

STATE AND MUNICIPAL NON-OCCUPATIONAL NOISE PROGRAMS

DECEMBER 31, 1971

U.S. Environmental Protection Agency Washington, D.C. 20460

STATE AND MUNICIPAL NON-OCCUPATIONAL NOISE PROGRAMS

DECEMBER 31, 1971

Prepared by

for the

U.S. Environmental Protection Agency Office of Noise Abatement and Control Washington, D.C. 20460

CONTENTS

		Page
INTRODUCT	TION	1
SUMMARY		2
Researc	Programs th and Testing Facilities	2 3
	Funding	3
	e of Potential Nationwide Budget of State and City 1-Occupational Noise Programs	4
	al Use of Federal Funds	6
CONCLUSIO	NS	7
RECOMMEN	IDATIONS	8
CATEGORIZ	ATION OF RESPONSES	9
Question	n 1	9
Question	n 2	9
Question	n 3	10
Question	n 4	10
Question	n 5	11
Question		11
Question		12
Question	n 8	13
Appendix A	DEMOGRAPHIC DATA	
Appendix B	CITY RESPONSE SUMMARY CHART	
Appendix C	STATE RESPONSE SUMMARY CHART	

INTRODUCTION

This document is a report on state and municipal government nonoccupational noise abatement and control programs prepared from information obtained in response to a questionnaire disseminated by the Environmental
Protection Agency (EPA). The questionnaire and a letter of inquiry were part
of a study to establish the national need for legislation and research concerning noise abatement and control. They were forwarded by the EPA Administrator to the governors of each state (including Guam, Puerto Rico, the Virgin
Islands) and the mayors of the 153 cities having populations, as of 1970, of
100,000 or more. The questionnaire requested information concerning the
level and scope of existing and planned noise abatement and control programs.
It furthermore solicited opinions on what additional support programs could
be developed by the Federal government. Described herein are the replies
of 114 mayors and of 41 governors.

The responses to each of eight questions have been categorized. The results are first summarized and then discussed separately for each question. Specific demographic data is presented in Appendix A. Because the categorization process removes the identity of the respondents, appendices B and C present the responses made by each city and state, respectively. The numerical code representing specific cities or states corresponds to their population rank number. Also included is a geographical map indicating where noise abatement programs do and do not exist. Appendix D contains the letter of inquiry and the actual responses of the various governments.

Because some of the information contained in the replies was non-specific, every city or state that responded may not be represented in each class of categorization or may be represented in several categories.

SUMMARY

Since only recently has noise abatement and control received broad national attention, it is not surprising that approximately half of the states and cities do not have an agency responsible for noise abatement programs. Of those cities and states that did have a class of programs, responsibility for these programs is fragmented throughout several agencies. With few exceptions, these programs are effectuated by an on-demand, part-time staff, often deficient in acoustical expertise and drawn from several agencies. Perhaps as a function of the local nature of may noise problems, a greater percentage of the cities, as compared to the states, have specific noise programs and personnel assigned to them on a continuous basis. Thus, state and city governments are only beginning to deal with noise and, with few exceptions, are in the exploratory stages of developing a program to deal with the

Current Programs

Most current programs are devoted to:

- Increased enforcement of existing nuisance ordinances.
- Establishment of governmental channels to respond to individual complaints.
- Studies and surveys of noise related issues in order to develop enforceable model laws, regulations and ordinances that will include specific criteria and noise level standards for facility and community requirements.

The few exceptional situations in which specific noise standards and regulations (as opposed to general nuisance ordinances) have been promulgated and enforced, include:

- Control of highway vehicular noise according to noise level standards.
- Restriction of the time of day during which scheduled airlines may use airport facilities.
- Prohibition, in terms of both sales and use, of specific recreational vehicles in wilderness areas.

Research and Testing Facilities

Those agencies carrying out noise related activities have equipment ranging from a single sound level meter to several sets of equipment, including a spectrum analyzer and several cars. As an exceptional example, the California Highway Patrol is extensively equipped to monitor noise. During a 12-month period (1970-71), the noise levels of 1 million highway vehicles were monitored.

Current Funding

In most cases, funding for non-occupational noise abatement is part of the operational budget of several agencies within a government and not specifically allocated to a program of noise abatement. However, for five cities allocating funds specifically for noise abatement programs, the cost of current programs is approximately \$.02 to \$.04 per resident person per year as shown in Table 1.

Table 1
BUDGET OF CURRENT (1971) NOISE ABATEMENT
PROGRAMS IN FIVE CITIES

<u>City</u>	Approx. Pop. (1,000,000)	Program Cost Per Resident (cents)
New York, N. Y.	8.0	4
Boston, Mass.	0.6	4
Columbia, S. C.	0.1	2
Fremont, Calif.	0.1 , .	2
Philadelphia, Pa.	1.9	1.6

Two states with noise abatement programs, Illinois and California, have allocated respectively \$.01 and \$.025 per resident. Although a few local governments have estimated future budgetary requirements (New York City has \$1 million budgeted for 1973. . . \$.12 to \$.15 per resident), most did not have available an estimate of cost for noise abatement programs.

Estimate of Potential Nationwide Budget of State and City Non-Occupational Noise Programs

The 1970 census shows that cities of 100,000 population and over contain a total of 52 million people. If it is assumed that the governments of such areas will be concerned with noise control programs and that the estimate of program cost is \$0.02 to \$0.15 cents per person, then a crude estimate of a nationwide budget for non-occupational noise control of local governments of cities of 100,000 or over is 1 to \$7.8 million per year. When the fact is considered that urbanized areas of the U.S. (cities of 50,000 or over plus the densely settled adjoining areas) contain 118 million people, an estimate of this

budget increases to \$2 to \$17 million per year. Based on an estimate of \$.01 and \$.025 per person, the state contributed budget throughout the country could be \$2 to \$5.5 million.

Thus, based on the existing budgets of state and local governments already actively addressing the noise problem and by extrapolating this information to the population throughout the country, a crude estimate of the possible state and local government budget that would be devoted to the initial stages of noise abatement and control could range from \$3 to \$22.5 million per year, as summarized in Table 2.

