far less than the modified autos.

He said beginning July 1 the enforcement team, including the Colorado Springs Police Department will begin monitoring noise polluters and issuing warnings. Persons failing to correct a situation in violation of the ordinance can be prosecuted by the city attorney's office.

Presenting the report from Palmer High School was Missy Landon, Jeff Palmer and Don Osborn.

From: Gazette Telegraph, June 1, 1972

City Jumps On Noise Pollution

A warning to those of you who have fiddled with your car, truck or motorcycle exhaust pipes to make them loud. Do not play around near those little white Colorado Springs "noise control" cars anymore. They pack a wallop now.

Previously, the cars were occupied by noise control technicians. But they have now been upgraded to control officers, and they can issue you a ticket for being too noisy.

Joe Zeunich, noise control officer for the city, says the officers will be issuing tickets not only to operators of motor vehicles that violate city noise limits, but also to those who play their stereos too loud, those who improperly operate chain saws and lawn mowers, and anyone who might otherwise crack the city's noise barriers.

City ordinances set maximum sound levels for vehicles being driven on city streets at 80 decibels for cars and 88 decibels for trucks. Zeunich said noise control officers will closely check class-pack type mufflers and other custom exhaust rigging on cars, trucks and motorcycles.

'Early bird' caged

Dawn mowing cut short

By Vicki Phillips

A well-manicured lawn usually brings praise from one's neighbors, but in the case of early bird Robert Matthews, whose attempts at a tidy yard usually start around dawn, it brought more than 48 hours in the county jail.

A self-styled "weakened criminal" (as opposed to a hardened one), the 62-year-old retiree from upstate New York was released from the El Paso County Jail early Thursday morning.

Matthews' previously spotless record began to go astray last summer after he and his wife moved to Colorado Springs.

An early riser, Matthews thought that 6:30 a.m. was a splendid time to mow his lawn in the 1900 block of Alpine Drive, and continued the prac-

tice despite repeated complaints from a neighbor.

Matthews said that on June 11, he called city hall to determine whether he was breaking the law by mowing his lawn early in the morning. He said he was told that there were no laws regarding the correct time of day to operate a lawn mower; however, Matthews admits that he was told it was illegal to cause an excessive racket at an unreasonable hour.

Believing he was within the law and his rights, Matthews continued his sun-up mowing sessions, but was abruptly interrupted on the morning of Aug. 25 when he was arrested by city police on a complaint of excessive noise at an unreasonable hour.

On Sept. 1, Matthews ap-

peared in municipal court and asked for a trial by judge. That trial, held Monday, resulted in Matthews' being found guilty and fined \$10.

However, Matthews refused to pay the fine "on principle"

and was sentenced to two days in the county jail.

Matthews was booked into jail about 3:30 p.m. Monday and released about 2:30 a.m. Thursday.

Judge issues stiff noise policy

No noise is good noise.

That seems to be the thinking in Colorado Springs Municipal court where a new fine policy concerning motor vehicle noise violations was recently issued.

Under the new policy, signed by Municipal Court Judge Norman Walton, anyone violating the ordinances will post a \$25 bond. If it is a first offense and a compliance certificate is brought to court within 30 days, a \$15 refund will be made.

A second violation of the same ordinance will bring a \$50 fine

plus \$10 in court costs. A third offense means a mandatory court appearance with a \$75 bond.

Previously noise violations due to improper mufflers were dismissed with a warning if a compliance certificate was presented.

Fire Safety Class Planned Wednesday

As part of its "Outdoor Odyssey" program, the Colorado Springs Park and Recreation Department and the National Forest Service is sponsoring a class in fire safety Wednesday.

The class will focus on ways to avoid fire danger and what to do if you are caught in a forest fire. Registration is free.

For further information, contact Lorrie Bensik.

OPEN PARLIAMENT

6/12/76
G.T.

The statements and opinions expressed in this column are those of the contributors and do not necessarily express opinions or convictions held by this newspaper. Letters will be published with only the writer's name; however, an address (and telephone number if possible) will be required with each letter for verification purposes. Letters must be received at least two days before publication, and every effort should be made to limit letters to 500 words.

'George' Has Too Much Power

You are not going to get rid of the tatterdemallons with their frisbees and big dogs who hang out in Acacia Park year 'round, the "ladies of the evening" both pro and amateur who strut their wares on S. Nevada to potential "Johns" cruising the avenue or the noisy, lawless, boozed-up hot-rodders who terrorize the residents of the downtown all night every night until there's a shake-up and thorough house cleaning in the Colorado Springs Police Department.

