NFIB Research Foundation

National Small Business Poll

Volume 6, Issue 3
2006

NFIB National

Small Business Poll

Energy Consumption

NFIB National Small Business Poll

The *National Small Business Poll* is a series of regularly published survey reports based on data collected from national samples of small-business employers. Eight reports are produced annually with the initial volume published in 2001. The *Poll* is designed to address small-business-oriented topics about which little is known but interest is high. Each survey report treats different subject matter.

The survey reports in this series generally contain three sections. The first section is a brief Executive Summary outlining a small number of themes or salient points from the survey. The second is a longer, generally descriptive, exposition of results. This section is not intended to be a thorough analysis of the data collected nor to explore a group of formal hypotheses. Rather, it is intended to textually describe that which appears subsequently in tabular form. The third section consists of a single series of tables. The tables display each question posed in the survey broken-out by employee size of firm.

Current individual reports are publicly accessible on the NFIB Web site **(www.nfib.com/research)** without charge. Published (printed) reports can be obtained at $15 per copy or by subscription ($100 annually) by writing the *National Small Business Poll*, NFIB Research Foundation, 1201 "F" Street, NW, Suite 200, Washington, DC 20004. The micro-data and supporting documentation are also available for those wishing to conduct further analysis. Academic researchers using these data for public informational purposes, e.g., published articles or public presentations, and NFIB members can obtain them for $20 per set. The charge for others is $1,000 per set. It must be emphasized that these data sets do NOT contain information that reveals the identity of any respondent. Custom cross-tabulations will be conducted at cost only for NFIB members on a time available basis. Individuals wishing to obtain a data set(s) should write the *Poll* at the above address identifying the prospective use of the set and the specific set desired.

NFIB National
Small Business
Poll

Energy Consumption

Volume 6, Issue 3
2006
ISSN - 1534-8326

William J. Dennis, Jr.
NFIB Research Foundation
Series Editor

NFIB
The Voice of Small Business®

1201 "F" Street, NW
Suite 200
Washington, DC 20004
nfib.com

National Small Business Poll

Energy Consumption

Table of Contents

Executive Summary

- The energy costs of individual small businesses vary greatly. Ten (10) percent of small employers claim that energy costs are the largest single cost they have while 8 percent claim that they have no direct energy expenses.

- Small-business energy costs (closely related to consumption) are primarily linked to vehicles (38%), heating and cooling of occupied space (33%), operating equipment or processes (21%) and lighting (6%).

- Of the 84 percent who use vehicles in their business operations, 49 percent did not change much of anything in the last year to counteract the higher price of gasoline and/or diesel. The most frequent step of those who did was: 18 percent rescheduled or changed routing; 16 percent used fewer vehicles or used them less frequently; and 11 percent purchased or leased more energy efficient vehicles.

- Fifty-seven (57) percent own the building in which their business is primarily located. Seventy-one (71) percent of those who lease directly pay the heating and cooling bill, meaning that between 85 and 90 percent have an immediate incentive to reduce energy costs in the space they occupy.

- One in five (20%) of those who directly pay heating and/or cooling bills remodeled their building or substantial parts of it in the last three years in a way that achieves notable energy cost savings, and a non-mutually 21 percent plan to do so in the coming three years.

- Eleven (11) percent of small businesses occupy space in addition to that in their primary location. Just over half (56%) occupy one facility; the remainder occupy more. About half own those locations. Twenty-four (24) percent lease them resulting in about 62 percent with a direct incentive to conserve in these structures.

- Flourescent lighting is now the standard in small businesses. Seventy-three (73) percent use it; 65 percent in lamps and 8 percent in compact bulbs. Just 12 percent still employ incandescent lighting and 6 percent halogen.

- Two-thirds (67%) of small businesses have outdoor lighting. The primary purpose of outdoor lighting in over 80 percent of cases is safety and/or security. Most of the remainder use it primarily for advertising and/or awareness.

- Twenty-six (26) percent report that they use equipment and/or processes that require large amounts of energy like ovens, refrigeration units, or drying machines.

- Within the last three years, 43 percent have taken steps to reduce the amount of energy their businesses consume. The most prominent steps were operational such as changing to more efficient lighting, changing the thermostat, rearranging or rescheduling processes, and switching-off lights or equipment when not in use. The most frequent investments were new and more energy-efficient equipment, adding insulation, new windows and/or doors, and installed/improved heat recycling systems. Just 27 percent of those who had taken at least one step could name a second step they had taken.

Energy Consumption

The year-long rise in the price of energy appears to have peaked, at least for the time being. The conventional short-term prognosis is for lower prices. While substantial price swings in energy markets, such as those now experienced, often conceal long-term trends, energy costs are headed higher over time on, both on a relative and absolute basis. Controlling costs is a key factor in most successful small-business operations. That means small-business owners must address their energy consumption and find means to reduce energy use on a per unit of output basis. This issue of *The National Small Business Poll*, therefore, addresses small business Energy Consumption.

Energy is a major cost in a substantial share of small businesses. One in 10 (10%) small-business owners claim that energy is their single greatest cost, greater than wages and salaries, materials and supplies, etc. (Q#1). Another 25 percent claim energy is one of the two or three largest business costs they have. While current energy prices may focus more attention on energy costs than normal thereby leading to exaggeration of their importance, it is obvious that energy is a significant cost of doing business in many small enterprises. Exceptions are the 8 percent who pay no energy costs directly and the 23 percent who say that energy costs are not in the top five of all business expenses. The owners of these firms have modest incentive to lower their energy consumption.

Energy costs in small businesses are typically linked to operating vehicles or heating and cooling. Thirty eight (38) percent report their primary energy costs are attributable to vehicles while another third (33%) attribute theirs to heating and cooling (Q#2). Thus, 70 percent associate their greatest energy costs with transportation and buildings. Twenty-one (21) percent report theirs are tied to operating equipment and/or processes. In other words, just one in five cite production as the source of their primary energy costs. Five percent consider lighting theirs.