Table 2

CRUDE ESTIMATE OF POTENTIAL NATIONWIDE BUDGET OF STATE AND CITY NON-OCCUPATIONAL NOISE CONTROL PROGRAMS

Bases of Estimate		Budget/person (dollar)	Nation Bud (\$ mil	get
Type of Area	Population* (million)			
Type of Area	(IIIIIIIII)		/1\	
Cities over 100,000	52	.0215	$\frac{1}{1}$ $\frac{(1)}{(2)}$	- • -
Urbanized areas (whi include cities 100,00 & over)		.0215	2 (2)	17.0
States	203	.01025	2 (3)	5.5
Tota	l range	• • • • • • • • • • • • • • • • • • • •	3 - 22	. 5
			(1)+(2)	(2)+(3)

* 1970 census

It would appear, however, from the general fragmented nature of the existing state and local noise programs, coupled with the generally reported opinion that effectiveness of programs could not be evaluated, that the estimate

of a potential state and local budget ranging from \$3 to \$22.5 million is less than the lower bound needed to achieve comprehensive and effective programs.

Potential Use of Federal Funds

Because of the difficulty of enforcing nuisance laws, most city and state governments would prefer Federal funds be used to develop criteria based on such issues as land use and human response to noise. This would allow those governments to develop and implement meaningful programs in 3 to 5 years.

CONCLUSIONS

- Over half of the states and half of the cities have no agency assigned the responsibility for noise abatement.
- Of those local governments that did have some class of programs, responsibility is fragmented throughout several agencies.
- Reflecting the local nature of many noise problems, a greater percentage of the cities as compared to the states have specific noise programs and personnel assigned to them on a continuous basis.
- The broad power given to the courts under the general category of nuisance laws has had limited success in reducing noise. However, most local governments feel that if noise criteria, involving such issues as land use and human response to noise were available in measurable terms, they could develop and implement more meaningful programs regarding local requirements within 3 to 5 years.
- Those governments having active programs have noted that Federal funds would be used to improve staffs and facilities and to enlarge the scale of activities.
- Reflecting the recent concern for noise problems, local programs have been initiated within the last 1 to 2 years. Their success has not been evaluated as yet. It should be noted that in a 12-month period during 1970 and 1971, California, having promulgated noise standards for road vehicles, measured the sound level of 1 million highway vehicles.

RECOMMENDATIONS

- Criteria for the effects of noise should be established.
- Model ordinances that may be adapted by local governments for their own requirements should be developed.
- An accessible channel for exchange of information between governments that have undertaken programs and those just beginning should be established and continued on a cooperative basis.
- A program of technical information assistance and education should be established.

CATEGORIZATION OF RESPONSES

Question 1: What agency, bureau, or commission is responsible for establishing noise abatement and control programs and budget requirements, their implementation and monitoring?

Table 1
RESPONSIBLE AGENCIES

Response	Cities	States
None	61	23
Health Dept.	21	12
Public Works: Bldg. Inspection and Safety	19	-
Environmental	10	8
Noise Abatement	2	-
General City or State Govt.	4	1

Table 1 shows that over half the respondent have no agency assigned the responsibility of a noise abatement program. Of those cities and states having programs, responsibility is often fragmented throughout several agencies.

Question 2: What is the total number and classification of personnel continuously employed (in noise abatement)?

With few exceptions, noise programs are staffed with individuals drawn part time or on-demand from the responsible agencies and are provided

little administrative assistance. The professional fields of such personnel range from air pollution control aides and building inspectors to industrial hygienists, with few trained in acoustics.

Question 3: What special facilities and equipment have been or are being purchased? For what purpose and at what cost?

The nature of the replies indicates that little equipment is known to be available and that it is used only periodically and not on a program basis.

Table 2
EQUIPMENT

Response	Cost (\$100)	Cities	States
None (not stated)		37 (7)	12 (9)
Sound level meter	2-4	11	4
Meter with octave band analyzer	12-15	3	2.
More than above	20-185	13	5

Question 4: What is the current total annual operating budget for the responsible agency, bureau or commission? If possible, indicate past 3 to 5 years expenditures and future planned annual expenditures (for noise programs).

The replies to this question reflect the recent nature of concern with solving noise abatement and control problems. As a result, although funds may be available through the operating budgets of the responsible agencies, few cities or states have funds allocated specifically to noise programs.

Question 5: What is the nature of programs undertaken (e.g. noise level monitoring, noise abatement and control, etc.)? Indicate objectives.

Most respondents, with some form of noise program, are at the level of assessing the problem, in the form of surveys and studies and are providing governmental channels for responding to individual complaints, while attempting to develop noise criteria and enforceable laws, regulations, and ordinances. Several cities have begun to enforce existing land use zoning noise ordinances, while metropolitan agencies dealing with aircraft noise have begun programs of limiting the time of day for scheduled airport use. Some states have begun to prohibit the use of specific recreational vehicles in wilderness areas and to enforce recently promulgated state laws having vehicular noise level standards.

Table 3
PROGRAMS

Response	oonse Cities	
Complaint answer	22	3
Survey/monitoring	15	3
Developing ordinance	11	8
Enforcing ordinance	11	3
Research (Training)	14 (1)	6
Public Education	3	5

Question 6: What success have you had with your programs? Which have been successful? Which have not had anticipated benefits? On what basis is success or failure evaluated, i.e., what criteria are used?

The criteria of success cited were: lowering of noise levels, compliance, and citations held up in court. Most of the difficulty in achieving some measure of success was the qualitative phraseology of nuisance ordinances, whereby enforcement is based on subjective opinion rather than on standard measurement based on specific noise level criteria for various land use contexts. It should be noted, however, that nuisance law phraseology allows broad powers to be used at the discretion of the court.

Table 4
PROGRAM SUCCESS

Response	Cities	States			
Successful	15	6			
Unsuccessful	7	1			
Undetermined	47	25			

Question 7: By what authority are noise abatement and control programs funded and undertaken?

The authority is disparate. It is, however, oriented toward existing ordinance enforcement within the cities and toward the development of model laws within the states that would allow existing agencies to function on the basis of objective standards.

Table 5
FUNDING AUTHORITY FOR CITIES

Response	Cities
City Council	14
Nuisance ordinances	16
Noise ordinances	3
Air pollution code	1
State	9
Administrative budget	6

Table 6
FUNDING AUTHORITY FOR STATES

Response	Cities
Agency Statues: Health, Sanitary Engineering, Public Works	19
Air & Water Pollution Control Board	1
Environmental Legisla- tion	1
Bureau of Air Quality & Noise	1

Question 8: How might additional funds furnished by the Federal Government be employed to abate and control noise? What results could be expected and in what time period?

