

Environmental Report



National League of Cities July 23, 1979

Can City Hall Buy Peace and Quiet?

Program Tells You How To 'Buy Quiet'

by Lewis Spangler

All of us at some time have become aware of the noisy environment in which we work, live and play. We are surrounded by products designed without consideration for their noise impact. How many times has each of us remarked that we just want to get away where we can have some peace and quiet to organize our thoughts? Noise is no longer a mere irritant. Scientists and the medical profession now tell us that noise does not just have a very adverse impact on our health and our livelihood. You as the elected leader in your city, a key decision-maker, hold a very important tool to reduce noise at the source in your community. It is your ultimate control over the city's purse strings. How public funds are spent in providing community goods and services is important to you and important to the community. Using this purchasing power wisely and creatively can insure that your city services, such as garbage collection and infrastructure maintenance, are both cost effective and quiet. How do you do it? The National Institute of Environmental Purchasing (NIGP) and the National League of Cities are cooperating with the EPA Office of Noise Abatement and Control, the National Bureau of Standards and the General Services Administration in initiating a "Buy Quiet" program. It is designed to stimulate and encourage government agencies at the federal, state, and local levels to procure quiet equipment and products. The General Services Administration and some state and local agencies have, in the past, been successful in the procurement of products that have a significantly lower noise level. The city of New York, for example, has established noise level limitations in its specifications for garbage and trash collection equipment. El Segundo, Calif., has done the same on tree-trimming equipment. NIGP has available a specification and purchase description for a quiet lawnmower. If you would like to secure a copy, write to NIGP at the address below. Other agencies have been successful in the procurement of compressors and earth-moving equipment with reduced noise levels. An interesting aspect is that industry is not only receptive to these efforts but also has been able to meet the specific requirements without adversely affecting quality or prices.

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Lewis Spangler is executive vice president of the National Institute of Governmental Purchasing, an international organization of governmental buying agencies dedicated to improving governmental purchasing. NIGP has 460 direct member cities.