Vehicles

About 84 percent of all small businesses have at least one vehicle (Q#3). But the number of vehicles in a business is tied to firm size. For example, the median number of vehicles in businesses employing less than 10 people is about two and one-half while the median number of those employing more than 20 is almost five. In fact, over one in four (28%) of the largest have 11 or more vehicles in their fleets.

The current price of gasoline and diesel is having an effect on small-business owner decision-making. But owners cannot simply discard the investment they have in their current fleets regardless of their fuel efficiency. The situation is different when it comes time to replace them. Energy efficiency will be a very important influence in the decisions of 46 percent of all small-business owners when they replace their current vehicles (Q#3b). That totals to 88 percent who claim that energy efficiency will influence their decision in purchasing/leasing a replacement vehicle.

Small-business owners purchase/lease vehicles to perform a function(s). That means it is important that more energy-efficient vehicles are able to perform substantially the same tasks as the current vehicles. Are such vehicles available? The answer to that question is important because it encourages owners to search (or not search)

for them at the appropriate time for replacement, and even to accelerate the process.

Small-business owners have mixed views on the question. Thirty-two (32) percent strongly believe that vehicles exist on the market today that can perform substantially the same business tasks as their current vehicles, yet consume notably less energy (Q#3a). Meanwhile, 37 percent strongly disagree and believe that they do not exist. Even those who have less strong beliefs on the question are split. Thus, while small employers would like to substitute more energy-efficient vehicles when the old ones wear out, they are not sure such vehicles can be found. The survey did not explore the reasons for owner views on this question, or the degree to which they have searched the market for energy- and economically-efficient alternatives.

Reducing vehicle energy costs is not confined to purchasing/leasing new vehicles. Operational changes can be instituted that may be even more effective. Give the recent run-up in energy prices, one assumes that many owners have changed operations to reduce their costs. But that assumption would not be totally accurate. Forty-nine (49) percent of small-business owners with business vehicles have changed little or nothing in the last year to compensate for the higher gasoline and diesel prices (Q#3c). Still, 18 percent rescheduled or changed routing. Another 16 percent used fewer vehicles or used them less frequently. And, 11 percent purchased more energy efficient vehicles. Thus, roughly equivalent numbers took steps to cut consumption of vehicle fuel (on a per unit of output basis) in the last year while roughly half did not.

Buildings

About 31 percent of all small employers have businesses housed in a residence or an associated building such as a garage or barn (Q#4). (This number is about 5 percentage points higher than when referring to a home rather than a residence.) Still, a residence houses a significant number of small employers, particularly those employing fewer than 10 people.

Thirty-one (31) percent of all employing small businesses are also housed in low-rise buildings (excluding residences), those typically three to four stories high. Most (80%) of those low-rise buildings are free standing or detached while the remainder are attached to another (Q#4a). The next most common type facility used by small business is an industrial building. Eighteen (18) percent operate out of that type of a structure. A warehouse/hangar type facility house another 9 percent followed by 6 percent in a mall. While the number of cases is too few to report figures, it appears the number of small businesses in strip malls significantly exceeds the number in enclosed malls. Finally, few small businesses inhabit high rises. High rises apparently are the domain of larger firms.

Most small businesses are located in commercial areas. Forty-six (46) percent of small employers report their businesses in them (Q#4b). The numbers of businesses are far fewer in other settings. However, the large number of home-based businesses suggests a considerable presence in residential areas. Twenty-six (26) percent are located among residences, suggesting a few business owners still live above the store. Isolated/rural is the third most frequent type of area in which businesses are located. Owners report 15 percent of the time that their firms can be found in such places. Relatively few say that their enterprises operate in an industrial area (6%) or an industrial park (6%).

The typical small business (44%) occupies 1,000 to 4,999 square feet of space (Q#4c). That approximates the floor space of residences (small to large). While 21 percent occupy less than 1,000 square feet, another 15 percent occupy between 5,000 and 9,999 square feet and 11 percent between 10,000 and 24,999. Three percent occupy more. For comparative purposes, the size of a football field is about 54,000 square feet.

About half (52%) occupy their building exclusively (Q#4d). The remainder share the space with other occupants.

The age of buildings occupied by small businesses varies enormously. In fact, the distribution of small businesses by the age of the building in which they occupy space is virtually constant by decade. Thirteen (13) percent occupy construction built in this century, 14 percent in the 1990s, 16 percent in the 1980s, 16 percent in the 1970s, and 12 percent in the 1960s (Q#4e).

The percentage appears to start declining with structures built in the 1960s, but the survey truncates the data in the 1940s and so reveals little about buildings prior to that time. The relevance of these data to energy consumption, of course, is that older construction is more likely to consume relatively greater amounts of energy and therefore has greater potential for savings by retrofitting, or even demolition and the construction of new space.

a. Paying Energy Costs for Space

Economic incentives usually stimulate action. Therefore, small businessmen and women who rent rather than own their space are less likely to directly pay energy costs. That means they are also less likely to invest in energy conservation measures. Fifty-seven (57) percent of small employers own the building in which their business currently resides (Q#4f). Forty-two (42) percent do not. Of those who lease or rent, 71 percent pay their heating and/or cooling bill directly (Q#4g). Twenty-eight (28) percent have their heating and/or cooling costs rolled into the rent. As a result, 85 to 90 percent of all small-business owners have a direct incentive to reduce their heating and/or cooling consumption.

Of those who directly pay their heating and/or cooling bills, 20 percent say that they have remodeled their building or large portions of it in the last three years in a way that cuts their heating and/or cooling costs (Q#4g2). A non-mutually exclusive 21 percent plan to make changes in their building over the next two to three years that accomplish the same objective (Q#4g3). The 20 percent who have made changes in the last three years and the 21 percent who plan to do so in the near future are not mutually exclusive. There is overlap - about 5 percentage points. Thus about 35 percent have changed their structure thereby cutting energy costs (energy consumption) or plan to do so in the next two to three years.