Federal funds could be used for personnel, research, equipment, and public education and in general support of existing ordinance enforcement and development of model ordinances. Although a time scale of 3 to 5 years was often mentioned, no clear estimates of the level of results as a function of available funds and personnel was presented.

Table 7
POTENTIAL USE OF FEDERAL FUNDS BY CITIES

	Cities						
Response	With Programs	Without Programs					
Research	17	8					
Equipment	24	7					
Personnel (Hire)	20	5					
Personnel (Train)	8	4					
Matching funds	2	1					
Other (e.g., public education)	27	17					
No proposal	1	33					

Table 8
POTENTIAL USE OF FEDERAL FUNDS BY STATES

	St	ates
Response	With Program	Without Program
Research	5	3
Equipment	8	1
Personnel (Hire)	7	1
Personnel (Train)	3	-
Monitoring	2	1
Establish Control Program	4	2
EPA Demonstration for Model Law	1	-
Prepare Statutes	1	5
Matching Funds	-	2
Public Education	2	2
Other	3	4
No Proposal	8	13

Appendix A DEMOGRAPHIC DATA

Table A-1
RESPONSIBLE CITY AGENCIES & PROGRAM CLASSIFICATION*

Number of Cities

Responsible
Agency Nature of Program

Population (in 1,000)	Total Number of Cities	None	Health	Bldg. Inspection	Environmental	Noise Abatement	City Government	Complaint Answer	Survey/Monitoring	Developing Ordinance	Enforcing Ordinance	Research (Training)	Public Education
100-200	90	37	9	14	2	1	2	11	5	3	7	6(1	.) -
200-300	15	7	-	1	2	-	1	3	-	1	1	2	1
300-400	17	3	5	1	3	-	1	3	3	2	1	2	-
400-500	5	2	1	<u>-</u>	-	-	1	-	-	-	1	2	-
500-600	8	5	2	2	-	-	-	1	1	2	-	1	-
600-700	5	4	-	-	1	_	-	-	-	1	1	-	-
700-800	5	2	1	-	1	-	-	1	1	-	-	-	-
800-900	2	_	2	1	-	-	-	1	ì	_	-	-	-
more 1,000 Total	$\frac{6}{153}$	$\frac{1}{61}$	$\frac{2}{22}$	<u>-</u> 19	$\frac{1}{10}$	$\frac{1}{2}$	- 5	$\frac{2}{22}$	$\frac{4}{15}$	$\frac{2}{11}$	-	$\frac{1}{14}(1$) 2

^{*}Of a possible total of 153 cities whose population is over 100,000, this table is based on information from 114 cities.

Table A-2
RESPONSIBLE AGENCIES AND INDIVIDUALS TO CONTACT

Rank	City	Responsible Agency	Individual to Contact
1	New York, N.Y.	Bureau of Noise Abatement Dept. of Air Resources	Robert S. Bennin Director
2	Chicago, Ill.	Department of Environmental Control	H. W. Poston Commissioner
3	Los Angeles, Cal.	?	
4	Philadelphia, Pa.	Occupational & Radiological Health Sec Dept. Public Health	Norman R. Ingraham, M.D. Commissioner
5	Detroit, Mich.	(Air Pollution Control Division Wayne County Dept. of Health)	(Morton Sterling Director)
6	Houston, Tex.	Public Health Engineering Div. City of Houston Health Dept.	Gerald E. Hord Director
7	Baltimore, Md.	Baltimore City Health Dept.	George W. Schucker, Asst. Commissioner of Health
8	Dallas, Tex.	Dallas City Health Dept.	Hal J. Dewlett, M.D. Director
9'	Washington, D.C.	Dept. of Environmental Services Environ. Health Administration	Malcolm C. Hope, Director Environmental Health
10	Cleveland, Ohio	Cleveland Div. of Health, Environmental Health Services	Bailus Walker, Jr., Deputy Health Commissioner for Environmental Health
11	Indianapolis, Ind.	(Police Dept Dept. Public Safety)	
12	Milwaukee, Wisc.	?	
13	San Francisco, Cal.	(Dept. Public Works)	
14	San Diego Cal.	None	

Rank	City	Responsible Agency	Individual to Contact
15	San Antonio, Tex.	None	
16	Boston, Mass.	Air Pollution Control Commission	David Standley, Exec. Director
17	Memphis, Tenn.	(Police Dept.)	George S. Lovejoy, Dir. Health Dept.
18	St. Louis, Mo.	None	
19	New Orleans, La.	Dept. of Safety & Permits	Bernard B. Levy, Chief Admin. Officer - New Orleans
20	Phoenix, Ariz.	(Police, Building & Safety & Health Depts)	Steve Carter - Admin. Asst.
21	Columbus, Ohio	(Police)	Charles R. DeVoss, Chief Air Pollution Control Engineer
22	Seattle, Wash.	(Police, Engineering, Health Depts.)	
23	Jacksonville, Fla.	None	
24	Pittsburgh, Pa.	Allegheny Co. Health Dept.	Frank B. Clark, Director
25	Denver, Colo.	None	
26	Kansas City, Mo.	None	
27	Atlanta, Ga.	City Board of Aldermen	Mac Baggett, Director
28	Buffalo, N.Y.	(Common Council, Police)	
29	Cincinnati, Ohio	?	
30	Nashville, Tenn.	None	
31	San Jose, Cal.	Santa Clara Col Health Dept.	T. W. Fletcher, City Manager
32	Minneapolis, Minn.	(Air Pollution Control Div. of Dept. of Inspections)	(Robert L. Lines, Supervisor)

Rank	City	Responsible Agency	Individual to Contact
33	Ft. Worth, Tex.	Health Dept.	W. V. Bradshaw, Jr., Director Public Health
34	Toledo, Ohio	Pollution Control Agency	
35	Portland, Oregon	Portland City Council	Ronald A. Buel, Administrative Assistant
36	Newark, N.J.	None	
37	Oklahoma City, Okla.	Health Dept.	
38	Oakland, Cal.	Alameda Co. Health Dept.	Ben H. Mathews, Chief Environ- mental Services
39	Louisville, Ky.	?	
40	Long Beach, Cal.	?	
41	Omaha, Nebraska	None	
42	Miami, Fla.	?	
43	Tulsa, Okla.	Health Dept.	
44	Honolulu, Hawaii	Dept. of Health (State)	Albert C. Zane, Director & Chief Engineer, Dept. Public Works
45	El Paso, Tex.	Health Dept.	John Morrison, Sanitary Engineer
46	St. Paul, Minn.	None	
47	Norfolk, Va.	None	
48	Birmingham, Ala.	(Dept. of Environmental Health)	
49	Rochester, N.Y.	(Air Pollution Control Program Monroe Co. Dept. of Health)	Robert R. Bouley P.E.

