

## **I. INTRODUCTION**

The objective of this study was to conduct a telephone survey with Building Code Officials in the state of Iowa. Questions were asked to elicit respondent information in an attempt to identify the possible barriers and opportunities involved in adopting and enforcing building energy codes, as well as ways to improve the DNR's related services.

## **II. METHODOLOGY**

Eighty-one surveys were completed during the period between December 2003, and January 2004. These surveys were conducted over fourteen days using a Random B sampling technique.

When the surveys were completed, results were cross-tabulated and analyzed. The sampling margin of error is plus or minus 4.9% at a 95% confidence level. This margin of error only applies to responses of the entire population. The margin of error will be larger when looking at the responses of smaller segments within the sample universe.

Differences in the total sample of more than ten percentage points should be considered statistically significant. Differences in the total sample of five to ten percentage points should be considered directional rather than significant. Throughout the report, many percentages are rounded up or down to the nearest one percent for ease of use. Actual percentages to the tenth of a percent can be found in the Marginals section of this report.

## **III. SUMMARY**

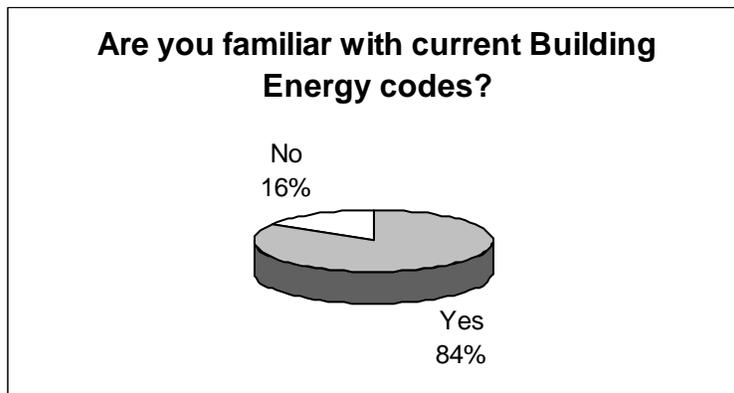
### *General Summary*

- Eighty-four percent of the respondents were familiar with Iowa's current Building Energy Codes
- Thirty percent of the officials had adopted the 2000 IECC code. Twenty-eight percent said they had adopted the 92-MEC. Twenty-three percent of the respondents had not adopted any of the recommended codes.
- Fifteen percent of the respondents said that they plan to adopt new Building Energy Codes within the next year. Of this number, 83% said they would adopt the 2003 IECC.
- Fifty-five percent of the officials were either very, or somewhat familiar with the 2003-IECC, while forty-three percent said they were not at all familiar with this code.

- Forty-nine percent of the respondents surveyed, felt that newer Building Energy codes should be put in place.
- Fifteen percent of the officials said that they had contacted a particular state agency with questions regarding Building Energy codes. Ninety percent said they were able to get the information they needed, and 80% said that their interaction with the state agency was helpful.
- Fifty-seven percent had little or no difficulty adopting and enforcing their local building energy codes, while 27% said they found it either somewhat or extremely difficult.
- The most often mentioned obstacles to **adopting** building energy codes were: Lack of information (36%), resistance from contractors/developers (22%), and opposition from other groups or individuals at 15%.
- The most often mentioned obstacles to **enforcing** building energy codes were: Lack of information (27%), Lack of staff and financial resources (25%), and opposition from other groups or individuals (10%). Thirty-one percent did not know.
- The most often mentioned statement in **favor** of implementing building energy codes was: Energy efficient buildings save money (46%). The most popular statement in **opposition** to adopting and enforcing energy codes was: Energy efficient buildings cost more money to build (26%)
- Forty-seven percent of all the respondents feel that the state of Iowa, and the U.S. Department of Energy **do not** provide them with adequate resources and support. More or better educational programs (31%), and more or better access to available resources (12%), were mentioned most often as factors that would make adoption and enforcement easier.
- Fifty-eight percent of the building officials had been in their current position between 1-7 years, 14% between 8-15 years, and 26% for more than 15 years.
- Forty-six percent of the respondents felt that their job has become more difficult, 21% said it has become less difficult, and 33% said it has stayed about the same. A variety of reasons were given for this belief. The full list of responses can be seen in the Marginals section of this report.

## Analysis

The majority of the officials (84%) who participated in this study, stated that they were familiar with the Building Energy codes currently in place, in the state of Iowa.