A computer-controlled environment is one significant way to reduce energy consumption in buildings. Interior climate changes are, therefore, conducted automatically and do not rely on people remembering to turn down (up) the thermostat when they go home, among other things. Twenty-one (21) percent of small-business owners claim to have such a system now in place (Q#4g4).

Again, it is assumed that those who own the building pay the light bill directly. Seventy-one (71) percent of those who lease also do so (Q#4h). The percentage of renters who pay the lighting bill directly is therefore virtually the same number of renters who directly pay the heating and/or cooling bill. That means for all intents and purposes, the small-business owners directly paying their light bill are the same people as those directly paying their heating/cooling bill.

Almost two-thirds (65%) of all businesses now light their premises with energy-conserving flourescent lights (Q#4h2). Another 8 percent use the corollary compact flourescent bulbs. Twelve (12) percent still use the traditional incandescent light while 8 percent use halogen lighting.

About two-thirds of all small businesses use outdoor lighting (Q#4h2). The most common purpose for outdoor lighting is security and/or safety. Over 80 percent of those with outdoor lighting or 55 percent of the total population cite safety and/or security as the reason for their use of outdoor lighting. Another 12 percent with outdoor lighting use it primarily for advertising and/or awareness. Few (5%) use it to conduct business after dark, e.g., a minor league baseball stadium.

Eleven (11) percent have a computer-controlled lighting system that adjusts lighting levels to outdoor brightness and similar factors (Q#4h3). About 10 percent who have either computer-controlled heating and/or cooling or computer-controlled lighting have both.

b. Auxiliary Space

A limited number of small businesses occupy space other than at their primary place of business. A limited number also lease some of their business space to other businesses. However, the issue for present purposes is who directly pays for the energy consumed in that space. In other words, who has the incentive to reduce energy consumption.

Eleven (11) percent of small businesses occupy space other than at their primary location (Q#8). That number rises to 29 percent among those that employ 20 or more people. (Temporary facilities, such as might be found at a construction site, do

not apply.) A majority (56%) of those occupy just one other location (Q#8a). But a substantial percentage (43%) of those owning the largest indicate that they occupy four or more other structures.

About half (51%) who occupy more than one building own it (those with more than two report on their second most important location) (Q#8b). The other half (47%) lease it. Of those leasing, 24 percent report that they pay their heating and/or cooling bills on those facilities directly (Q#8b1), while 29 percent report that they pay the lighting bill (Q#8b2). That means the occupant of secondary locations directly pays associated energy costs in 85 to 90 percent of cases. The situation for tertiary and additional locations is not known, though it is reasonable to assume that they are similar to secondary locations.

Ten (10) percent of small businesses lease space to other businesses or people (Q#9). In just over half (53%) of cases, the tenant directly pays the energy bills (Q#9a). In just under half (45%) of cases, the small-business owner/landlord rolls the energy cost into the rent.

Production Processes

The operation of certain business equipment and processes is highly energy intensive. The businesses that employ them, therefore count energy among the key inputs required to function. In these instances, energy costs typically constitute a substantial share of the business's cost structure.

Twenty-six (26) percent of small-business owners report that they use equipment and/or processes requiring large amounts of energy (Q#4i). However, when defining large amount as a cost greater than the cost of heating/cooling and lighting combined, just 57 percent respond in the affirmative (Q#4i1). That translates into about 15 percent of the small-business population who use considerable amounts of energy to produce what they sell.

Given the importance of energy to these businesses and their output and sales, it is often difficult for them to control energy costs. Investment in new, energy efficient machinery is one way they can. However, investment often entails considerable cost that many small-business owners cannot afford. Assuming resources are available, one potentially productive investment is a system that can recycle the heat or cold generated and put it to other uses. Twelve (12) percent of those who say they are heavy users have such recycling equipment in use (Q#4i2).

One of the means that heavy users of electricity can often employ to reduce costs, though not necessarily consumption, is to contract with the local utility to trade lower unit costs for the suspension of electric power during certain peak-use periods. For the arrangement to be useful to the business, the firm must be a heavy consumer of energy and must be able to truncate work on days (or part of days) when total electricity consumption is very high. Comparatively few small businesses fit that profile. As a result, just 5 percent of small businesses have such a contract (Q#5).

Energy Conservation

Forty-three (43) percent of small, employing businesses have implemented energy cost reduction steps in the last three years (Q#6). Curiously, owners of the smallest were almost as likely as those of the largest to do so.

The steps that small-business owners took over the last three years were varied, but not frequent. Seventy-three (73) percent of the 43 percent who report that they have taken at least one step, could identify just a single action (Q#6a). That means only about 12 percent of all small employers took more than one action to reduce energy costs in the last three years.

The most frequent steps taken to reduce energy consumption include: changing to more efficient lighting (21%), changing the thermostat (18%), purchasing new, more energy efficient equipment (15%), adding insulation (15%), and switching off the lights or equipment when not in use (10%). These steps are notable in that four of the six are process in nature. They require no investment, other than training employees to remember to take a few simple actions.

The owner charges himself or herself in the overwhelming majority of cases with the firm's use of energy. The owner was responsible for selecting and implementing the above noted actions in 86 percent of cases (Q#6b). Employees (9%) and consultants (4%) did the job much less frequently. Little by way of actions to reduce

energy consumption in small businesses, therefore, occurs without the immediate attention of the owner(s).

The price of energy has risen notably over the last year. And, while the price may fluctuate over weeks and months, there is little doubt that the real cost will rise over time. The only question is – how much over what period of time?

As prices rise, additional energy conservation steps become economically feasible. The survey postulated an additional 25 percent increase in energy costs, a substantial hike, and asked respondents if they knew additional steps to cut energy costs in that eventuality. Forty-seven (47) percent answered in the affirmative (Q#7). These owners believe that should costs rise 25 percent there are steps they currently are aware of that can be taken to reduce energy consumption. But we do not know how many would be aware of such steps if the energy cost increases were 10 percent, for example.