Rank	City	Responsible Agency	Individual to Contact
50	Tampa, Fla.	?	
51	Wichita, Kansas	?	
52	Akron, Ohio	None	
53	Tucson, Ariz.	City Manager's Office	Thomas E. Doran, Admin. Asst Research & Evalua.
54	Jersey City, N.J.	?	
55	Sacramento, Cal.	None	
56	Austin, Tex.	None	
57	Richmond, Va.	Air Pollution Control Bureau in Dept. of Safety	Jack Fulton, Director, Public Safety
58	Albuquerque, N. M.	Dept. of Environ. Health	Victor R. Bickel, Director
59	Dáyton, Ohio	None	
60	Charlotte, N. C.	None	
61	St. Petersburg, Fla.	None	
62	Corpus Christi, Tex.	None	
63	Yonkers, N. Y.	Bureau of Environmental Protection Dept. of Development	
64	Des Moines, Iowa	None	
65	Grand Rapids, Mich.	?	
66	Syracuse, N. Y.	None	

Rank	City	Responsible Agency	Individual to Contact		
67	Flint, Mich.	(Dept. Public Works)			
68	Mobile, Ala.	(Inspection Service Dept.)			
69	Shreveport, La.	?			
70	Warren, Mich.	(Div. Bldgs. & Safety Engineering)	Paul Van Den Braden, Director, Dept. Public Services		
71	Providence, R.I.	(Dept. Bldg. Inspection)			
72	Ft. Wayne, Ind.	None ,			
73	Worcester, Mass.	Div. Air Pollution Control Dept. Public Health	Francis J. McGrath, City Manager		
74	Salt Lake City, Utah	?			
75	Gary, Indiana	(Police)			
76	Knoxville, Tenn.	(Police)			
77	Madison, Wisc.	(Police)			
78	Virginia Beach, Va.	(Police)			
79	Spokane, Wash.	(Police)			
80	Kansas City, Kansas	None			
81	Anaheim, Cal.	(Bldg. Safety, Zoning & Planning Div.)			
82	Fresno, Cal.	City Council	Ted C. Wills, Mayor		
83	Baton Rouge, La.	(Dept. Public Works)			
84	Springfield, Mass.	(Planning, Bldg., Police, Public Health)	Stephen H. Pitkin, Planning Director		

Rank	City	Responsible Agency	Individual to Contact
85	Hartford, Conn.	(City Council, Police)	
86	Santa Ana, Cal.	None	
87	Bridgeport, Conn.	(Mayor's Environ. Council)	Jack McCarthy, Admin. & Director - Air Pollution Control
88	Tacoma, Wash.	(Police & Planning)	
89	Columbus, Ga.	(State Health Dept.)	
90	Jackson, Miss.	None	
91	Lincoln, Neb.	(Police, Bldg. Inspections)	
92	Lubbock, Tex.	(City Council)	
93	Rockford, Ill.	None	
94	Greensboro, N. C.	None	
95	Paterson, N. J.	Board of Health	Dr. Allen Yager, Director
96	Riverside, Cal.	None	
97	Youngstown, Ohio	None	
98	Fort Lauderdale, Fla.	Committee on Noise Control	James L. Leavitt, Mayor
99	Evans ville, Ind.	Air Pollution Control Dept.	John E. Clausheide, Chief
100	Newport News, Va.	?	
101	Huntsville, Ala.	None	(Mr. Deglas - Office of Air Pollution)

102

New Haven, Conn.

Table A-2 (Contd.)

Rank	City	Responsible Agency	Individual to Contact
103	Colorado Springs, Colo.	?	
104	Torrance, Cal.	None	
105	Montgomery, Ala.	?	
106	Winston-Salem, N.C.	None	
107	Glendale, Cal.	?	
108	Little Rock, Ark.	None	
109	Lansing, Mich.	?	
110	Erie, Pa.	?	
111	Amarillo, Tex.	?	
112	Peoria, Ill.	(Environmental Development Dept.)	
113	Las Vegas, Nev.	Clark Co. District Health Dept. Pollution Control Board	
114	South Bend, Ind.	None	
115	Topeka, Kansas	?	
116	Garden Grove, Cal.	Urban Development Office (under City Manager)	
117	Macon, Ga.	?	
118	Raleigh, N. C.	(City Council/Bldg. Inspect. Dept.)	
119	Hampton, Va.	None	
120	Springfield, Mo.	City-Co. Health Dept.	

Table A-2 (Contd.)

Rank	City	Responsible Agency	Individual to Contact
121	Chattanooga, Tenn.	None	
122	Savannah, Ga.	None	
123	Berkeley, Cal.	None	
124	Huntington Beach, Cal.	?	
125	Beaumont, Tex.	None	
126	Albany, N. Y.	?	
127	Columbia, S. C.	(Dept. Bldg. & Inspect.)	
128	Pasadena, Cal.	?	
129	Elizabeth, N.J.	None	
130	Independence, Mo.	None	
131	Portsmouth, Va.	None	
132	Alexandria, Va.	(Dept. Health, Environ. Control Div.)	
133	Cedar Rapids, Iowa	None	
134	Livonia, Mich.	Bureau of Inspect Dept. Public Works	
135	Canton, Ohio	?	
136	Allentown, Pa.	?	
137	Stamford, Conn.	Health Dept.	
138	Lexington, Ky.	None	
139	Waterbury, Conn.	?	
140	Hammond, Ind.	(Health Dept.)	
141	Stockton, Cal.	None	

Rank	City	Responsible Agency	Individual to Contact
141	Stockton, Cal.	None	
142	Hollywood, Fla.	City Commission	Robert L. Buschman Public Works Director
143	Trenton, N. J.	?	
144	San Bernardino, Cal.	None	
145	Dearborn, Mich.	None	
146	Scranton, Pa.	?	
147	Camden, N. J.	?	
148	Hialeah, Fla.	None	
149	New Bedford, Mass.	(Environmental Quality Control Council)	
150	Fremont, Cal.	Community Development Dept. (under City Manager)	
151	Duluth, Minn.	?	
152	Cambridge, Mass.	?	
153	Parma, Ohio	?	