I suggest the City Council start the ball rolling to change the City Charter so the voters can choose a police chief the same as the county sheriff is chosen (at the ballot box) instead of "letting George do it." George Fellows, that is, who now has more power than any public official in this town or any town this side of Chicago.

As many of you know, I've been conducting a campaign to get the police to crack down on the hot-rodders who invade the quiet residential streets of the near northside for three years and this is the result: The number of cars turning left into Williamette has been reduced 50 percent since the Traffic Dept. removed the "No U-turn" signs two years ago. The number of noisy cars has been greatly reduced, not by anything the police have done, in fact the noise abatement program has been abandoned but, we still pay for a Noise Abatement Officer, offices and a secretary.

The reason for the reduction of auto noise is the work of Lt. Col. Fred Villella, Provost Marshall at Ft. Carson, who has cracked down on soldiers with loud mufflers by going directly to the muffler shops and through a point system where a soldier after three citations gets sent home. I have been unable to get late fig-

ures from the new Information Officer at the post but last year Col. Fisk gave me figures showing some 1,500 troublemakers had been kicked out.

A one-column head in tonight's GT reads "Springs Crime Up 5 Percent" and a recent handout from the Law Enforcement Assistance Administration, U.S. Dept. of Justice, Washington, says "Fort Carson posted in 1975 a crime reduction of — 50 percent in violent crime in each of three successive quarters.

"A decrease in total crimes by 1,449 cases.

"A 25 percent increase in crime solution rates.

"A 43 percent decrease in barracks larcenies.

"A 50 percent decrease in confinement of military personnel in the county jail."

Fort Carson has about 20,000 soldiers with 23,000 civilian dependents, 35,000 retirees and 3,000 civilian employees. If Col. Villella can do a job (Continued on Next Page)

OPEN PARLIAMENT

(Continued from Prior Page) like that in less than two years, I think he would be the man to come up with some fresh ideas and clean house in our back-sliding Police Dept. which has had the go-ahead and the money to hire good recruits but lets some broad who couldn't punch her way out of a paper bag throw a monkey wrench into the works and deprive 240,000 people of necessary protection.

ROBERT MOSSMAN

Court Gets Tough on Noise Cases

The Municipal Court of Colorado Springs announced today it was getting tougher with motorists who are ticketed for violating the automobile noise ordinance with altered or improper mufflers.

The practice of letting first offenders off with a warning, provided a certificate of compliance is presented, is being discontinued.

Norman Walton, presiding judge, said first offenders will be required to post a \$25 bond at the violations bureau. If a compliance certificate is presented within 30 days, \$15 will be refunded.

Persons charged with a second violation of the ordinance will be fined \$50 plus \$10 costs. A third offense will result in a mandatory court appearance with a \$75 bond.

Municipal judges may impose larger fines if circumstances warrant, Judge Walton said.

City officers on noise 'listenout'

Noise control officers in Colorado Springs are on the lookout — rather the listenout — for violators of the city's noise ordinance, and they are going to start issuing citations.

Joe Zurich, chief noise control officer, said he and his staff will be looking — listening — for noisy vehicles, loud music, im-

proper use of chain saws, noisy lawn mowers and other noise-makers.

They are going to be closely checking out glass pack mufflers and sports-type mufflers on autos, Zurich said.

Motorists can have their vehicles tested free for noise by calling 471-6610, he said.



Staff photo by Ed Latta

Robert Proctor (seated), city noise control officer, and Joseph A. Zurich, noise abatement administrator, examine a sensing device.

In pursuit of cycles and roosters

Noise patrol protecting our ears

By Doyle Trent
Staff Writer

If it isn't an unmuffled engine it's somebody's stereo. If it isn't a stereo it's a rock band, and if it isn't a rock band it's roosters.

There's always something to keep the Colorado Springs noise control officers busy — measuring noise, answering complaints, taking to violators, and sometimes writing court summonses.

Complaints about noise have become so numerous lately the city administration

added another control officer to the staff of Joe Zurich, chief noise abatement officer, bringing the total to three.

And the city council is amending a city ordinance to give the officers authority to take action against muffler violations in the vacant lots — where off-road vehicles shatter the peace and quiet — as well as on the streets.

The amendment has been approved on first reading by the council and is expected to be adopted on second reading Tuesday.

In case anyone wants to know, the

legal noise limit for autos and motorcycles is 80 decibels. The big trucks can make a racket measuring 88 decibels without violating a city ordinance.