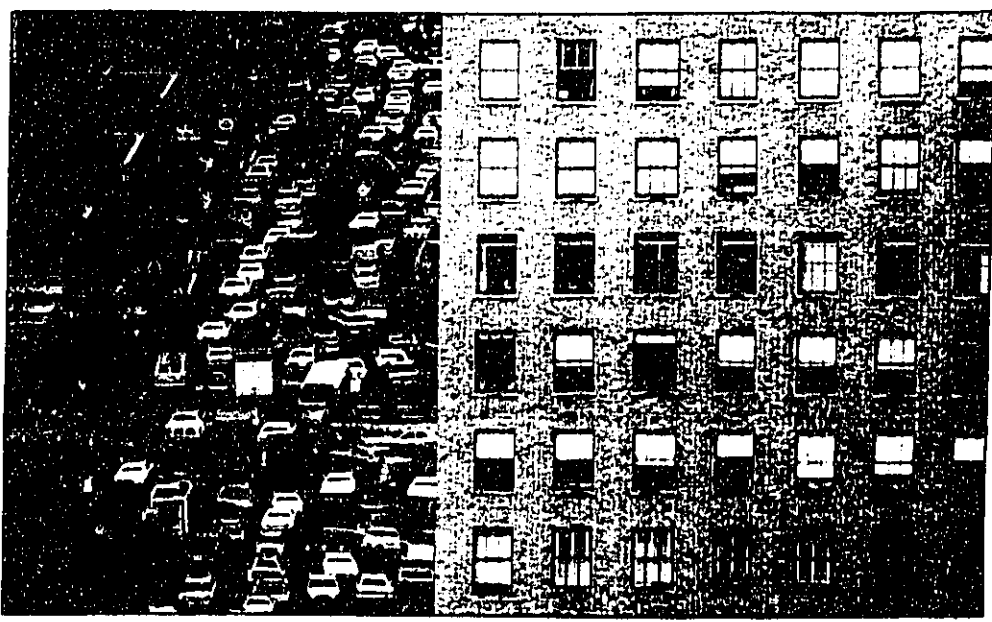


Photo by EPA Documerica

Cities, States Have \$100 Billion Clout

by Lloyd Chaisson

"Buying Quiet" is not a concept new to municipal government. For years the National League of Cities (NLC) has advocated and encouraged cities through its National Municipal Policy to use their purchasing power to insure that vendors supply new equipment or services that incorporate noise reduction features. Although not a panacea for solving our nation's urban noise problems, local "Buy Quiet" programs can go a long way towards telling manufacturers that quiet is very important to local leaders. In turn, such demands placed on manufacturers are often translated into quiet products and services not only for city governments but for the general retail consumer.

In 1976 state and local government expenditures for goods and services exceeded \$100 billion, with an equal amount spent by the federal government. Obviously such a tremendous volume of expenditures wields considerable power when it comes to suppliers meeting demand. Making use of this demand can accomplish more than insuring optimal procurement of goods and services that satisfy primary needs. It also can insure that secondary local considerations, such as quiet performance features, are met in the process of buying quality goods and services.

Specifications of the performance type, such as a noise level requirement, encourages vendors to

submit new products and new concepts. Competition is at the heart of any procurement; with the amount of money at stake in state, local and federal purchases for government vendors, you can be assured that reasonable performance specifications for noise levels can and will be met. Quieter police cars and motorcycles, quieter garbage trucks, quieter road construction activities and quieter buses, to name a few, are feasible and can show that a city is doing something about noise. City government can be a contributor to noise pollution, or it can set an example for others in the community to follow.

An incorporated city is in many ways similar to a business in that it provides a multitude of services to the community and must make choices as to the quality of these services. Providing most of these services requires equipment obtained through some kind of formal procurement. As a city official charged with overseeing the contracting and procurement policies of your local unit of government, you can tailor your demand for goods and services with specifications in a procurement. In some cases bid specifications can be made very exacting without worry that no vendor will make an offer.

The city of El Segundo, Calif., has incorporated

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Lloyd Chaisson is director of NLC's urban noise programs.

Film Shows Effect Of Aircraft Noise

Noise can be a nerve-shattering and deafening irritant to people who live near airports. Reducing aircraft and airport noise, a goal pursued vigorously by NLC for years, is the subject of a new film just released by the Environmental Protection Agency.

"Jet Roar" examines the environmental problems of aircraft and airport noise, and it attempts to point the way to solutions through the cooperation of airport operators, air carriers, manufacturers, pilots, professional planners, local government officials and the residents of affected communities. It should add to the growing awareness, fostered by NLC among city officials and at the federal level, that aircraft noise not only denies basic rights to peace and quiet but also presents a verifiable threat to the health, both mental and physical, of our nation's urban residents.

If you haven't seen "Jet Roar" yet, you should make it a point to.

For information on showing the film, contact Carol Jordan, Manager, Consumer Information Programs, Environmental Protection Agency (ANR-471) Washington, D.C. 20460.



Photo by EPA Documerica

About This Issue . . .

Local government procurement represents a powerful tool to encourage the suppliers of municipal goods and services to develop products incorporating the best available noise control technologies. With billions of local dollars at stake in a highly competitive market, no manufacturer or service provider is apt to brush aside a bid requirement for "quiet" and yield a competitive edge.

If you say that only large cities with large bulk purchases can leverage the vendor market, you would be wrong. Even smaller cities such as El Segundo, Calif., have embarked on "buy quiet" programs with remarkable success rates. We hope that this issue of Environmental Report will add a new dimension to local noise programs . . . a

dimension which in the long run will cost very little and, in fact, is likely to save precious local dollars.

This report was prepared by NLC's Urban Noise Project with assistance from a contract with the U.S. Environmental Protection Agency (EPA). The project acts as an advisory and action link

between NLC members and EPA's noise office, providing an open channel for the flow of information and communication.

For further information on cities and noise control, contact NLC's Urban Noise Project, National League of Cities, 1620 Eye Street, NW, Washington, D.C. 20006.