Table A-3
RESPONSIBLE STATE AGENCIES & PROGRAM CLASSIFICATION*

				spo Age				Nat	ure	of	Pro	gra	ım
Population (in 1,000)	Total Number of States	None	Health Dept.	Bldg. Inspection	Environmental	Noise Abatement	State Government	Complaint Answer	Survey/Monitoring	Developing Ordinance	Enforcing Ordinance	Research (Training)	Other
300-900	11	6	3	-	-	-	-	-	-	2	-	1	-
900-1,000	2	2	-	-	-	-	-	-	-	-	-	-	-
1,000-2,000	6	3	-	-	2	_	-	1	1	-	-	-	1
2,000-3,000	7	3	-	-	1	-	1	-	-	2	-	2	3
3,000-4,000	8	2	4	-	2	-	-	-	-	-	-	1	1
4,000-6,000	7	4	3	-	-	_	-	-	1	1	2	-	-
6,000-11,000	4	2	-	-	1	-	-	-	-	2	-	1	-
11,000-19,000	<u>5</u> 50	$\frac{1}{23}$	$\frac{1}{11}$	- 0	2 8	- 0	$\frac{\overline{1}}{1}$	$\frac{1}{2}$	$\frac{1}{3}$	18	$\frac{1}{3}$	$\frac{1}{6}$	<u>-</u> 5

^{*}Of a possible total of 53 states and territories, this table is based on information from 41 states.

Table A-4
RESPONSIBLE AGENCIES AND INDIVIDUALS TO CONTACT

Rank	State	Responsible Agency	Individual to Contact
1	California	(Dept. Public Health)	John M. Heslep, Ph.D., Deputy Director for Environmental Health & Consumer Protection
2	New York	?	
3	Pennsylvania	Bureau of Air Quality & Noise Control Dept. of Environmental Resources	Victor H. Sussman, Director
4	Texas	None	
5	Illinois	Illinois Environmental Protection Agency Division of Noise Pollution Control	John S. Moore, Div. Manager
6	Ohio	None at present time	
7	Michigan	?	
8	New Jersey	(Dept. of Environmental Protection Div. of Environmental Quality)	Grant F. Walton, Director
9	Florida	Dept. of Air & Water Pollution Control	Vincent D. Patton, Director
10	Massachusetts	Bureau of Air Use Management, Div. of Environmental Health, Dept. Public Health	E. M. Comproni, Air Pollution Control Engineer
11	Indiana	(State Board of Health)	Perry E. Miller, Asst. Com- missioner for Environ. Health
12	North Carolina	None	
13	Missouri	(Air Conservation Commission)	Frederick W. Ott, Air Pollution Control Engineer

Rank	State	Responsible Agency	Individual to Contact
14	Virginia	(Health Dept.)	Gerald P. McCarthy, Exec. Director, Council on the Environ.
15	Georgia	(Dept. Public Health)	
16	Wisconsin	None	
17	Tennessee	None	
18	Maryland	Bureau of Consumer Health Protection State Dept. Health & Mental Hygiene	Neil Solomon, M.D., Ph.D. Sec. Health & Men. Hyg.
19	Minnesota	Minn. Pollution Control Agency	Edward M. Wiik, Director, Div. Air Quality
20	Louisiana	Bureau of Health	
21	Alabama	None	
22	Washington	?	
23	Kentucky	(Dept. of Health)	
24	Connecticut	Dept. of Environmental Protection	Commissioner hasn't been appointed
25	Iowa	None	
26	South Carolina	None	
27	Oklahoma	Dept. of Health	Lloyd F. Pummill, Deputy Commissioner for Environ. Services

Rank	State	Responsible Agency	Individual to Contact
28	Kansas	?	
29	Mississippi	None	
30	Colorado	None	
31	Oregon	Environ. Quality Commission	
32	Arkansas	None	
33	Arizona	None .	
34	West Virginia	None	
35	Nebraska	None	
36	Utah	?	
37	New Mexico	Environmental Improvement Agency	Larry J. Gordon, Director
38	Maine	None	
39	Rhode Island	None	
40	Hawaii	Dept. of Health	
41	New Hampshire	Div. Public Health	
42	Idaho	None	
43	Montana	None	
44	South Dakota	?	
45	North Dakota	Dept. of Health	W. Van Heuvelen, Chief Environ. Health & Engineering Services

Table A-4 (Contd.)

Rank	State	Responsible Agency	Individual to Contact
46	Delaware	None	
47	Nevada	None	
48	Vermont	None at present	
49	Wyoming	None	
50	Alaska	?	