Final Comments

A large portion of small employers, though certainly not all, have strong incentives to reduce energy consumption (on a per unit of output basis). Energy costs are following a long-term trajectory upward; they already put a significant dent in many small-business budgets; and small-business owners typically pay their energy costs directly, meaning any consumption reduction actions they take, or do not take, fall directly to the bottom line. Given these conditions, the issues in reducing energy consumption become the attention owners devote to energy costs, their knowledge of potential economically-efficient reduction measures, and the alternative investments, energy and non, owners can make with the resources available.

There is no single, best-fit small-business plan or solution to reduce its energy consumption. Even if costs warrant action, some enterprises consume primarily to heat, cool, and light the building spaces they occupy; others consume most of their energy on the nation's roads and highways; and, still others consume most of theirs in the production process. This mixture implies the likelihood of many different effective tacks. The data also show that most of the actions taken recently have been process-oriented, rather than investment-oriented. However, there has been replacement (updating) of machinery and vehicles that have made them more energy efficient. Many have also remodeled or relocated in newer, more energy efficient space. But, the survey does not contain data that provide insight into possible additional energy consumption reduction investments that would yield favorable rates-of-return.

Energy Consumption

(Please review notes at the table's end.)

	Employee Size of Firm			
	1-9 emp	10-19 emp	20-249 emp	All Firms
1. Is the cost of energy used in your business, such as electricity, natural gas, gasoline, and fuel oil:?				
1. The single largest business cost you have	10.2%	7.1%	11.7%	10.0%
2. One of the two or three largest business costs you have	25.3	27.1	15.6	24.5
3. One of the five largest business costs you have	33.1	40.0	39.0	34.4
4. Not in the top five business costs you have	25.1	24.7	28.6	22.5
5. Your business has no direct energy costs	9.2	1.2	3.9	7.8
6. (DK/Refuse)	0.8	—	1.3	0.7
Total	100.0%	100.0%	100.0%	100.0%
N	350	200	201	751
2. Are your business energy costs linked primarily to:? (If direct energy costs in Q#1.)				
1. Operating vehicles	37.7%	38.1%	37.8%	37.7%
2. Heating and/or cooling	32.9	34.5	35.1	33.3
3. Lighting	5.4	2.4	5.4	5.1
4. Operating equipment and/ or processes	21.0	23.8	20.3	21.3
5. (All of the above)	2.3	1.2	1.4	2.1
6. (DK/Refuse)	0.7	—	—	0.5
Total	100.0%	100.0%	100.0%	100.0%
N	320	198	194	712
3. About how many vehicles do you use in your business?				
1. None	15.0%	24.7%	18.3%	16.3%
2. One	27.2	11.1	9.9	24.0
3. Two	23.4	12.3	8.5	20.9
4. 3 to 5	26.3	24.7	18.3	25.4
5. 6 to 10	5.7	17.3	16.9	7.9
6. 11 or more	2.4	9.9	28.1	5.5
7. (DK/Refuse)	—	—	—	—
Total	100.0%	100.0%	100.0%	100.0%
N	350	200	201	751

	Employee Size of Firm			
	1-9 emp	10-19 emp	20-249 emp	All Firms

3a. Are there vehicles on the market today that can perform substantially the same business tasks that you require of yours, yet use notably less energy? Do you believe that strongly or not so strongly? (If have business vehicles in Q#3.)

1. Yes, strongly	33.2%	28.6%	23.8%	31.9%
2. Yes, not so strongly	11.6	12.7	9.5	11.5
3. No, not so strongly	14.4	19.0	17.5	15.1
4. No, strongly	36.0	34.9	44.4	36.7
5. (DK/Refuse)	4.9	4.8	4.8	4.8
Total	100.0%	100.0%	100.0%	100.0%
N	294	149	166	609

3b. Considering all factors that influence your decision when you replace your business vehicles, will the energy efficiency of the vehicle you buy be:?

1. Very important	47.8%	36.5%	45.3%	46.5%
2. Somewhat important	42.0	46.0	31.3	41.3
3. Not too important	5.0	9.5	14.1	6.3
4. Not at all important	5.0	7.9	6.3	5.4
5. (DK/Refuse)	0.2	—	3.2	0.5
Total	100.0%	100.0%	100.0%	100.0%
N	294	149	166	609

3c. Which best describes how you have changed operation of your business vehicles in the last year to compensate for higher gas and diesel prices?

1. Didn't change much of anything	48.2%	53.2%	50.8%	48.9%
2. Used fewer vehicles or vehicles less frequently	17.4	12.9	11.1	16.4
3. Rescheduled or changed routing	17.0	22.6	17.5	17.6
4. More frequent vehicle maintenance	2.1	—	1.6	1.8
5. Purchased/leased more energy-efficient vehicles	11.2	4.8	11.1	10.6
6. Negotiated a bulk fuel deal with a supplier	0.4	3.2	3.2	0.9
7. (Raised prices)	2.6	3.2	3.2	2.7
8. (Other)	0.4	—	1.6	0.5
9. (DK/Refuse)	0.8	—	—	0.6
Total	100.0%	100.0%	100.0%	100.0%
N	294	149	166	609

	Employee Size of Firm			
	1-9 emp	10-19 emp	20-249 emp	All Firms

4. In what type of building or facility is the primary location of your business housed? Is it housed in a:?

1. Residence or associated building, such as a garage or a barn	37.3%	13.1%	3.8%	31.4%
2. Low-rise building (3 or 4 stories)	28.6	39.3	42.9	31.1
3. Mall	6.3	6.0	3.8	6.1
4. High rise building	2.4	2.4	5.1	2.7
5. Warehouse/hanger-type facility	8.6	9.5	10.3	8.8
6. Industrial building	15.9	29.8	32.1	18.9
7. (DK/Refuse)	0.9	—	2.6	1.1
Total	100.0%	100.0%	100.0%	100.0%
N	350	200	201	751

4a. Is the building free standing or attached? (If NOT a mall or high-rise building in Q#4.)