A motorcycle with the sound baffles removed from the muffler — a favorite trick of some motorcycle enthusiasts — usually runs the noise meter up to about 95 decibels.

And those bike motors can be muffled to run as quietly as a V-8. Zurich said there are such devices as "super traps" that can be attached to the end of exhaust pipes to

reduce the noise considerably without causing a loss in engine power.

Then there are the glass-packed mufflers with the fiberglass removed, leaving nothing more than a straight pipe. They can make a vehicle sound like a machine gun going down the street.

Unfortunately, there are hot-rodders and bike riders who equate noise with power.

Zurich said he has sympathy for a motorist who has a hole rusted through his

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Roosters, cycles raise decibels

(Continued from page 1)

muffler and doesn't realize he is violating any law. But he said that when he stops someone who obviously has his muffler rigged to make a racket, he is not so sympathetic.

Still, the motorist or rider can have his court fine reduced from \$25 to \$10 if he gets his muffler fixed within 30 days.

Zunich doesn't blame the dealers. He said some muffler shops, when they install a glass-packed muffler, get the vehicle owner's signature on a paper releasing them from any responsibility.

Most motorcycle dealers "have been more than cooperative," Zurich said.

The city's noise abatement department keeps one car on the streets about eight hours a day and another about four hours a day. They're probably the most noticeable autos on the street.

Both are white with the words "Noise Control" painted on the sides and trunks, and they have red and blue warning lights on top.

But it isn't just noisy motors the officers are after. There's the guy who thinks the whole neighborhood wants to hear his stereo record player.

And there's the guy who sets his portable radio outside while he polishes his car and turns the volume high enough to spook General Palmer's horse.

There are the trash trucks, rock bands and even chickens

Zunich said the city ordinance prohibits trash trucks from operating their noisy compactors in residential areas before 7 a.m., but some of them have been waking up neighborhoods as early as 5 a.m.

"We've been ticketing the trash companies," he said.

Recently, a rock band at the University of Colorado's Cragmor campus elicited "many many complaints," Zurich said. He said his officers went to investigate at 3 p.m. and found the noise clearly in violation of the law. After a brief conversation, the band agreed to turn its amplifiers down.

But at 8 p.m. the complaints were still coming in and the officers had to make another trip to the campus. That time, they made sure the noise was toned down.

The practice is, Zurich said, to talk to the violators and get them to agree to be quieter. But if a return trip is necessary, somebody usually gets summoned into

court.

It wasn't necessary to ticket the chicken owners in Village Seven, Zurich said. A family there had three roosters and some hens to help cut the cost of groceries. The hens apparently were not in violation of any city ordinance but the roosters were.

They sat on a fence early each morning and noisily greeted the daybreak. Zurich said. Sometimes before 6 a.m.

He said the family agreed to "get rid" of the chickens.

Despite the chickens, record players and trash trucks, the biggest headache for noise control officers are kids. Kids 10, 11 and 12 years old. Kids on motorcycles

"Their parents buy them a motor bike and turn them loose on the street," Zurich said. "They are a real safety problem."

"They take to the streets to get to a vacant lot someplace, and their bikes have no license plates and the kids have no licenses either."

Zunich said the parents are sometimes angry with any hapless officer who brings their "little boy" home. And, he said, "the kids give you a pretty hard time too."

"You'd be surprised at what a 10 or 11 year-old can tell you."

Don't Keep Quiet About Noise Complaints

By NANCY ALLEN

Clacking typewriters, ringing phones, noisy automobiles, the din of an airplane passing overhead, music from a stereo or radio, a barking dog or crying child.

If any one or combination of these noises is threatening to send you running for earplugs, take heart. For in the great bureaucracy of the city of Colorado Springs, there is a man who'll lend a sympathetic ear to your complaint.

His name is Joe Zurich, and he's the chief officer of the city's noise abatement program.

"Noise," explains Zurich, "is more dangerous than people realize. Loud noise increases heartbeat and blood pressure, and can cause severe nervous strain if it's constant or recurring."

That is the reason behind the city's 1972 ordinance prohibiting "the making and creating of excessive or unusually loud noise."

Enforcing the ordinance is the job Zurich has on his shoulders, but he doesn't mind. In fact, the whole program was partly his idea.

Noise control is a full-fledged section of the city's department of Safety, Claims Insurance and Noise Abatement. It was formed about two years ago as a result of Zurich's and Safety Department head Darrel Barnes' concern for the quality of life in the Springs.

A former police officer, Zurich was an employee of that department when it became apparent to him that little was being done to enforce the noise ordinance.