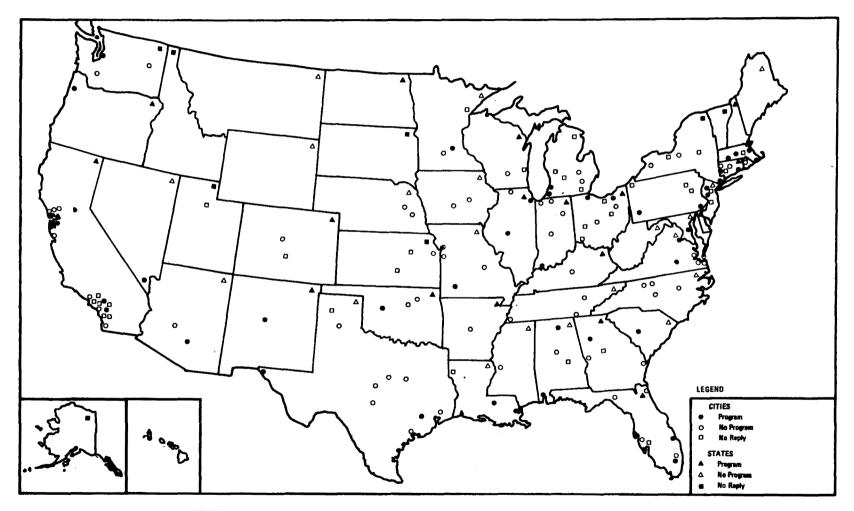
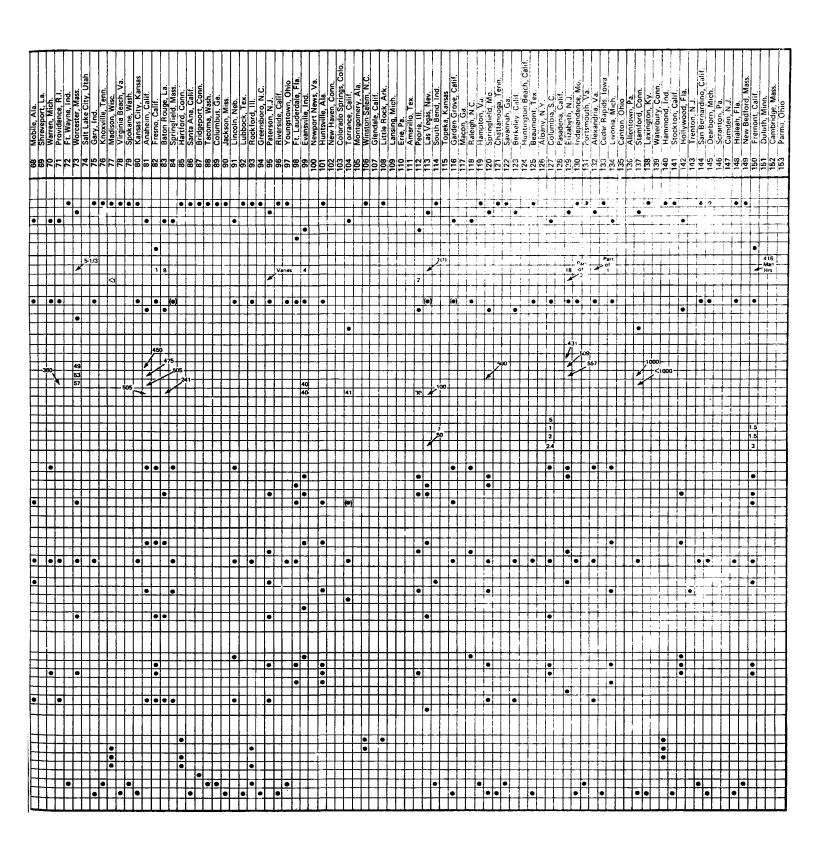


FIGURE A-1. NOISE ABATEMENT & CONTROL PROGRAMS FOR STATES & CITIES GREATER THAN 100,000

Appendix B CITY RESPONSE SUMMARY CHART

																	ì																																		
CITY SUMMARY POPULATION RANK	1 New York, N.Y.	- 1		ı	6 Houston, Tex.	- 1	- 1	1	1 1	- 1	1	ìΙ	1 1	- 1	,	1 1	- 1	1	1	1 ł		- 1	1		1 1		- 1	1 1		1 1	- 1			1	45 El Paso, Tex.		i l	1 1	- 1		1 1	1	i i	1 1	- 1	- 1	1 1	- 1	- 1	1 1	66 Syracuse, N.Y. 67 Flint, Mich.
	Н	+	+	H	H	+	1			1	Ţ				1						7	1	+	1	,,		1				+	4		10		7	-			,		., u	, 4,		.,	, 6		1			
Agency Responsible for Noise Program None Health Dept. Public Works: Bldg. Inspection & Safety Environmental Noise Abatement City Government Personnel	•	•	•	Pari	•	_[Som		Par	•		•	3		•		•	•					•	•	•	390	•	+	•		•		•	•	1,	•			•	•			•	•	•	•	• (•		•
Allocated to Responsible Agency Allocated Specifically to Noise		15 5	1	ř	7	4		Assig		9	وخلت	orne ir l		Pari	8:	2	+	\mp	1	± 86	55-		+	F		9	7	•	of 1	14	- 5% - 14	Ŧ	7	Ŧ	1	Part of 3	F	H	+	Ŧ	H	+	Ŧ	H	7	+	H		Ŧ	H	2
Equipment (in \$100) None (not stated) Sound Level Meter (2-4) Meter with Octave Band Analyzer (12-15) More than above (20-185)		•			•	•	•					•	П	1	•			•	•	•		•	1	•	•	•		•		•				•			•				•	•	•		•	•			•		•
Budget (in \$1000) For Responsible Agency 1968 1969 1970					19 18 20	\neg		-											-						24	12		88	21:	7	1	200-		+	12										1	462	195				50
1972 Specifically for Noise	E				22	4	104	+	E		+	-			\dagger	Ė		1	İ		Ė		\pm	ŧ	3¢	0 	Ī	Ė		-	1				29	+	Ė		1	1		1	\pm	H	7	丰	614-		+	Ė	
1968 1969 1970 1971 1972	25		0 1				+						25 25 38		,	7	7.4	4	_	20-24		1	ير	25				7 2	1	4				5												+					
Nature of Program Complaint Answer Survey/monitoring Developing ordinance Enforcing ordinance	•	•			•			•					•					•	•				\ \ \ \		•	•	•	•	Ť	1				•		+	-		+		•				•			•	•		
Research (Training) Public Education Other Program Success Successful	•		-	1	•	•	-	+	-							-		+				•	+	•		•	+	+		•		+				+	+		+	+	•		+	•	•	+					
Unsuccessful Undetermined By What Authority Program Undertaken City Council Nuisance ordinances		•			•		1	•	L			•	•			-		•	•			•	+	•	•	•	•	•	H	•					•	1	•			+	•	-	•	•	•	•			•	+	•
Noise ordinances Air Pollution Code State Administrative budget Potential Use of Federal Funds	•	•					•					-	•		•			•	•	•			+				+			•				•	•	 	-			+	•	-				+					
by Cities (With Program) Hesserch Equipment Personnel (hire) Personnel (train)	F		\perp	•	•	녤	•		<u> </u>		+		0 0	П	ŀ			•	•	•	L	•	+				1	•	\Box	•			П	•	•		‡ ‡				•				•			H	•	<u> </u>	•
Matching funds Other (e.g., public educ.) No proposal Potential Use of Federal Funds by Cities (without Program)	•	•		-	•		-	<u> </u>				 	•					•						-	•	•	•			•						Ŧ	Ŧ			[•	•	•		•	+			f		•
Research Equipment Personnel (hire) Personnel (train) Matching funds	F			†							•		E	•		•	•	\Box	‡ †								#																								•
Other (e.g., public educ.) No proposal	E	F		Ŧ	F	П	1	-	•		-	•			•			1	•	F	•		•	f	F	Ⅎ	1	f		ŧ	H	•		#		•	•	\exists	\perp		•	+	•	H	4		•	•	-		•



