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Special Report # 9

Neighborhood Noise and Its Consequences

A survey in collaboration with



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Executive summary

This Special Report discusses findings of an eTownPanel online survey, conducted in collaboration with The Council on the Environment of New York City, about neighborhood noise. This survey replicates a previous survey completed in November, 2004 (see eTownPanel Special Report #3).¹ As before, the survey focused on general perceptions of neighborhood noise, specific sources of noise in communities, complaints about noise, and the behavioral and emotional consequences of neighborhood noise.

Compared to respondents nationally, the survey found that New Yorkers reported being bothered more frequently by noise and that they were more likely to have made a complaint about it. New Yorkers also suffer various behavioral and emotional consequences of noise much more often. When asked what noises they find the most bothersome, however, New York City and national respondents identified the same three amongst their five top choices: neighbor activity or noises, car stereos or boom cars, and highway and street traffic.

Methodological note: The survey was conducted from July 19 through August 11, 2005, and included online responses from 1752 panelists, 134 of whom live in New York City. The panelists were recruited using the Internet and other sources to participate in online research; they are not a random sample, and thus the results are not scientifically projectable to the larger population. However, results are adjusted by gender, race, age, and geography to more closely reflect the general demographic profile of the US and New York City.

Background

On August 17, 2005, Mayor Michael R. Bloomberg noted in a press conference, called to discuss overhauling of noise code, that noise is the number one complaint to the City's 311 citizen service hotline. The Mayor added that between June 7, 2004 and August of this year, there were 410,000 noise complaints to 311 (Bloomberg, August 17, 2005 press release). Earlier, the New York Post (September 16, 2004) reported that noise is the number one complaint to the 311 Hotline and a Council on the Environment of New York City study (1999) found that noise pollution was one of the top three environmental issues of concern to the City's Community Boards.

Recognizing that the existing Noise Code of the City of New York, that was enacted over thirty years ago by the New York City Council, was not effective in lessening the noise in New York City, Mayor Bloomberg asked the Department of Environmental Protection (DEP) to revise the noise code. In June of 2004, DEP presented the City Council with a revised draft. In June of 2004, DEP presented the City Council with a revised draft. After the City Council Committee on Environmental Protection held two public hearings on the revised code in 2005 and met to discuss further changes, the City Council passed the final version on December 21, 2005. The Mayor signed the noise legislation on December 29, 2005.

Now that an updated Noise Code has been passed, the City should be required to assess its effectiveness. One method of assessment could involve examining the number of complaints

¹ Available at www.ETownPanel.com/SpecialReports.htm

received by the City's 311 system, including the types of complaints. 311 should be asked to track how the appropriate city agencies, DEP, police department, etc. handles the complaints assigned to them. An effective Code should result in fewer complaints and more successful amelioration of the complaints. It is also possible that certain sections of the Code will be more effective in resolving complaints than other sections. Failing sections should be reviewed and the City Council should revise them without waiting thirty years to redo the entire code.

Another way to assess the Code could involve asking New York citizens themselves about the city's noise level employing the methodology of the eTownPanel online survey. In December 2004 (Bronzaft & Van Ryzin) released the results of an online survey on the noise problem in New York City and the nation. This was the first of a series of surveys that Bronzaft and Van Ryzin hope to conduct in the next few years. The survey gathered views from 135 New Yorkers and 575 national residents during the month of July 2004. Results were weighted by gender, race and age to better reflect the demographic profile of New Yorkers and citizens nationwide. The survey found that New Yorkers were most often bothered by honking horns, car alarms, and boom cars and stereos. By contrast, residents nationally were most bothered by lawn mowing and barking dogs. New Yorkers reported much higher levels of neighborhood noise and also suffered more behavioral and emotional consequences, such as difficulty sleeping and relaxing and feeling annoyed, angry or upset.

In July and August 2005, the eTown Panel online survey was used for the second time to gather information on perceptions of neighborhood noise, sources of noise, complaints about noise, and the behavioral and emotional consequences of neighborhood noise in New York and the nation. The use of this online panel, because it tracks and records the responses of many of the same individuals over time, offers the potential to serve as a gauge of the effectiveness of New York City's Noise Code in the future. For now it would be worthwhile to compare the results of the second survey, which follow, with the results of the earlier survey.

Method

The survey was conducted from July 19 through August 11, 2005, and included online responses from 1752 panelists, 134 of whom live in New York City. The panelists are part of the eTownPanel project and were recruited using the Internet and other sources to participate in online research, including web directory listings, Google ads, Craigslist postings, and announcements sent via email to membership lists of various nonprofit organizations in New York City that have partnered with eTownPanel over the years. It is important to point out that the panel of respondents is not a random sample, and so the results are not scientifically projectable to the larger population. However, results are weighted by gender, race, age, and geography to more closely reflect the general demographic profile of the US and New York City. Both national and New York City weights were constructed using simple post-stratification methods.²

Table 1 presents the demographic profile of the survey respondents, both weighted and unweighted, and compares this profile to data from the US Census. As the unweighted results in Table 1 show, respondents nationally are disproportionately white, male, and in the 25 to 44 age group. Respondents nationally over-represent the northeast and Midwest and under-represent blacks, Asians, Hispanics, those 18-24 year of age, those 65 and older, and those in the lowest income group. The weighted results, by design, more closely mirror the Census figures nationally.