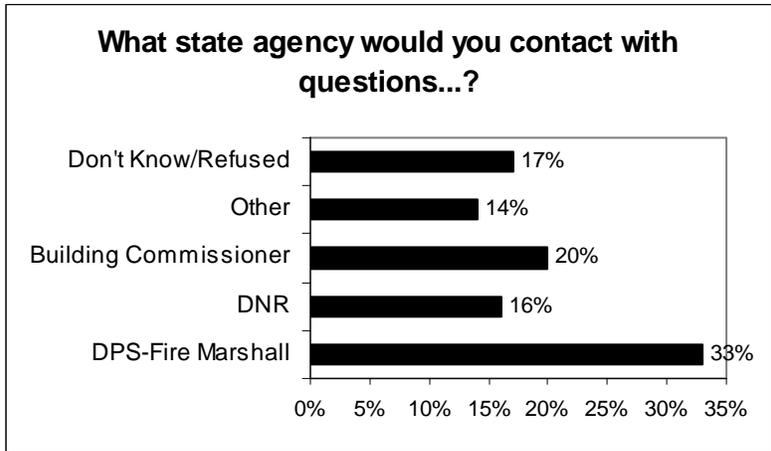


They seemed to be split on the specific codes that they had chosen to adopt. Thirty percent had adopted the 2000-IECC, and 28% had adopted the 92-MEC, while 23% stated they had either no uniform building codes, or had adopted something other than those recommended by the state. In addition, 15% percent of all the respondents, plan to adopt new Building Energy codes within the next year, with 83% stating the new code would be the 2003-IECC. Over half (55%) of the respondents said they were familiar with either the 2003-IECC (residential), or the ASHRAE 90.1-1999 (commercial) building energy codes. On the other hand, 43% of the officials were not at all familiar with these codes.

Forty-nine percent of all the respondents felt that current building energy codes were inadequate and newer ones should be adopted, while 31% believed the current codes were adequate, and 16% were either unsure or didn't know. Interestingly, when asked what state agency they would contact with questions regarding building energy codes, the respondents gave a variety of responses, all of which seemed to get the caller to the person or agency they wanted.

Thirty-three percent said they would contact the Department of Public Safety (Fire Marshall's Office), 20% the Building Code Commissioner/State Building Department,

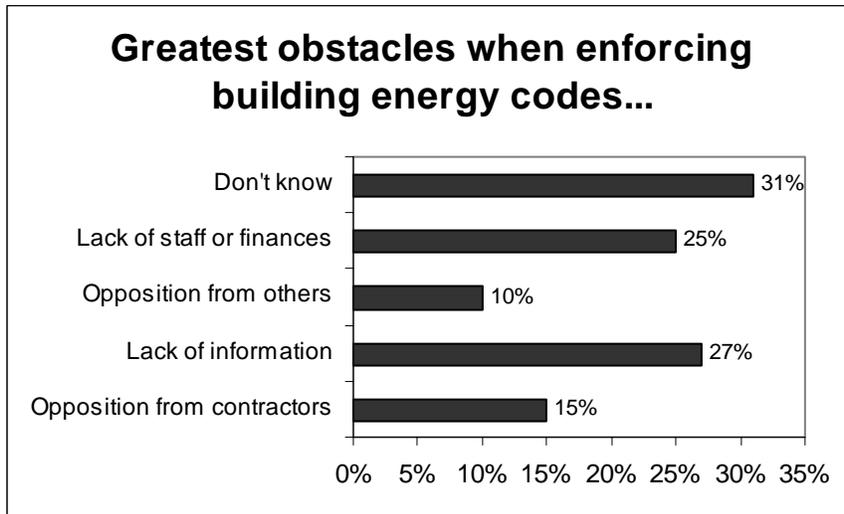
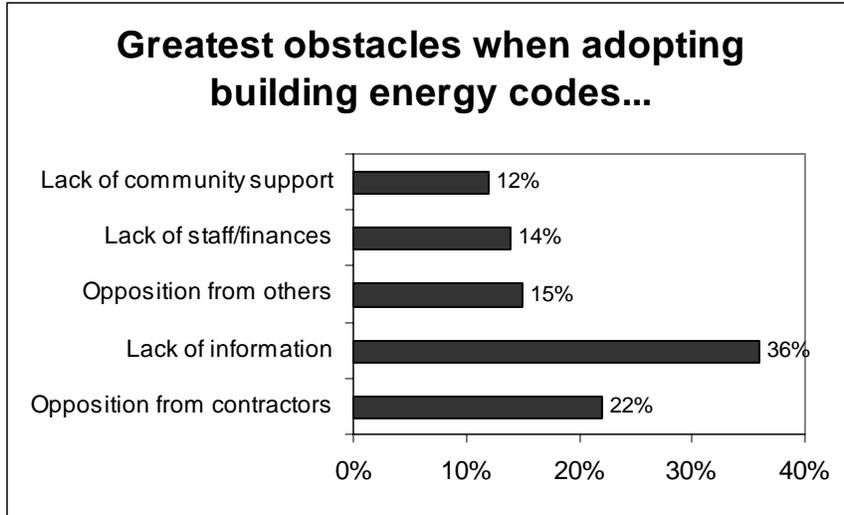
and 16% said they would contact the Department of Natural Resources. Seventeen percent said they did not know whom they would contact with questions regarding building codes. Despite which agency or person they had contacted, 90% of the respondents were able to get the information they needed, and 80% felt that the interaction was helpful.