He and Barnes suggested the formation of the noise

section. When it was created, Zurich applied for the job of administrator, which he got. He has been working to make Colorado Springs a quieter place ever since.

"Excessive noise" in a residential area is defined by the city ordinance as measuring louder than 55 decibels on a noise meter, from a distance of 25 feet. At night no more than 50 dB are allowed.

By comparison, human hearing begins at one dB. The noise you'd find in your backyard, normally, at 3 a.m. when street and household noise aren't contributing to it, would probably measure about 20 dB.

If you were sleeping, with a background noise level in your bedroom of about 30 dB (normal), the level could jump up to 40 or 50 dB if your

neighbor came home and turned on his tv. "That jump," explained Officer Robert Proctor of Noise Control, "could wake you up, even though it's within the legal limits."

At the high end of the scale, train engines moving through town have reached levels of about 92 dB. At 144 dB — equal to the sound of a jet plane taking off, from 100 feet — actual pain is felt.

A decibel is a unit of measure something like the calorie, which tends to remain imprecisely defined to the layman, while noise specialists understand it thoroughly.

Using the latest sound level meters, Zurich and his staff can be found all around the Springs, measuring the decibels produced by instruments, machines and sometimes people.

The meters they use in the field are about the size and weight of a large transistor radio. Decibel levels are projected digitally and can be locked in by pressing a button.

The problem of excess noise in the Springs is caused primarily by motor vehicles, the exhaust systems of which have either worn out or been purposely altered.

Apparently some people think that removing the baffles from their car muffler will give their engine more power. The trouble is, the baffles are designed to quiet the engine, and removing them makes the car too loud to drive, legally, in Colorado Springs.

Stopping and ticketing the drivers of these vehicles is one of the functions of Zurich's office.

If you happen to spot an inconspicuously parked "black and white" police vehicle along one of the streets in the Springs, it may not mean you should put your best driving habits on display immediately.

What it could mean, if it's one of the two cars operated by noise control, is that you'd better cruise by quietly, or pay the price. That, by the way, is not cheap.

First-time offenders are given a ticket for violating the noise ordinance, and a chance to reduce their fine from \$25 to \$10 if they bring their car or bike into compliance with the law. Tests are given by appointment at the Department of Safety Office, 411 Fontanero, for those who have received tickets and made an effort to fix their cars.

Second-time offenders are

given no such chance, however. They are automatically fined \$60, plus the cost of quieting the car. If anyone should gamble with his muffler a third time and lose, he must appear in court and faces a fine of \$75 to \$300, plus 90 days in jail.

Noise officers carry guns and have full power of arrest in Colorado Springs. The training they receive is the same given to police officers, and though the police department and noisecontrol are completely separate, the two often cooperate on cases. "The reason for the guns," Proctor said, "is that we never know who might be in a loud vehicle. Sometimes it's a person wanted on another charge and we have to be prepared to deal with him."

If all that seems like a stiff penalty for making noise, it is apparently effective. Officer Proctor estimates that of 800 traffic summonses given over the course of a year, only 35 are given to people who've already received one.

Faulty mufflers are the "problem children" of the streets, but residential areas have their fair share of noise, too.

Heading the list of noise-makers in the neighborhoods around town are mini-bikes and motorcycles ridden for fun along creek beds and vacant lots. Noise control investigates complaints of loud motorbikes as they receive them.

The trouble is that the bikers usually ride where an officer can't reach them in either of the two noise control cars.

Both Zurich and Proctor contend that a motorcycle or four-wheel drive vehicle

would greatly help them apprehend these offenders, and bring down the noise levels in neighborhoods where they ride.

To date, however, two requests for a motorcycle have been denied by City Council.

Aside from his duties as an enforcer of the city's noise laws, Zurich spends much of his time trying to make sure that potential noise problems don't become realities.

He sits on the city's Planning Commission, which reviews all plans for new buildings, additions and renovations within the city limits. Recommendations of the Planning Commission are passed on to City Council, which has the power to require them to be built into structures.

Zurich receives copies of all construction plans, which he studies, and makes several visits to the proposed site. Noise meter in hand, he takes readings to determine whether the noise presently monitored will cause a problem in the future. Zurich also tries to anticipate what noise levels might result from the intended construction, and takes them into account, too, when making recommendations to the Planning Commission.

Often he will suggest an addition to the plans, such as an embankment to deflect street noise into the air and away from future patios and bedroom windows. And often that embankment will be built.

Reflecting on his work, Zurich mused, "Noise is like all pollution." He said, "It's insidious. People don't realize it's becoming a problem until it's almost out of control."