² The weighting procedure involved two steps. First, weights were constructed to bring the sample into geographic balance based on the population of Census regions. This geographic weight was then applied to the data, and new weights were calculated to align the sample to the Census in terms of gender, race, and age. This weighting procedure was carried out separately for New York City and the nation. Income was not used as a weighting variable because of missing data on the income question.

The unweighted New York City respondents, compared to Census figures for New York City, are again disproportionately white, male and between 45 to 64 years and they under-represent blacks, Asians, Hispanics, those 65 and older, and the lowest income group. The weighted results again bring the profile of New York City respondents into line with Census figures for the city (except for income, which was not a weighting variable). The following results in this report for both New York and the nation are all weighted results.

Findings

As was done in the first report on noise, the findings below are reported separately for the nation as a whole and for New York City. This section begins with general perceptions of neighborhood noise. It then focuses on sources of noise within a neighborhood as well as complaints made about noise. It concludes with an analysis of the behavioral and emotional consequences of neighborhood noise.

Perceptions of neighborhood noise

Figure 1 compares New York City, similar cities, and the nation in terms of an overall index of perceived neighborhood noise. The index ranges from 0-100 and is based on three questions designed to measure overall perceptions of the level of neighborhood noise. The results show that New Yorkers surveyed perceived much more neighborhood noise than respondents nationally.

A majority of both New York City and nationwide respondents (65% for New Yorkers and 60% for nationwide respondents) reported that problems with noise have remained the same since last year (**Figure 2**). Twenty-four per cent of New Yorkers, compared to nineteen per cent of the nationwide respondents, reported noise problems have gotten worse; fifteen per cent of both New York and nationwide respondents found noise this year was better than last year.

Sources of noise

New Yorkers identified neighbors activity or voices as most bothersome, followed by car stereos or boom cars. Police, fire, or ambulance sirens and highway or street traffic noises tied for third with construction or repair work in fifth place (**Figure 3**). For the nationwide respondents, barking dogs or pet noises were the most bothersome, with neighbors activity or voices and car stereos or boom cars tied for second. Highway or street noise was fourth and lawn mowing or other power tools was fifth (**Figure 4**). In the top five list, three of the sources were the same for both groups of respondents: neighbors activity or voices, car stereos or boom cars, and highway or street traffic.

Noise complaints

When New Yorkers are compared with respondents nationwide, they are more likely to issue a complaint to their neighbors and to a government helpline, such as New York's 311 number, or police department (**Figure 5**).

Behavioral and emotional consequences

New York City residents report that they more frequently experience various behavioral and emotional consequences of noise when compared to respondents nationwide. New Yorkers are

more likely to close their windows, have trouble relaxing, lose sleep and have trouble reading (**Figure 6**). Similarly New Yorkers surveyed are more likely to feel annoyed, angry, helpless, upset and tired because of neighborhood noise (**Figure 7**).

Noises most associated with consequences

Correlations were calculated between the various sources of noise and an index of the behavioral and emotional consequences of noise (formed by summing the ratings of behavioral and emotional consequences listed in **Figures 6** and **Figure 7**). The correlation coefficient (Pearson r) measures the statistical association of one variable with another in standardized units. Because being bothered by a noise generally produces more consequences than fewer, the correlations are all positive (with a possible range from 0 to 1). Thus, each correlation measures the extent to which being bothered by a given noise is associated with overall behavioral and emotional consequences.

In New York City, as **Figure 8** demonstrates, the top noises most strongly associated with behavioral and emotional consequences: back-up beeps, honking horns, rowdy passersby, motorcycles, car stereos or boom cars. Nationwide (**Figure 9**) they are: rowdy passersby, neighbors activity or voices, car stereos or boom cars, honking horns, car stereos or boom cars, back-up beeps. There is much similarity between the two groups.

Discussion comparing 2004 and 2005 survey results

We have conducted the neighborhood noise survey for two years, 2004 and 2005, and hope to collect additional data for several more years. For now, we can compare only two years and so we cannot at this time discuss trends. Perceptions of neighborhood noise remained relatively the same for the two years, with New Yorkers perceiving more neighborhood noise than their counterparts nationwide. This year, as last year, the majority of New York and nationwide respondents found noise to be about the same. As we found last year, New Yorkers are more likely to complain about the noise and report that they more frequently experience behavioral and emotional consequences as a result of noise intrusions.

We would like to point out that 21% of the New Yorkers called a government helpline this year, compared to 12% last year. This significant increase might be the result of the introduction of the 311 helpline, rather than an increase in the level of perceived noise because the percentages of perceived noise this year as comparable to those noted last year (**Figure 2**) were similar.

In looking at the correlations indicating the noise most associated with behavioral and emotional consequences, car alarms, which was number one for New Yorkers in 2004, did not make the top five in 2005. It would be worthwhile to learn in the following years whether car alarms have become less intrusive. Back-up beeps on the other hand, appear this year to be the most strongly correlated with emotional and behavioral consequences.