Federal Regional Offices Offer Help

Noise monitoring equipment, while extremely useful, also is quite expensive. But did you know that EPA has a program to loan this expensive equipment to cities? There's a lot of other technical assistance that EPA has available to city officials through its 10 regional offices. Each of

the noise representatives listed below is responsible for fulfilling requests for direct assistance in developing or evaluating noise control programs. They have at their disposal a multitude of resources designed with the city in mind.

REGIONAL NOISE REPRESENTATIVES U.S. Environmental Protection Agency

Region I
Al Hicks
JFK Building
Rm. 2113
Boston, MA 02203
(617) 223-5708

Region VI
Mike Mendias
First International Building
1201 Elm Street
Dallas, TX 75270
(214) 729-2712

Region II
Tom O'Hare
26 Federal Plaza
Rm. 907G
New York, NY 10007
(212) 264-2109

Region VII
Vincent Smith
324 East 11th Street
Rm. 1509
Kansas City, MO 64108
(816) 374-3307

Region III
Patrick Anderson
Curtis Building
6th and Walnut Streets
Philadelphia, PA 19106
(215) 597-9118

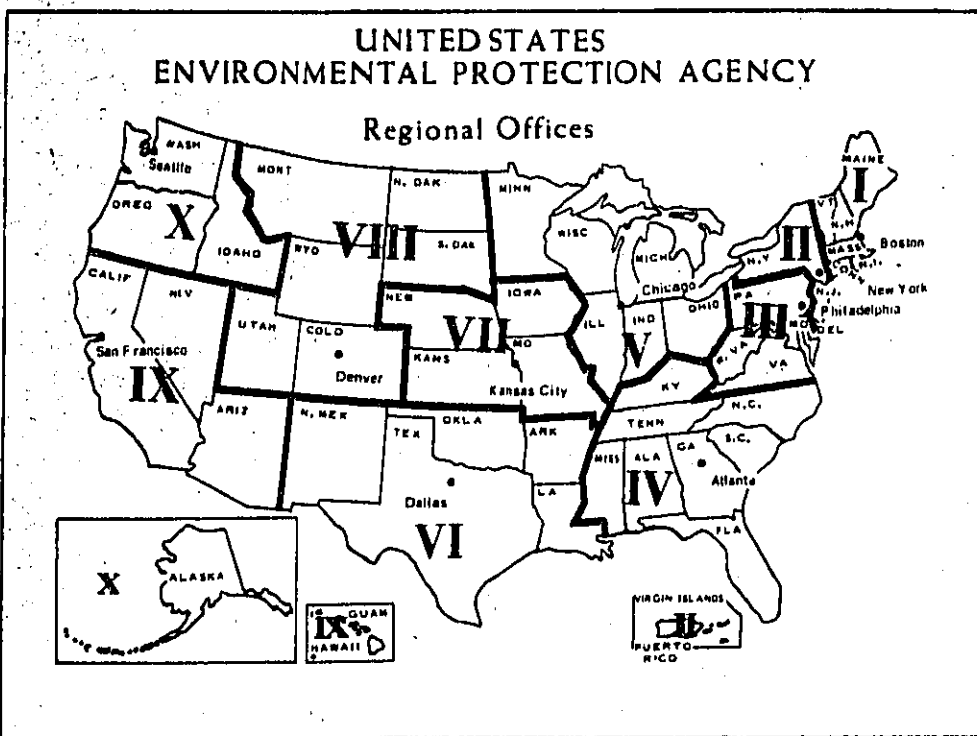
Region VIII
Paul Smith
Lincoln Tower
Suite 900
1860 Lincoln Street
Denver, CO 80203
(303) 837-2221

Region IV
Dr. Kent Williams
345 Courtland Street, N.E.
Atlanta, GA 30308
(404) 881-4861

Region IX
Dr. Richard Proconier
15 Fremont Street
San Francisco, CA 94105
(415) 556-4606

Region V
Horst Witschonke
230 Dearborn Street
Chicago, IL 60604
(312) 353-2205

Region X
Deborah Yamamoto
1200 Sixth Avenue
Seattle WA 98101
(206) 442-1253





NLC Seeks To Learn Local Officials' Attitudes towards Noise

During November 1978, the National League of Cities in cooperation with the Gallup Organization of Princeton, N.J., conducted a survey to ascertain urban residents' attitudes towards environmental issues. The results of the survey, which were released at the 1978 Congress of Cities in St. Louis, showed that although progress is being made, much work also remains to be done. Citizens' attitudes towards urban noise issues and problems were part of this survey.