“Building energy codes help save money, improve the long-term quality and comfort of the building, and enhance the housing stock as well as the economic growth of the community.” The officials were read this statement by the interviewer, and asked to rate their level of agreement to it’s content. As expected, because of the nature of their work, none of the respondents disagreed with the statement, in fact, 100% of the officials were in agreement, with 81% stating that they strongly agreed with it’s content.

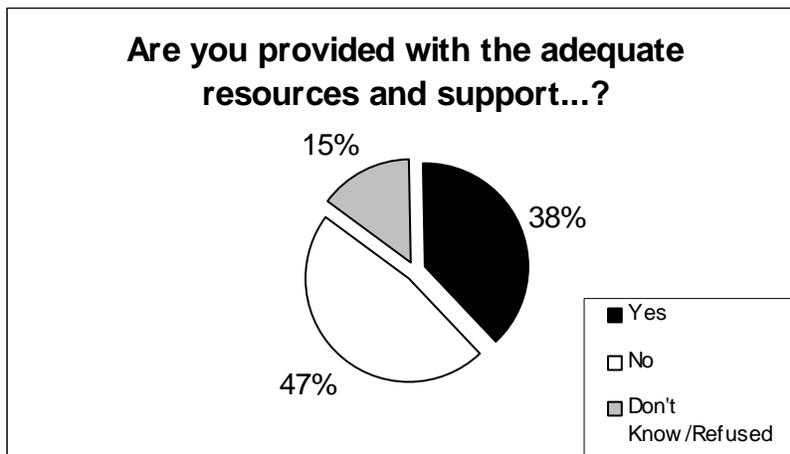
Fifty-seven percent of the officials surveyed, said that they have had little, or no difficulty adopting or enforcing building energy codes on a local level, while 27% stated that they have had some difficulty in this area. Of those who have had some difficulty, the main reasons given were: Political considerations (18%), Budget constraints (12%), and Contractor resistance (7%). For those respondents who have had no difficulty, the main reasons were: Already enforcing codes (25%), and Rational codes are easy to enforce (15%).

The respondents were asked what obstacles they have experienced when **adopting** building energy codes as well as when they **enforce** them. The following graphs represent the top five responses in each category.



When asked what factors might cause **opposition** to adopting and/or enforcing building energy codes, the three most often mentioned responses were: Energy efficient buildings cost more money to build (26%), Lack of staff/funding/resources make codes unenforceable on the local level (18%), and Resistance to government/over regulation at 9%. On the other hand, the most frequently mentioned factors that might **favor** the adoption and enforcement of building energy codes were: Energy efficient buildings save money (46%), Local control provides better application of codes (18%), and Improves long-term quality and comfort of buildings at 17%.

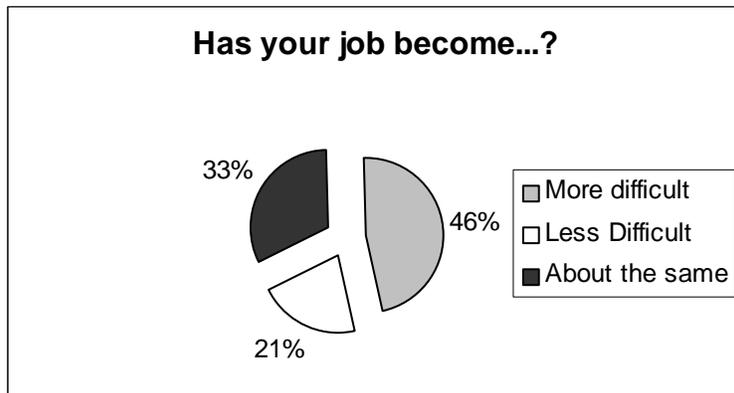
The officials were in slight disagreement over whether they thought that the state and federal governments provided them with the adequate resources and support they needed to effectively do their jobs. The following chart shows their responses.



Not surprisingly, when the officials were asked what it would take to make it easier for them to adopt and enforce building energy codes, most of the responses were related to a need for various kinds of support. Thirty-one percent said they would like more/better educational programs to assist them, 12% would like more/better access to those resources, and 10% feel that more staff would be most beneficial to them.

The state of Iowa seems to have a relatively experienced group of Building Energy Code officials. The majority of the respondents (44%), have been in their current position between 4-7 years, 13% from 1-3 years, 11% from 10-14 years, and 26% for more than 15 years. Only a small percentage (2%), said that they had been at their position for less than a year.

The general feeling among the building code officials that were surveyed, was that their jobs have become more difficult, although a significant percentage said that the difficulty of their positions has stayed about the same.



The most often mentioned reasons for believing that their jobs had become more difficult were: Codes more complex (21%), Increased workload/more codes (14%), and Lack of resources/budget constraints (11%). For those respondents who felt their jobs had become less difficult the main factors were: More support/understanding (14%), Know job better (7%), and Good relationship with contractors (3%).

The officials also seem eager to pursue and accept any resources or assistance from state or federal entities, with 81% requesting more information about Iowa's current building energy codes and/or, the resources available to them with regard to those codes.