1. Free standing	78.5%	80.5%	91.2%	79.9%
2. Attached	21.1	19.5	8.8	19.8
3. (DK/Refuse)	0.4	—	—	0.3
Total	100.0%	100.0%	100.0%	100.0%
N	314	182	179	675

4b. Which best describes the immediate area where your business is located?

1. Industrial park	5.1%	6.2%	11.3%	5.8%
2. Industrial	4.2	11.1	14.1	5.8
3. Commercial	45.2	53.1	45.1	46.0
4. Residential	28.7	17.3	15.5	26.3
5. Isolated/Rural	16.1	11.1	14.1	15.4
6. (DK/Refuse)	0.6	1.2	—	0.7
Total	100.0%	100.0%	100.0%	100.0%
N	333	193	190	716

	Employee Size of Firm			
	1-9 emp	10-19 emp	20-249 emp	All Firms
4c. Approximately, how many square feet does your business occupy in this building?				
1. < 1,000	24.8%	6.0%	2.6%	20.6%
2. 1,000 to 4,999	45.6	39.3	34.2	43.8
3. 5,000 to 9,999	13.5	20.2	17.1	14.6
4. 10,000 to 24,999	9.0	22.6	18.4	11.4
5. 25,000 to 49,999	1.7	4.8	11.8	3.0
6. 50,000 or more	1.6	3.6	11.8	2.8
7. (DK/Refuse)	3.8	3.6	3.9	3.3
Total	100.0%	100.0%	100.0%	100.0%
N	350	200	201	751
4d. Does your business occupy the entire building?				
1. Yes	47.6%	63.5%	72.4%	51.7%
2. No	52.4	36.5	27.6	48.3
3. (DK/Refuse)	—	—	—	—
Total	100.0%	100.0%	100.0%	100.0%
N	350	200	201	751
4e. In approximately what decade was the building constructed?				
1. 00s	14.2%	7.1%	7.8%	12.8%
2. 90s	13.2	14.3	19.5	13.9
3. 80s	14.8	16.7	19.5	15.5
4. 70s	15.4	17.9	19.5	16.1
5. 60s	11.8	10.7	14.3	11.9
6. 50s	10.4	9.5	3.9	9.6
7. 40s or earlier	16.7	19.0	11.7	16.5
8. (DK/Refuse)	3.5	4.8	3.9	3.7
Total	100.0%	100.0%	100.0%	100.0%
N	350	200	201	751
4f. Do you own the building in which your business is primarily located or do you lease the space?				
1. Own	57.1%	57.6%	59.7%	57.4%
2. Lease/Rent	42.4	41.2	39.0	41.9
3. (DK/Refuse)	0.5	1.2	1.3	0.7
Total	100.0%	100.0%	100.0%	100.0%
N	350	200	201	751

	Employee Size of Firm			
	1-9 emp	10-19 emp	20-249 emp	All Firms

4g. Do you pay the heating and/or cooling bill for your business directly or is that cost rolled into the rent or lease payment? (If "Lease/Rent" in Q#4f.)

1. Yes (pay bill directly)	69.1%	83.3%	76.7%	71.3%
2. No (rolled into rent)	29.7	17.7	23.3	27.8
3. (Other)	1.1	—	—	0.9
4. (DK/Refuse)	—	—	—	—
Total	100.0%	100.0%	100.0%	100.0%
N	150	84	79	313

4g1. Have you remodeled this building or large portions of it in the last three years in a way that had notably favorable effects of your heating and/or cooling costs? (If pay heating and/or cooling costs in Q#4f or #4f1.)

1. Yes	20.5%	17.7%	23.2%	20.4%
2. No	77.5	79.7	75.4	77.6
3. (New building)	2.0	1.3	1.4	1.9
4. (DK/Refuse)	—	1.3	—	0.1
Total	100.0%	100.0%	100.0%	100.0%
N	307	186	182	675

4g2. Do you plan to make any changes in this building over the next two or three years that will help reduce your heating and/or cooling costs?

1. Yes	18.8%	28.2%	24.6%	20.5%
2. No	78.1	67.9	72.5	76.4
3. (New building)	1.8	2.6	—	1.7
4. (DK/Refuse)	1.3	1.3	2.9	1.4
Total	100.0%	100.0%	100.0%	100.0%
N	307	186	182	675

4g3. Does your business have a computer-controlled environment, that is, where heating and/or cooling are automatically adjusted for temperature, time of the day, day of the week and so forth?

1. Yes	27.9%	28.2%	24.6%	20.5%
2. No	71.4	67.9	72.5	76.4
3. (DK/Refuse)	0.6	—	1.3	0.7
Total	100.0%	100.0%	100.0%	100.0%
N	350	200	200	751

	Employee Size of Firm			
	1-9 emp	10-19 emp	20-249 emp	All Firms

4h. Do you directly pay the bill for electricity to light your business, or is the electricity bill rolled into the rent or lease payment? (If "Lease/ Rent" in Q#4f.)

1. Yes	68.1%	82.9%	77.4%	70.5%
2. No	31.9	17.1	19.4	29.2
3. (DK/Refuse)	—	—	3.2	0.3
Total	100.0%	100.0%	100.0%	100.0%
N	150	84	79	313

4h1. Do you primarily light your business with:?

1. Flourescent lamps	64.2%	72.4%	65.7%	65.2%
2. Compact flourescent bulbs	7.9	5.3	10.0	7.8
3. Incandescent lights	13.2	6.6	7.1	11.9
4. Halogen lights	6.1	6.6	5.7	6.4
5. Other	5.9	6.6	5.7	5.9
6. (DK/Refuse)	2.8	2.6	2.9	2.8
Total	100.0%	100.0%	100.0%	100.0%
N	306	184	183	673

4h2. Do you use outdoor lighting primarily for:?

1. Safety or security	51.7%	63.6%	73.9%	55.3%
2. Advertising or awareness	8.1	10.4	7.2	8.3
3. Conducting business outside after dark	3.1	2.6	4.3	3.2
4. Don't use outdoor lighting	36.6	23.4	13.0	32.8
5. Other	—	—	1.4	0.1
6. (DK/Refuse)	0.4	—	—	0.3
Total	100.0%	100.0%	100.0%	100.0%
N	306	184	183	673

	Employee Size of Firm			
	1-9 emp	10-19 emp	20-249 emp	All Firms

4h3. Do you have a computer-controlled lighting system that adjusts the lighting level for outside brightness or similar factors?