In order to gain a more thorough understanding of how local officials perceive the problems associated with noise pollution in comparison with the attitudes expressed by urban residents as part of the Gallup Survey, we would like you to take some time to fill out the survey below. Our main interest is to see how the attitudes of local leaders towards noise pollution issues correspond with those of citizens, and in what respects differences may exist. The results of this survey and the noise component of the Gallup Citizens' Attitudes Survey will be tabulated and reported in a future Environmental Report.

As noise is generally a very localized problem, cities are the principle vehicles in any strategy to reduce and eliminate excessive amounts of environmental noise. The Quiet Communities Act passed by Congress last year acknowledged this fact and directed EPA to refocus its efforts towards assisting communities in their fight for quiet. Your cooperation in completing this survey is appreciated. Based on its results the NLC Urban Noise Project will respond to the concerns that you express with information to help local leaders cope with the explosive growth of noise within many of our nation's cities. As an incentive to return this survey the NLC Urban Noise Project will send you technical assistance documents developed by NLC and EPA with the local official in mind. Whether your city has acute noise problems or only sporadic ones, these documents will assist you in combating and preventing all types of local noise problems. □

A Survey of Local Officials' Attitudes Toward Noise

City _____ State _____ Zip Code _____

Population _____

Urban _____

Suburban _____

Rural _____

Form completed by:

Name _____

Title _____

Address _____

- How serious a problem is noise in your community? (Check one) _____ very serious
_____ fairly serious _____ not too serious _____ don't know
- Is noise a more serious problem or a less serious problem in your city than it was five years ago? (Check one) _____ less serious _____ more serious _____ don't know
- Is too much being done to control noise in your city, or not enough? (Check one) _____ too much
_____ not enough _____ about right _____ don't know
- Do you feel that noise pollution in your community represents a threat to the health of any of your citizens? (Check one) _____ yes _____ no
_____ don't know
- Name five sources of noise in your city which you as a local official receive the most complaints about or feel represent the most serious problems. Place a check next to the one which represents the largest problem.
 - _____
 - _____
 - _____
 - _____
 - _____
- Please place a check(s) next to those areas where you believe the federal government could assist you the most in helping you solve your city's noise problems.

Technical assistance _____
Grants (funding) _____
Product regulation _____
(Other) (Fill in) _____

As a service to our readers to fill in this survey we will send copies of the following

documents developed to assist city officials in attacking local noise pollution problems. Please check the last box if you would like an EPA official to contact you and explain what other types of assistance for cities is available from EPA including grants for local noise program developments and demonstrations.

□ "Barking Dog Brochure"—A pamphlet designed for distribution to citizens experiencing noise problems from barking dogs.

□ "Environmental Report on Noise"—Reprints of four supplements to Nation's City Weekly describing ways for city officials to solve local noise problems including mini case histories of how some cities have solved their problems.

□ "Model Community Noise Ordinance"—A model noise ordinance designed for local adoption developed by the National Institute of Municipal Law Officials.

□ "Noise: A Health Problem"—A description pamphlet of the many ways that noise affects our health.

□ "ECHO (Each Community Helps Others)"—An informative brochure on EPA's local self-help assistance program which enables communities that are already dealing effectively with noise problems.

□ "Airport Noise Abatement Planning"—A pamphlet designed to provide a brief introduction to the planning process involved in airport noise abatement programs.

□ Yes, I would like to be contacted by an EPA official.