Conclusions and Policy Implications

New Yorkers, more than respondents nationwide, are more likely to lose sleep, have greater difficulty relaxing, are less able to listen to music, television or radio undisturbed in their homes, and find it hard to concentrate as a result of noise. These findings should demonstrate to public officials that New Yorkers cannot find the requisite peace and quiet in their homes that they deserve. New Yorkers may reluctantly deal with the daily onslaught of noise as they go about their business in the streets of the City, and even this din should be lowered, but they deserve quiet in their homes.

The Revised Noise Code is viewed as an improvement over the existing Code, which was forward-thinking when it was passed over thirty years ago, and it is expected to be more effective in dealing

with New York City's growing noise problem. However, passage of the Code alone will not produce the desired impact if it is not supplemented with educational materials to inform people about the hazards of noise, the ways to protect themselves against noise, and the activities individuals should undertake to protect other people's rights to quiet.

Furthermore, it is strongly urged that the City Council pass legislation that will require evaluation of the Revised Noise Code during the years ahead to learn whether or not noise has indeed been lessened in the city. To this end, querying New York citizens, as our surveys have, on their general perceptions of noise in their neighborhoods could serve as a valuable evaluation tool. Fewer noise complaint calls to 311 after the revision of the Noise Code could provide additional information on the success of the revisions. The Noise Code should not be "written in stone" but rather in a way that permits improvements and alterations and if sections of the Code are not able to abate certain noises, as analyses of 311 calls and citizen surveys may demonstrate, such sections should be overhauled sooner rather than later.

It was noted in this survey that New Yorkers were especially bothered by "neighbor noises." Although the Noise Code, as is and in its revised form, covers some neighbor complaints, such as noisy parties, for the most part the Code falls short in dealing with "neighbor noises." Inadequate floor covering, slamming of doors, and young children running around excessively are noise complaints that are best handled by clauses in apartment leases. In fact, callers to 311 are told to speak to their landlords or managing agents about such complaints. However, tenants and shareholders in cooperatives and condominiums often find landlords, managing agents, and Boards of Directors reluctant to cope with "neighbor noises." The City Council should consider legislation that would call for the enforcement of apartment leases that guarantee residents the "quiet enjoyment of their homes."

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About eTownPanel. eTownPanel is a university-based, nonprofit project that aims to expand the potential of the Internet as a tool for measuring the quality of life in communities across the US and for providing citizen-driven feedback on the performance of local governments. eTownPanel also serves as a cost-effective research tool for local nonprofit organizations and government agencies that seek to understand what citizens think about important local issues. The project currently focuses on New York City but will soon include additional cities and towns from across the US.

For more information visit www.ETownPanel.com or email info@ETownPanel.com

TABLE 1. Demographic profile of survey respondents (percents)

	The Nation (n=1436)			New York City (n=134)		
	Census	Weighted	Unweighted	Census	Weighted	Unweighted
Northeast	19.0	20.0	26.4	100.0	100.0	100.0
South	35.6	35.9	32.5	0.0	0.0	0.0
Midwest	22.9	20.5	23.0	0.0	0.0	0.0
West	21.9	23.6	18.1	0.0	0.0	0.0
White, non-Hispanic	69.1	71.2	86.2	35.0	48.7	70.9
Black or African American	12.3	12.0	5.4	24.5	22.2	9.7
Asian or Pacific Islander	12.5	9.2	3.4	27.0	17.6	6.7
Hispanic or Latino	3.7	4.7	3.2	9.7	8.9	6.7
Other	2.4	2.8	1.8	3.8	2.6	6.0
Male	51.0	49.7	74.3	51.0	44.8	61.9
Female	49.0	50.3	25.7	49.0	55.2	38.1
18 to 24 years	13.4	14.7	6.7	13.1	14.3	10.5
25 to 44 years	40.7	39.3	53.3	43.5	45.3	46.6
45 to 64 years	29.6	31.6	36.3	27.9	22.6	40.6
65 years and over	16.7	14.4	3.7	15.5	17.8	2.3
Less than \$25,000	28.7	18.6	16.6	34.9	21.3	14.9
\$25,000-\$49,999	29.3	38.2	37.3	25.7	37.2	31.4
\$50,000-\$74,9999	19.5	23.2	24.9	16.7	21.9	21.5
\$75,000 or more	22.5	20.1	21.2	22.7	19.6	32.2

Note: Census figures from American FactFinder, 2000 Census Quick Tables, available at www.census.gov.
 Weighted results reflect post-stratification adjustments for region, race, age, and gender.