1. Yes	9.9%	10.3%	15.7%	10.5%
2. No	89.7	88.5	84.3	89.0
3. (DK/Refuse)	0.4	1.3	—	0.4
Total	100.0%	100.0%	100.0%	100.0%
N	306	184	183	673

4i. Do you use equipment or processes in your business that require large amounts of energy to operate? Examples include equipment that heats or cools like stoves and freezers, or large engines that power mechanical equipment, or processes such as drying brick or heating metal?

1. Yes	22.3%	40.5%	39.0%	25.8%
2. No	77.6	59.5	61.0	74.1
3. (DK/Refuse)	0.2	—	—	0.1
Total	100.0%	100.0%	100.0%	100.0%
N	350	200	201	751

4i1. Would you estimate that you use more energy, at least in terms of cost, for this type of equipment than for space heating, space cooling, and lighting combined? (If "Yes" in Q#4i.)

1. Yes	50.0%	73.5%	72.4%	57.1%
2. No	45.0	23.5	24.1	38.4
3. (DK/Refuse)	5.0	2.9	3.4	4.4
Total	100.0%	100.0%	100.0%	100.0%
N	82	83	79	244

4i2. Do you have a system that recycles excess heat or cold created by this equipment into other uses?

1. Yes	14.3%	2.9%	13.8%	12.3%
2. No	85.0	97.1	86.2	87.2
3. (DK/Refuse)	0.7	—	—	0.5
Total	100.0%	100.0%	100.0%	100.0%
N	82	83	79	244

	Employee Size of Firm			
	1-9 emp	10-19 emp	20-249 emp	All Firms
5. Do you have a contract with your electric company that gives it the right to reduce the supply of electricity you receive during peak periods in exchange for a lower rate?				
1. Yes	5.1%	4.8%	6.6%	5.2%
2. No	91.9	90.5	88.2	91.4
3. Not applicable	0.5	1.2	—	0.5
4. (DK/Refuse)	2.5	3.6	5.3	2.9
Total	100.0%	100.0%	100.0%	100.0%
N	350	200	201	751
6. Within the last three years, have you taken one or more steps to reduce the amount of energy your business consumes?				
1. Yes	42.0%	47.1%	48.7%	43.2%
2. No	57.1	51.8	51.3	55.9
3. (DK/Refuse)	1.0	1.2	—	0.9
Total	100.0%	100.0%	100.0%	100.0%
N	350	200	201	751

	Employee Size of Firm			
	1-9 emp	10-19 emp	20-249 emp	All Firms
6a. What were the most important steps you took? (If "Yes" in Q#6.) (Allow no more than two answers.)				
1. Changed the thermostat	15.3%	27.8%	25.0%	17.7%
2. Added insulation	15.3	11.1	13.9	14.7
3. New windows and/ or doors	5.3	5.6	8.3	5.7
4. Purchased new, more energy-efficient equipment	13.7	16.7	22.2	15.0
5. Rearranged, rescheduled processes	9.5	—	5.6	8.1
6. Planted trees or added screens/awnings	1.9	—	—	1.5
7. Changed work schedules or operating hours	2.3	8.3	—	2.7
8. Installed/Improved heat-recapture system	5.0	2.8	2.8	4.5
9. Purchased new, more energy-efficient vehicles	5.7	5.6	2.8	5.4
10. Rerouted/Rescheduled vehicle routing or reduced frequency of use	6.1	5.6	5.6	6.0
11. Eliminated, reduced deliveries	2.3	—	—	1.8
12. Changed to more efficient lighting	20.6	25.0	19.4	21.0
13. Ventilated area; added ventilator fan	2.3	—	2.8	2.1
14. Switch off lights/ equipment when not in use	10.7	8.3	8.3	10.2
15. Upgrade maintenance of equipment	1.5	—	5.6	1.8
16. (Other)	6.1	5.6	8.3	6.3
17. No second mention	72.5	75.0	69.4	72.5
18. (DK/Refuse)	3.8	2.7	—	3.3
Total	200.0%	200.0%	200.0%	200.0%
N	150	97	97	344

	Employee Size of Firm			
	1-9 emp	10-19 emp	20-249 emp	All Firms

6b. Who has primary responsibility for selecting and implementing these energy-saving measures? Was it:?

1. You (respondent)	88.6%	87.2%	71.1%	86.5%
2. Employee	6.4	10.3	21.1	8.5
3. Consultant	4.2	2.6	5.3	4.1
4. (DK/Refuse)	0.8	—	2.6	0.9
Total	100.0%	100.0%	100.0%	100.0%
N	150	97	97	344

7. Are you aware of steps making economic sense that you can take to reduce your use of energy should energy costs rise another 25 percent?

1. Yes	47.0%	43.5%	50.6%	47.0%
2. No	51.0	55.3	48.1	51.1
3. (DK/Refuse)	2.0	1.2	1.3	1.9
Total	100.0%	100.0%	100.0%	100.0%
N	350	200	201	751

8. Does your business occupy space in a building or buildings other than its primary location, not including temporary facilities such as a construction site?

1. Yes	8.3%	13.1%	28.9%	10.8%
2. No	91.4	86.9	71.1	89.0
3. (DK/Refuse)	0.3	—	—	0.3
Total	100.0%	100.0%	100.0%	100.0%
N	350	200	201	751

8a. How many more? (If "Yes" in Q#8.)

1. One	—%	—%	28.6%	56.0%
2. Two	—	—	19.0	14.3
3. Three	—	—	9.5	8.3
4. Four or more	—	—	42.9	20.2
5. (DK/Refuse)	—	—	—	1.2
Total	100.0%	100.0%	100.0%	100.0%
N	30	27	58	115

8b. (If more than one in Q#8a: Think of the second most important building for this question.) Do you own the building in which this part of your business is housed or do you lease it?