Please return completed survey and information requests to:

NLC Urban Noise Project
National League of Cities
1620 Eye Street, NW
Washington, DC 20006

Spangler from p. 5

Industry is basically in the business of producing goods with the greatest market value. Unless the public and government insist on a quieter product, industry has no incentive to provide it. This is why all of us, elected leaders and local purchasing officials, should be interested in this approach to local noise abatement. It is our motivation that can help reduce noise at its source.

NIGP will act as a clearinghouse for information concerning the availability of quieter products, the basic specification requirements involved, and the industry sources that exist. It will also circulate information of federal, state and

government agencies on their experiences with quieter products. This should lead to a greater awareness by industry of the potential government market for quieter products. Cities will have the benefit of technical data and user experience involved in transactions of other government purchasers.

The cooperation of local government agencies is essential to the success of such a program. City administrators can support such a project by asking their purchasing and operating officials what they are doing with respect to noise limitations, if any, in the products and services the city purchases. Without such interest and

support, noise will continue to plague all of us.

If you have questions concerning the program or would like to know who you can join in and start "buy quiet" purchasing, please write me at the following address:

Lewis Spangler
Executive Vice President
"Buy-Quiet"
National Institute of Governmental Purchasing
Inc.
1001 Connecticut Avenue, NW
Washington, DC 20036.

Clout from p. 5

into its administrative procedures a requirement that any goods purchased by the city comply with acceptable noise levels if the potential noise emissions from the type of product could pose a danger to the health and welfare of El Segundo's citizens. The city's classic example involved a bid request for several garbage trucks.

As far as any city official knew, no company within the market service area of El Segundo manufactured a garbage truck which could meet the noise specification. Convinced that practical technology did exist to meet their demands, the city went ahead with the offer. Sure enough, one national manufacturer was able to come up with a vehicle and compaction unit meeting the city's specification.

According to Councilman Dick Nagel, "When quiet equipment is available, we specify noise levels, and if the horsepower and size of the engine are sufficient, we buy the quietest product available." (Standards for most vehicles average under 75 decibels, 25 feet from the vehicle, 5 feet above ground.)

"When we're shopping for a product, we ask the vendors who are bidding to indicate the noise level of their product. For instance, we recently contracted for quiet garbage trucks by adding noise qualifications to the bid specs and prohibiting trash pickup before 7:00 a.m. in residential areas," Nagel says. All seven bidders said they could meet the qualifications, so El Segundo chose the lowest bidder.

However, total success is not always the case, as was evidenced in the city's desire to obtain a quiet, trailer-mounted brush-chipper. (A brush-chipper is a device which fragments dead tree branches into a coarse mulch. When it is in operation it emits a tremendously loud noise level similar to that of a large chain saw.) When the purchasing officer for the city advertised the following request for a bid for a chipper, minimum noise requirements were added not only to reduce the disturbance to neighborhoods and business districts but also to protect the operator of the equipment and workmen.

"We therefore find it necessary to ask for noise factors in relation to equipment submitted for evaluation for purchase by the city. Please fill in the ratings for equipments submitted under the bid and with readings taken under normal operating range," the city announcement said.

"Ratings will be a factor in bid evaluation and, if equipment is purchased by the city, must operate with ratings given.

§ 96 decibels at the operator's ear level, under normal operating load

§ 80 decibels at 50 feet from equipment operating under normal load

"Failure to list ratings may result in rejection of bid."

The need for such noise requirements is apparent when one considers the typical location of chipper use. It is generally used in areas where tree branch growth, underbrush growth, or dead trees are not desirable. In all likelihood these are high population density areas where unwanted tree and brush growth present a problem. It is clear that operations at any time of day will disrupt someone's daily routine, thus the need for a "quiet" procurement was determined.

However, the state of the art in chipper noise attenuation was not quite up to the city's specifications. The only bid that came close to El Segundo's desires was one that offered for sale a device which emitted 85 decibels at 50 feet. (Five decibels beyond the city's requirements may appear minimal but, in fact, due to the logarithmic

nature of decibel ratings, 85 decibels represents a sizable increase over 80 decibels.) The city council, faced with the need to replace their current chipper rated at 98 decibels at 50 feet, chose to purchase the 85-decibel chipper and permit exception to the city noise code for operation of the chipper under the following conditions:



§ Operation only during hours of 8:00 a.m. to 6:00 p.m.