FIGURE 1. Overall index of perceived neighborhood noise (0-100 scale)

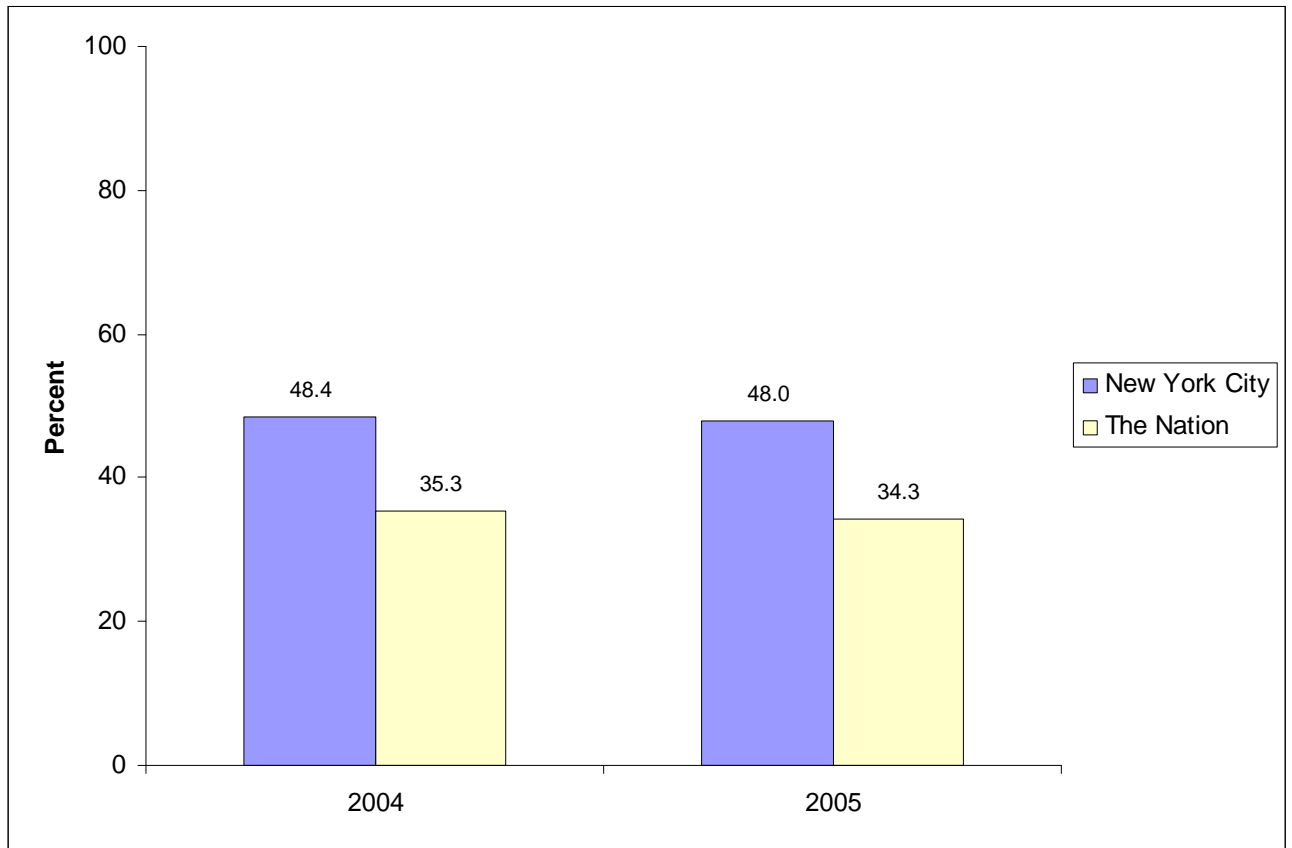


FIGURE 2. Compared to this time last year, would you say the problem of noise in your neighborhood has gotten . . .