1. Own	—%	—%	50.0%	51.2%
2. Lease/Rent	—	—	50.0	46.5
3. (DK/Refuse)	—	—	—	2.3
Total	100.0%	100.0%	100.0%	100.0%
N	30	27	58	115

	Employee Size of Firm			
	1-9 emp	10-19 emp	20-249 emp	All Firms
8b1. Do you pay the heating and/or cooling bills for this business location? (If "Lease/Rent"in Q#8b.)				
1. Yes	—%	—%	—%	23.8%
2. No	—	—	—	76.2
3. (DK/Refuse)	—	—	—	—
Total	100.0%	100.0%	100.0%	100.0%
N	15	12	29	56
8b2. Do you directly pay the lighting bill for this business location? (If "Lease/Rent"in Q#8b.)				
1. Yes	—%	—%	—%	28.6%
2. No	—	—	—	71.4
3. (DK/Refuse)	—	—	—	—
Total	100.0%	100.0%	100.0%	100.0%
N	15	12	29	56
9. Does your business lease space to other businesses or people in any location?				
1. Yes	10.0%	7.1%	9.2%	9.6%
2. No	90.0	92.9	90.8	90.4
3. (DK/Refuse)	—	—	—	—
Total	100.0%	100.0%	100.0%	100.0%
N	350	200	201	751

Demographics

D1. Which best describes your position in the business?

	Employee Size of Firm 1-9 emp	10-19 emp	20-249 emp	All Firms
1. Owner/manager	87.9%	79.8%	73.7%	85.7%
2. Owner but NOT manager	4.3	3.6	5.3	4.3
3. Manager but NOT owner	7.8	16.7	21.1	10.0
4. (DK/Refuse)				
Total	100.0%	100.0%	100.0%	100.0%
N	350	200	201	751

D2. Is your primary business activity: (NAICs code)

1. Agriculture, forestry, fishing	4.0%	1.3%	1.3%	3.4%
2. Construction	9.9	8.8	10.7	9.8
3. Manufacturing, mining	8.4	13.8	12.0	9.3
4. Wholesale trade	3.8	5.0	9.3	4.5
5. Retail trade	16.6	13.8	10.7	15.7
6. Transportation and warehousing	3.0	3.8	5.3	3.3
7. Information	1.6	2.5	—	1.5
8. Finance and insurance	5.6	1.3	2.7	4.9
9. Real estate and rental leasing	4.9	2.5	4.0	4.6
10. Professional/scientific/ technical services	13.7	11.3	6.7	12.8
11. Adm. support/waste management services	2.9	1.3	2.7	2.7
12. Educational services	0.2	1.3	—	0.3
13. Health care and social assistance	3.2	3.8	8.0	3.7
14. Arts, entertainment, or recreation	3.0	1.3	4.0	2.9
15. Accommodations or food service	3.5	16.3	13.3	5.7
16. Other service, incl. repair, personal care	10.0	6.3	2.7	8.9
17. (Other)	4.9	6.3	6.7	5.2
18. (DK/Refuse)	0.8	—	—	0.7
Total	100.0%	100.0%	100.0%	100.0%
N	350	200	201	751

	Employee Size of Firm			
	1-9 emp	10-19 emp	20-249 emp	All Firms
D3. Over the last two years, have your real volume sales:?				
1. Increased by 30 percent or more	12.4%	16.5%	19.7%	13.5%
2. Increased by 20 to 29 percent	14.1	9.4	11.8	13.4
3. Increased by 10 to 19 percent	24.3	28.2	26.3	24.9
4. Increased by less than 10 percent	18.6	23.5	21.1	19.3
5. Decreased by less than 10 percent	13.5	4.7	6.6	11.9
6. Decreased by 10 percent or more	5.1	2.4	3.9	4.7
7. (DK/Refuse)	12.1	15.3	10.5	12.2
Total	100.0%	100.0%	100.0%	100.0%
N	350	200	201	751
D4. Is this business operated primarily from the home, including any associated structures such as a garage or a barn?				
1. Yes	31.3%	7.1%	6.5%	26.3%
2. No	68.2	90.5	92.2	72.9
3. (DK/Refuse)	0.5	2.4	1.3	0.8
Total	100.0%	100.0%	100.0%	100.0%
N	350	200	201	751
D5. How long have you owned or operated this business?				
1. < 6 years	24.8%	16.9%	14.5%	23.0%
2. 6-10 years	18.3	19.3	18.4	18.4
3. 11-20 years	23.7	31.1	23.7	24.5
4. 21-30 years	19.2	16.9	22.4	19.3
5. 31 years+	12.9	14.5	18.4	13.6
6. (DK/Refuse)	1.1	1.2	2.6	1.3
Total	100.0%	100.0%	100.0%	100.0%
N	350	200	201	751

	Employee Size of Firm			
	1-9 emp	10-19 emp	20-249 emp	All Firms
D6. What is your highest level of formal education?				
1. Did not complete high school	2.7%	1.2%	—%	2.3%
2. High school diploma/GED	21.8	20.2	13.2	20.8
3. Some college or an associates degree	21.5	22.6	15.8	21.0
4. Vocational or technical school degree	3.3	1.2	1.3	2.9
5. College diploma	33.5	35.7	51.3	35.5
6. Advanced or professional degree	16.1	17.9	15.8	16.2
7. (DK/Refuse)	1.1	1.2	2.6	1.3
Total	100.0%	100.0%	100.0%	100.0%
N	350	200	201	751
D7. Please tell me your age.				
1. <25	0.5%	1.2%	—%	0.5%
2. 25-34	7.3	8.2	7.7	7.4
3. 35-44	16.1	21.2	19.2	16.9
4. 45-54	29.4	30.6	34.6	30.1
5. 55-64	26.6	24.7	24.4	26.1
6. 65+	17.0	11.8	10.3	15.8
7. (DK/Refuse)	3.2	2.4	3.8	3.2
Total	100.0%	100.0%	100.0%	100.0%
D8. What is the zip code of your business?				
1. East (zips 010-219)	16.2%	12.9%	18.4%	16.1%
2. South (zips 220-427)	20.3	18.8	22.4	20.4
3. Mid-West (zips 430-567, 600-658)	22.4	30.6	25.0	23.5
4. Central (zips 570-599, 660-898)	24.6	24.7	22.4	24.4
5. West (zips 900-999)	14.8	11.8	9.2	13.9
6. (DK/Refuse)	1.6	1.2	2.6	1.6
Total	100.0%	100.0%	100.0%	100.0%
N	350	200	201	751