Appendix C STATE RESPONSE SUMMARY CHART

STATE SUMMARY		1		<u> </u>	Т		_		1	1.1	_	Ţ	П	_	1 1	_	П				Т	1 1	_	T		-	_	1 1	_	1	_	П	_	Т		_	_
Agency Repostable for Noise Program Agency Repo	STATE SUMMARY	California	New York Pennsylvania	Texas	Ohio	Michigan New Jarea	Florida	Massachusetts	Indiana North Carolina	Missouri	Virginia	Wisconsin	Tennessee	Maryland Minnesota	Louisiana	Alabama Washington	Kentucky	Connecticut	South Carolina	Oklahoma	Kansas	Colorado	Oregon	Arizona	West Virginia	Nebraska	Utah New Mexico	Maine	Rhode Island	New Hamnshire	Idaho	Montana	South Dakota	Delaware	Nevada	Vermont	Alaska
Month Mont	POPULATION RANK	-	3 2	4	9	~ ¤	6	2	- 2	13	<u> </u>	9	12																								
Method Market M	Agency Responsible for Noise Program				1									1							+		1						 	1			Ť			1	
Allocated to Assponsible Agency Presonant Allocated to Assponsible Agency Vision From the Control of the Contro	Health Dept.	•			Ī			•								1	•	-			-		+	-	•		‡		_	•			•			1	\vdash
Personnel Allocated to Responsible Agency Allocated Specifically to Noise Equipment in S100 Noise for Flands Fig. 1 Fig. 2 Fig. 2 Fig. 2 Fig. 3 Fig.	Noise Abatement		•		•		•		1			Ŧ		•	Н			•				П	• (•			+				Ħ	\exists	土	\equiv
Assistance of Assignment in California (1974) Note in California (1974) Surger (1974) Meter with Octave Band Analyzer (1974) Meter with Octave Band Band Band Band Band Band Band Band	Personnel		8-10 -Man	\coprod	\pm	6 +3 -	1		\pm		\pm	\pm	Н	+	<u> </u>	\pm	\pm				\pm		\pm					Н			4+	4	\pm	H	 	\pm	上
Stored Level Mere 17-20 10 10 10 10 10 10 10	Allocated Specifically to Noise		7	\coprod	7	More End FY	†		+			+	Ц	4	/an	\pm	9	Ш	$^{\pm}$	Н	†		1	+						1			1	P	art ime	\pm	
Meter with Octave Band Analyser (12-15) Wore than above (20-186) Budget In \$10000 For Responsible Agency 1908 1907 1971 1972 Specially for Noise 1989 1990 1997 199	None (not stated)	<u> </u>	•	(0)			•		•		(•)	•	(0)	• •	•	•	L	•	•	(•)	\pm	(0)	•	\perp	(•)	Н	1		1				+		(•) (•)	\perp
Bidgest In \$1000	Meter with Octave Band Analyzer (12-15)	1.	-				+		+		-	•		‡		‡	•		Ŧ		‡	\exists	1	+			+		\perp		+	\Box	-		Ħ	+	十
1988 968 969	Budget (in \$1000)			#	+	\parallel	1		\dagger			#		#			ļ		1	H	‡	+	1	+			1		-	1	+	\parallel	1	H	#	#	\perp
197	1968 1969	-			+		+		+		7	1			H	\pm	F	Ļ,	490	H	‡	\parallel	7	+			+	H		Ŧ	Ť	\exists	#	H	 	‡-	+
Specifically for Noise 1968 1969 1977 1977 Nature of Program Consider Agency Control English Research Research (Training) Program Success Successivi Unsuccessivi Unsuccessivi Undermined Program Control English Research	1971	500			\perp		I	1	7		-			9 📙		4	E	ا سام	203E	3	-		7	5			,	21	17	1	Ŧ	\prod	-		\blacksquare	\pm	I
1969 1970 1971 Nature of Program Complaint answer Survey/monitoring Developing ordinance Frooring ordinance	Specifically for Noise				65		+		#	+	İ	1		+			+		t		+		+	+-		H	+	H	-	‡	+	1	+			\pm	F
Nature of Program Complaint answer Survey/monitoring Developing ordinance Enforcing ordinance Research (Training) Public Education Other O	1969 1970						1					+											+	+	H		1				1		+		\Box	\pm	Ė
Complaint answer Survey/mortoring Developing ordinance Enforcing ordinance Research Training) Public Education Other Other Program Success Successful Unsuccessful Unsuccessful Undetermixed Py What Authority Program Undertaken Agency Statutes: Health, Sanitary Engineering, Public Works Air & Water Pollution Control Board Environmental Legislation Bureau of Air Quality & Noize Potential Use of Federal Funds by States (With Program) Research Equipment Personnel (train) EFA Demonstration for Model Law Prepare Statutes Matching Funds Mystatutes Mystatutes Mystatutes Matching Funds Public Education Other No Proposal Potential Use of Federal Funds by States (Withour Program EFA Demonstration for Model Law Prepare Statutes Matching Funds Mystatutes Mystatutes Matching Funds Mystatutes Mystatutes Matching Funds Mystatutes M	1972				\pm									+						Н		\exists							_		Ī					\pm	
Developing ordinance	Complaint answer	<u> </u>		\rightarrow	-		\downarrow		1	+		+		+			\perp	H	Ŀ	Н	-						\downarrow		1	•	•		+		\vdash	+	<u> </u>
Research (Training) Public Education Other	Developing ordinance	1.			• •		•	•						#		\perp	‡	-	‡		+	•		+			+		1	•	‡		\dagger	•	\pm	‡	#
Program Success	Research (Training) Public Education				•		1		\pm			I				\pm		•	Ī	•	+	П		F					1	•						\pm	
Undetermined	Program Success		: 	++	-	H	+		+			\pm		\pm		_					+			\pm			•		+	+	t		\pm		+	\pm	\vdash
By What Authority Program Undertaken Agency Statutes: Health, Sanitary Engineering, Public Works Air & Water Pollution Control Board Environmental Legislation Bureau of Air Quality & Noise Potential Use of Federal Funds by States (With Program) Research Eguipment Personnel (Irian) Monitoring Establish Control Program Establish Control Program EPA Demonstration for Model Law Propensal Potential Use of Federal Funds by States (Without Program) Research Epy States (Without Program) Expanded Statutes Proposal Potential Use of Federal Funds by States (Without Program) Research Equipment Potential Use of Federal Funds by States (Without Program) Research Equipment Personnel (Grin) Monitoring Presonnel (Grin) Monitoring Research Equipment Personnel (Grin) Monitoring Research Equipment Personnel (Grin) Monitoring Establish Control Program Establi	Unsuccessful			1		H	ļ			\pm											+		1	+		H	‡		+		Ţ		1		#	\pm	