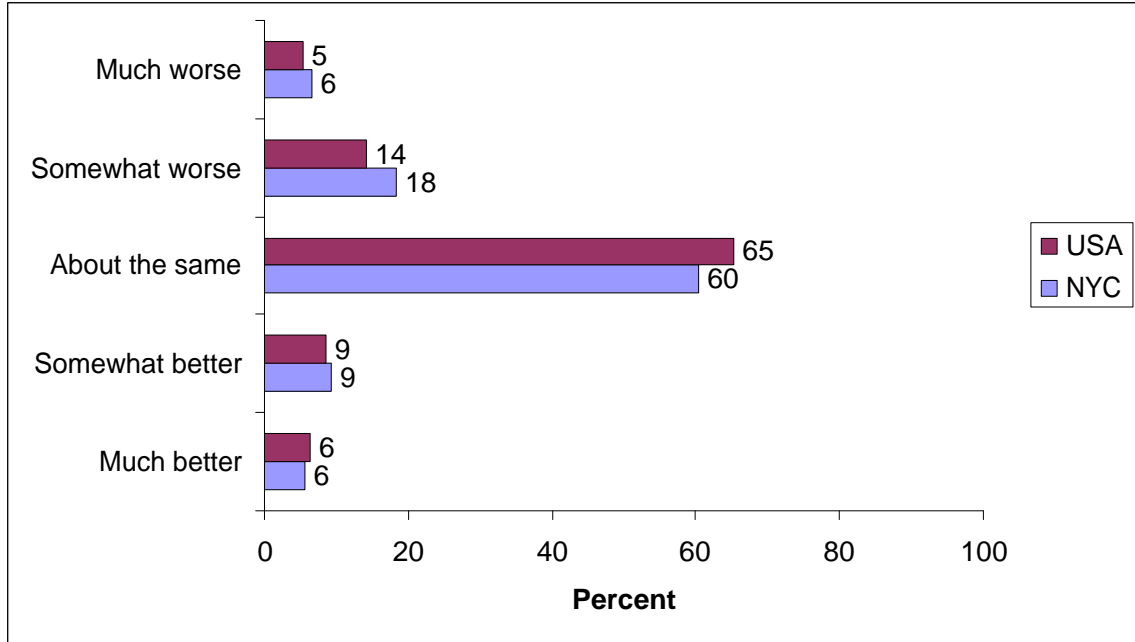


FIGURE 3. How often are you bothered by the following sources of noise in your neighborhood? (The Nation)

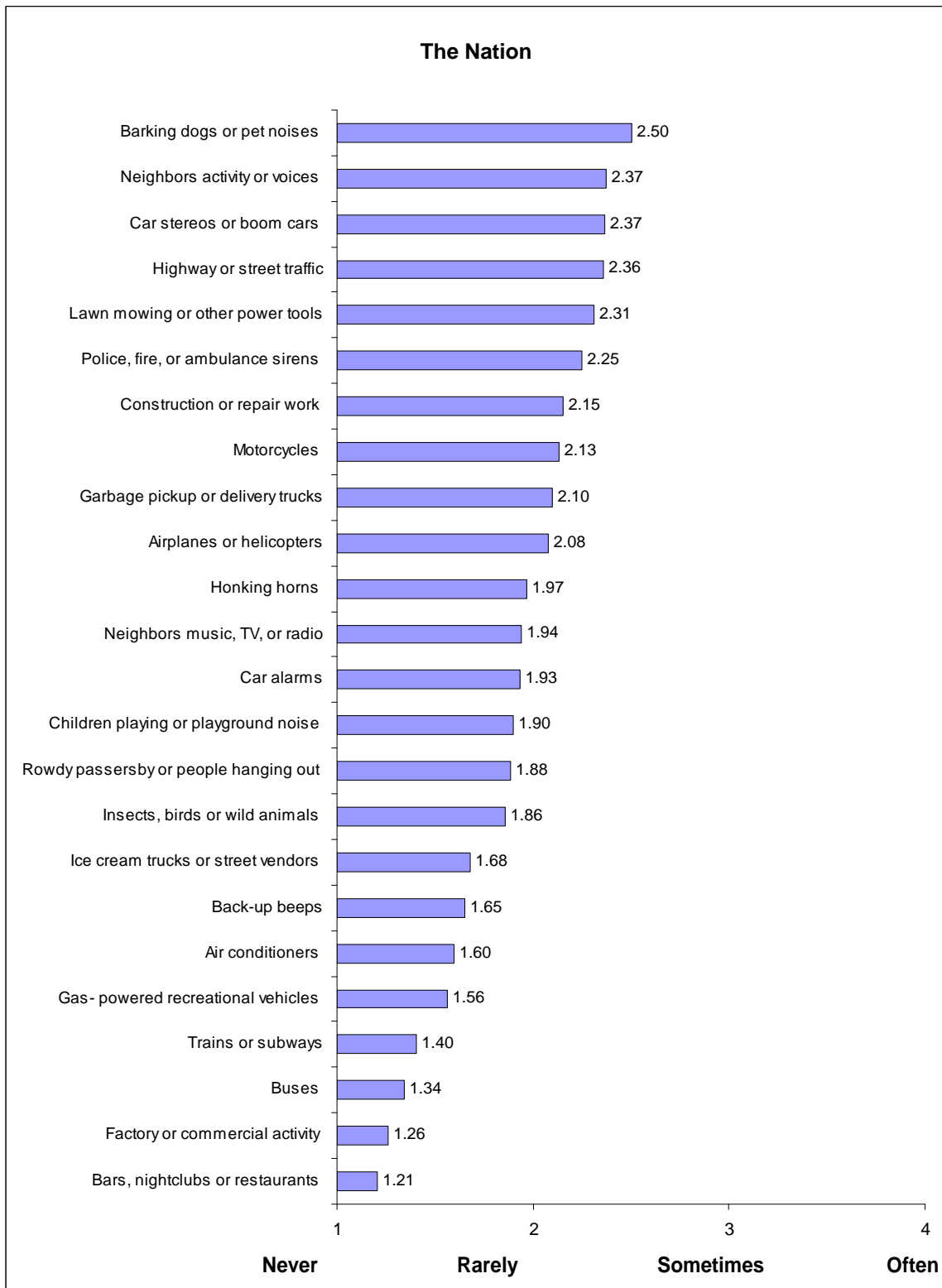


FIGURE 4. How often are you bothered by the following sources of noise in your neighborhood? (New York City)