§ Operation limited in any one location to a maximum of four hours per day.

The city officials also were pleasantly surprised to learn that of five bids received, ranging in price from a low of \$6,087 to a high of \$8,374 and ranging in noise levels from a low of 85 decibels to a high of 92.5 decibels, the bid accepted at 85 decibels also happened to be the lowest bid in price.

El Segundo Chipper Bid Summary

Company	Amount of Bid	Average Noise Factor at 50 Feet
A	\$6,087.61	85 decibels
B	\$7,067.02	85 decibels
C	\$6,709.80	85 decibels
D	\$7,842.94	92.5 decibels
E	\$8,374.00	89.5 decibels

Purchasing low noise emissions products by city government can be a first step towards quieting urban clamor. And as shown by the case of El Segundo, costs do not necessarily rise because of the desire for quieter products.

List of potentially noisy products for which a city might desire to establish acoustical bid specifications:	
trucks	buses
automobiles	bulldozers
motorcycles	pneumatic drills
compressors and generators	ambulances
pumps	fire vehicles
engines	chippers
fans and blowers	lawnmowers
chain saws	air conditioners
garbage trucks	

This example is by no means a single, remote case. When the U.S. General Services Administration set out to purchase a large number of lawn mowers, a decision was made early in the procurement process to obtain the quietest and most affordable. It was a practical

test of the goals and objectives of the "Buy Quiet" concept.

"It is clear that the root cause of urban noise problems results from the initial development and subsequent marketing and use of noisy products in urban areas," EPA says. One question to be addressed, therefore, is how to stimulate the introduction of available noise control technology into the design of marketed products."

Government regulations which set noise limits for various products are one method that has been used with some success. But it was felt that incentives could complement federal regulatory activity.

"For example," EPA said, "the character of products produced reflects, to a large extent, the response of producers to the demands and requirements of their major customers. Thus, the federal government has the opportunity to influence the character of products manufactured, either directly through incentives and specifications in its own procurements, or indirectly through information and cooperation with ultimate purchasers of consumer or industrial products."

In its purchase of quiet lawn mowers, GSA worked closely with the Experimental Technology Incentive Programs (ETIP) in the Department of Commerce and with the Environmental Protection Agency to create an incentive for manufacturers to provide a quiet lawn mower. It did this by applying a noise factor to a procurement for 10,000 lawn mowers. The incentive provided a simple dollar-for-decibel advantage to manufacturers offering quieter lawn mowers.

GSA came out of this experiment with lawn mowers roughly half as loud as those normally purchased. Interestingly, the bulk purchase price for GSA to purchase the quieter mowers was approximately 30 percent lower than lawn mowers normally acquired. This approach has merit and appeal. It should be extended to include other federal agencies, state and local governments, and large industrial purchasers of noisy products.

The concept is being extended with the help of EPA, GSA, NLC and the National Institute of Governmental Purchasing. In fact, a recent edition of Nation's Cities Weekly (see The Weekly, May 28) carried an article advertising the availability of these GSA lawn mowers to local governments for demonstration and evaluation purposes. The response was swift. Cities ranging in size from Chicago to Dayton and Columbus, Ohio, to Atmore, Ala. (pop. 8,400) have contacted NLC asking about "buy quiet" programs.

The beauty of this type of local administrative control of noise has several elements:

- § It costs very little;
 - § It sets a good example;
 - § It establishes market pressures;
 - § It begins the community quieting process.
- And most important of all it is done without federal regulation. The market responds to demand naturally rather than artificially through a regulatory process.

Because of small contract volume, not all communities can successfully pressure contractors into providing quieter goods and services. However, a group of communities can presumably leverage manufacturers of city-type products and providers of capital construction services which contract with more than one community. Thus communities acting together can leverage the quality of supply because of the magnitude of demand. Many cities already participate in cooperative procurement programs; if your city does, contact your lead agency and ask them to explore a "buy quiet" program. □