Engineering, Public Works Air & Water Pollution Control Board Environmental Legislation Bureau of Air Quality & Noise Potential Use of Federal Funds by States (With Program) Research Equipment Personnel (Irier) Personnel (Irier) Establish Control Program EPA Demonstration for Model Law Prepare Statutes No Proposal Potential Use of Federal Funds by States (Without Program) Research Equipment Personnel (Irier) Potential Use of Federal Funds by States (Without Program) Research Equipment Personnel (Irier) Personn	By What Authority Program Undertaken	1	\Box				<u> </u>		1			#					‡				#				Ľ		Ť			_			1			‡	İ
Environmental Legislation Bureau of Air Quality & Noise Potential Use of Foderal Funds by States (With Program) Research Equipment Personnel (hire) Personnel (train) Monitoring Establish Control Program EPA Demonstration for Model Law Prepare Statutes No Proposal Potential Use of Federal Funds by States (Without Program) Equipment Personnel (hire) Personnel (hire) Propare Statutes Propare Statutes Personnel (hire) Personnel	Engineering, Public Works	† •	,! 	-	•	+		1	•			•	-	•	•	\parallel	•	•	\downarrow	•	_	•	•	+			•	\dashv	• (•	-		•	-	\vdash	+	┢
by States (With Program) Research Equipment Personnel (Inire) Personnel (Irian) Monitoring Establish Control Program EPA Demonstration for Model Law Prepare Statutes Monitoring Potential Use of Federal Funds by States (Without Program) Research Equipment Personnel (Irian) Monitoring	Environmental Legislation	1	1		•.		+										ŀ				$\frac{1}{2}$	$oxed{H}$		ŀ	E		\pm		1	$\frac{1}{2}$	-		\pm		1	\pm	
Equipment Personnel (Inire) Personnel (Irain) Monitoring Establish Control Program EPA Demonstration for Model Law Prepare Statutes Matching Funds Public Education Other No Proposal Potential Use of Federal Funds by States (Without Program) Research Equipment Personnel (Irain) Monitoring Establish Control Program Establish Contr	by States (With Program)																																				
Personnel (train) Monitoring Establish Control Program EPA Demonstration for Model Law Prepare Statutes Matching Funds Public Education Other No Proposal Potential Use of Federal Funds by States (Without Program) Research Equipment Personnel (train) Monitoring ESTABLISH CONTROl Program EPA Demonstration for Model Law Prepare Statutes Matching Funds	Equipment	\perp					1	-	•	+				•	Ħ		•	П	ŧ	H	+						•		-	_	+	П	‡	Ħ	H	‡	F
Establish Control Program EPA Demonstration for Model Law Prepare Statutes Matching Funds Public Education Other No Proposal Potential Use of Federal Funds by States (Without Program) Research Equipment Personnel (hire) Personnel (hire) Personnel (triain) Monitoring Establish Control Program Prepare Statutes Matching Funds • • • • • • • • • • • • • • • • • •	Personnel (train)	1		•		H	ļ	+		Ŧ		+		•			Ť		+		‡	\exists	-	+	Ħ	Ħ	+	H	-	•	ļ		+	Ħ	H	‡	F
Matching Funds Public Education Other No Proposal Potential Use of Federal Funds by States (Without Program) Research Equipment Personnel (hire) Personnel (train) Monitoring Establish Control Program ESTAD Demonstration for Model Law Prepare Statutes Matching Funds Public Education Other	Establish Control Program EPA Demonstration for Model Law	\blacksquare			\perp		1					1	\vdash		F												•			1			•		₫	Ι	E
Other No Proposal Potential Use of Federal Funds by States (Without Program) Research Equipment Personnel (hire) Personnel (train) Monitoring Establish Control Program EPA Demonstration for Model Law Prepare Statutes Matching Funds Public Education Other	Matching Funds		\dagger	\Box	#		‡		\downarrow	†	-	+	H		+			\Box	+		\pm	\parallel	#	+	L		#	H	1	‡	ŧ	H		Ħ	$ \downarrow $	‡	Ħ
by States (Without Program) Research Equipment Personnel (hire) Personnel (train) Monitoring Establish Control Program EFA Demonstration for Model Law Prepare Statutes Matching Funds Public Education Other	Other	Ħ,		\parallel				•	#	+		+	F		F	+		П	+	•	+	•	_	\pm			1		•	+	\pm	$rac{1}{2}$;	Ħ	Ħ	丰	F
Equipment Personnel (hire) Personnel (trian) Monitoring Establish Control Program EPA Demonstration for Model Law Prepare Statutes Matching Funds Public Education Other	by States (Without Program)											I					I				I										I		I			$oxed{I}$	
Personnel (train) Monitoring Establish Control Program EPA Demonstration for Model Law Prepare Statutes Matching Funds Public Education Other	Equipment		\prod		\perp	\prod	\mp		$ \perp$	•		Ŧ			F		+	-	+		+		+	+		H	+	\Box	\pm	+	+	•	+	\pm	-	•	<u> </u>
Establish Control Program EPA Demonstration for Model Law Prepare Statutes Matching Funds Public Education Other	Personnel (train)	#		\parallel	+	++	+	+	+	‡	$ \cdot $	#	#	•	+	H	‡		+	Ħ	+	\parallel	+	+		H	#		+	+	+		#	Ħ	\mp	‡	F
Matching Funds ● ■	Establish Control Program EPA Demonstration for Model Law		\coprod	•	1	\coprod	\pm	E		Ī		\pm	Ė		Į		1	H			1		1	Ŧ			1	Н	\exists	1	-	Н			7	\mp	E
Other • • • •	Matching Funds		+	\coprod	+	\prod	+	L	+			•	-	ļ.		\parallel	+	H	•		+	\parallel	+	+			+	H	+	+	+	•	+	\parallel	+	+	\vdash
	Other	1	#	##	+			+		•		+	•	\ddagger	Ħ	•	Ŧ	H	•	H			7	•	•	•	+	•	+	+		П		H	•	‡	F