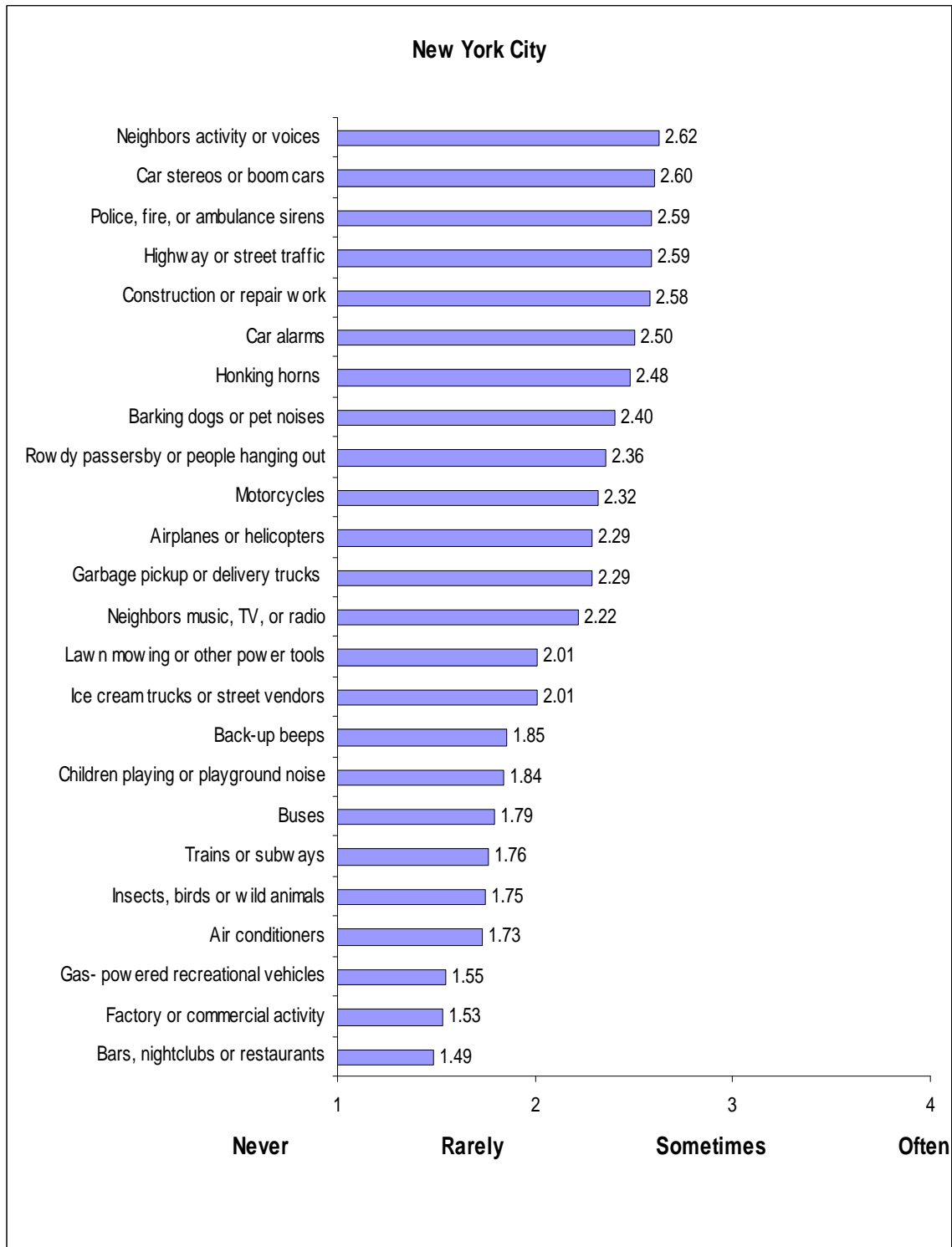


FIGURE 5. In the last year, did you make a noise complaint to any of the following?