	Employee Size of Firm			
	1-9 emp	10-19 emp	20-249 emp	All Firms
D9. Urbanization (Derived from zip code.)				
1. Highly Urban	10.2%	10.7%	7.8%	10.0%
2. Urban	17.8	19.0	20.8	18.2
3. Fringe Urban	18.9	16.7	16.9	18.5
4. Small Cities/Towns	22.4	25.0	22.1	22.7
5. Rural	26.2	26.2	26.0	26.2
6. (Not Known)	4.5	2.4	6.5	4.4
Total	100.0%	100.0%	100.0%	100.0%
N	350	200	201	751
D10. Sex				
Male	81.1%	82.1%	83.1%	81.4%
Female	18.9	17.9	16.9	18.6
Total	100.0%	100.0%	100.0%	100.0%
N	350	200	201	751

Table Notes

1. All percentages appearing are based on **weighted** data.
2. All "Ns" appearing are based on **unweighted** data.
3. Data are not presented where there are fewer than 50 unweighted cases.
4. ( )s around an answer indicate a volunteered response.

WARNING – When reviewing the table, care should be taken to distinguish between the percentage of the population and the percentage of those asked a particular question. Not every respondent was asked every question. All percentages appearing on the table use the number asked the question as the denominator.

Data Collection Methods

The data for this survey report were collected for the NFIB Research Foundation by the executive interviewing group of The Gallup Organization. The interviews for this edition of the *Poll* were conducted between July 24 - August 25, 2006 from a sample of small employers. "Small employer" was defined for purposes of this survey as a business owner employing no fewer than one individual in addition to the owner(s) and no more than 249.

The sampling frame used for the survey was drawn at the Foundation's direction from the files of the Dun & Bradstreet Corporation, an imperfect file but the best currently available for public use. A random stratified sample design is typically employed to compensate for the highly skewed distribution of small-business owners by employee size of firm (Table A1). Almost 60 percent of employers in the United States employ just one to four people meaning that a random sample would yield comparatively few larger small employers to interview. Since size within the small-business population is often an important differentiating variable, it is important that an adequate number of interviews be conducted among those employing more than 10 people. The interview quotas established to achieve these added interviews from larger, small-business owners are arbitrary but adequate to allow independent examination of the 10-19 and 20-249 employee size classes as well as the 1-9 employee size group.

Table A1

Sample Composition Under Varying Scenarios

	Expected from Random Sample*		Obtained from Stratified Random Sample			
Employee Size of Firm	Interviews Expected	Percent Distribution	Interview Quotas	Percent Distribution	Completed Interviews	Percent Distribution
1-9	593	79	350	47	350	46
10-19	82	11	200	27	200	27
20-249	75	10	200	27	201	27
All Firms	750	100	750	101	751	100

* *Sample universe developed from the Bureau of the Census (2002 data) and published by the Office of Advocacy at the Small Business Administration.*

Previous Publications in This Series

Volume 1, Issue 1 *The Changing Search for Employees*
Issue 2 *The Use and Value of Web Sites*
Issue 3 *The Cash Flow Problem*
Issue 4 *Adjusting to Cost Increases*
Issue 5 *Coping with Regulation*
Issue 6 *Success, Satisfaction and Growth*
Issue 7 *Getting Paid*
Issue 8 *Privacy*

Volume 2, Issue 1 *Workplace Safety*
Issue 2 *Liability*
Issue 3 *Postal Rates*
Issue 4 *Administering the Sales Tax*
Issue 5 *Advice and Advisors*
Issue 6 *Families in Business*
Issue 7 *Business Insurance*
Issue 8 *Pre-ownership Experience*

Volume 3, Issue 1 *Contacting Government*
Issue 2 *Compensating Employees*
Issue 3 *Reinvesting in the Business*
Issue 4 *Health Insurance*
Issue 5 *Paperwork and Record-keeping*
Issue 6 *Membership in Business Organizations*
Issue 7 *Road Transportation*
Issue 8 *Competition*

Volume 4, Issue 1 *International Trade*
Issue 2 *Family and Medical Leave*
Issue 3 *Alcohol, Drugs, Violence and Obesity in the Workplace*
Issue 4 *Strategic Alliances*
Issue 5 *Disasters*
Issue 6 *Contributions to Community*
Issue 7 *Business Structure*
Issue 8 *Telecommunications*

Volume 5, Issue 1 *Training Employees*
Issue 2 *The Use of Lawyers*
Issue 3 *Retirement*
Issue 4 *Political Participation*
Issue 5 *The State of Technology*
Issue 6 *Innovation*
Issue 7 *Evaluating Banks*
Issue 8 *Bank Competition*

Volume 6, Issue 1 *Payroll*
Issue 2 *Local Business Climate*

The Sponsor

The **NFIB Research Foundation** is a small-business-oriented research and information organization affiliated with the National Federation of Independent Business, the nation's largest small and independent business advocacy organization. Located in Washington, DC, the Foundation's primary purpose is to explore the policy related problems small-business owners encounter. Its periodic reports include *Small Business Economic Trends, Small Business Problems and Priorities*, and now the *National Small Business Poll.* The Foundation also publishes ad hoc reports on issues of concern to small-business owners. The Foundation's functions were recently transferred from the NFIB Education Foundation.

NFIB
The Voice of Small Business®

1201 "F" Street, NW
Suite 200
Washington, DC 20004
nfib.com