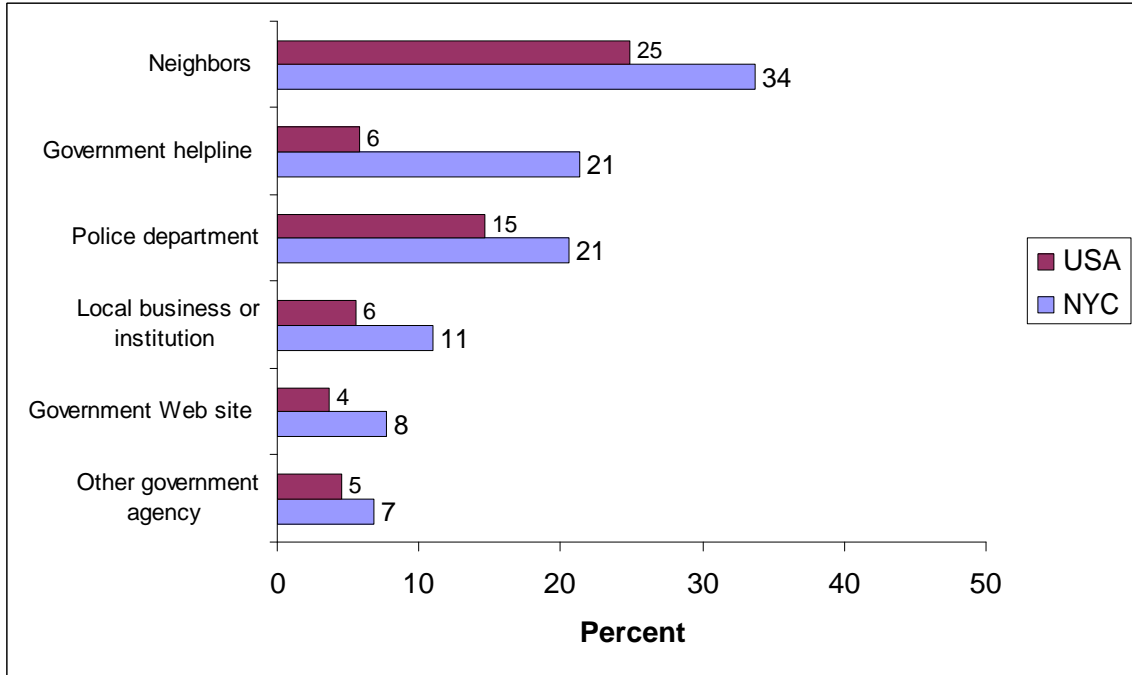


FIGURE 6. Behavioral consequences: “Because of noise, how often while at home do you . . .”

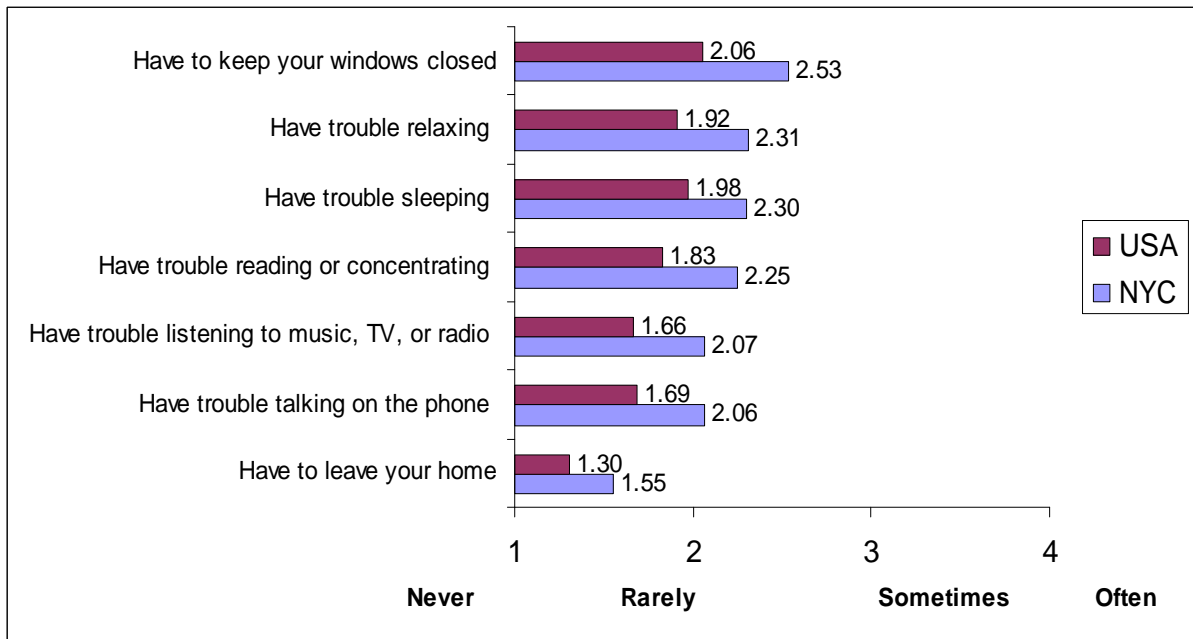


FIGURE 7. Emotional consequences: “Because of noise, how often do you feel . . .”

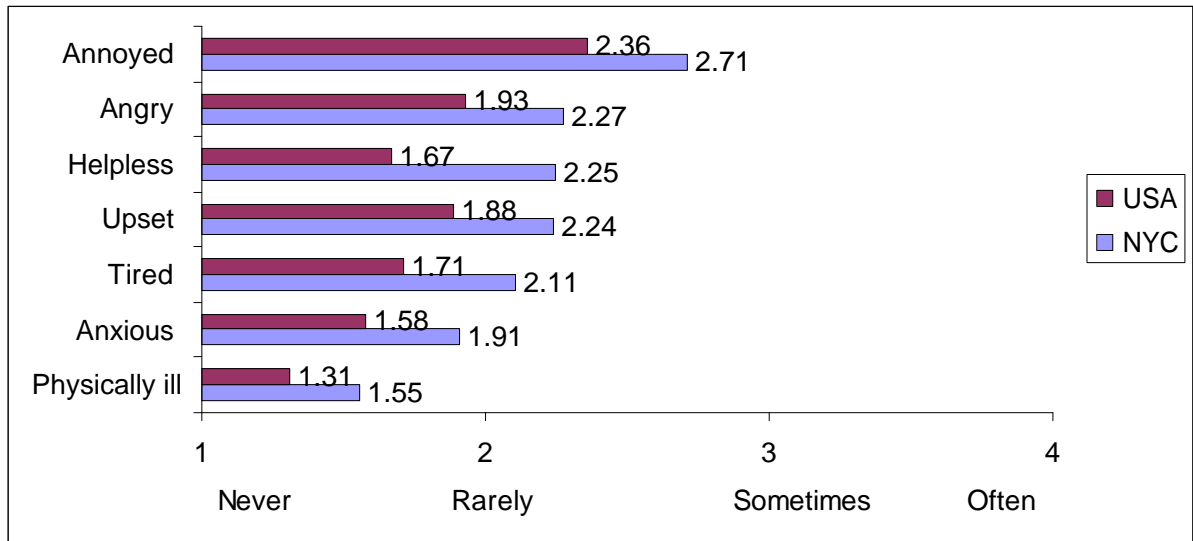


FIGURE 8. Correlation of noises with index of behavioral and emotional consequences (THE NATION)

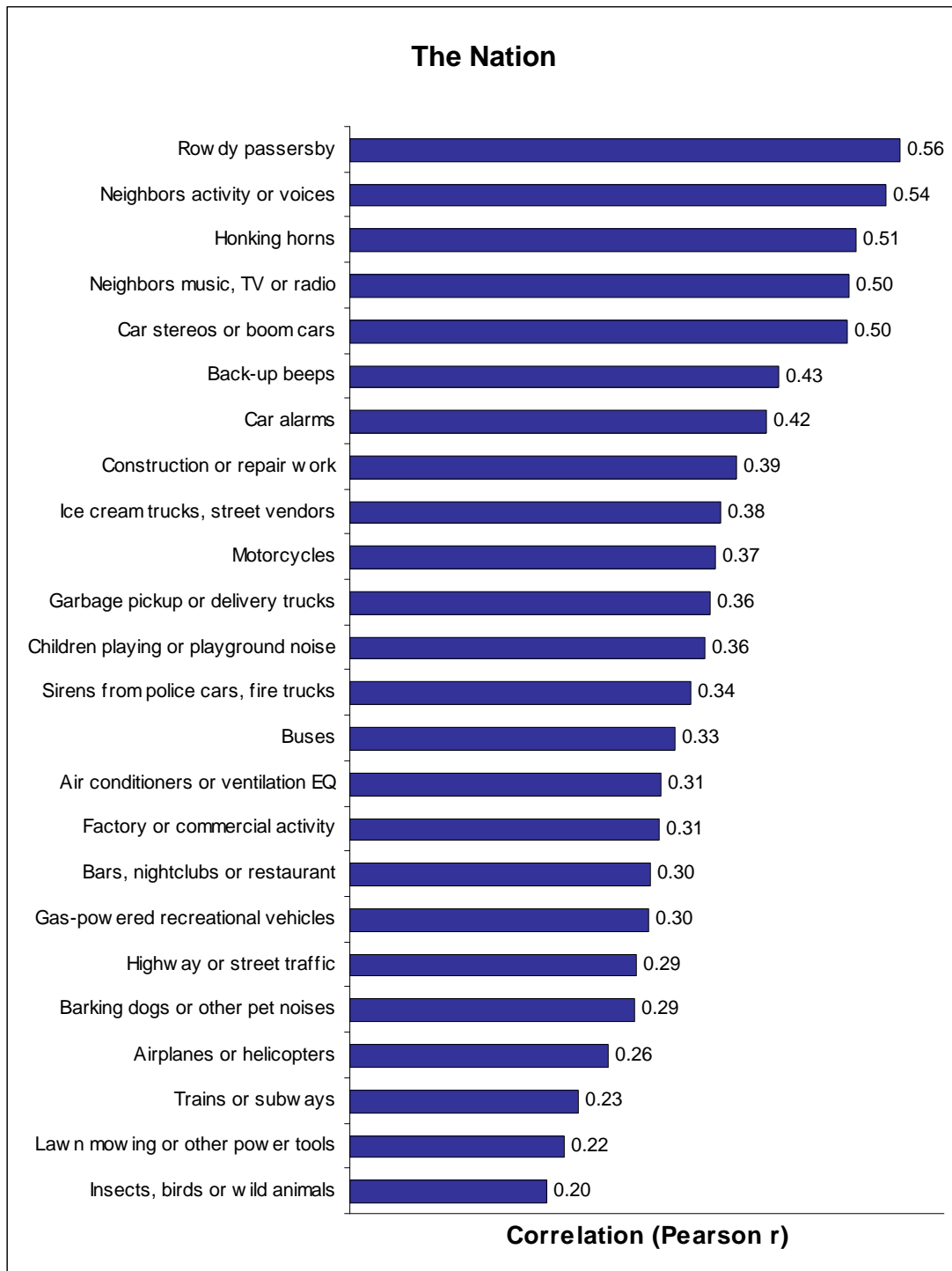


FIGURE 9. Correlation of noises with index of behavioral and emotional consequences (New York City)

