

IOWA STATE UNIVERSITY
DEPARTMENT OF SOCIOLOGY

A DECADE OF CHANGE IN IOWA'S SMALL TOWNS

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I N I T I A T I V E



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Traditionally, small towns have served as the cultural and socioeconomic hub for Iowa's residents. In recent years, due to a variety of circumstances, the survival of many of Iowa's rural communities is in question. Declines in the number of farms and businesses have contributed to a steady out-migration of residents, leaving fewer individuals and decreasing public revenue to address an increasing number of problems. Recognizing the significance of rural towns to Iowa's heritage, a major research effort was initiated in 1994 to assess the social conditions in Iowa's small towns. The purpose of this project, called the Rural Development Initiative, was to provide data that would improve the basis for policy decisions to stimulate rural development and economic growth. This research focused on three main areas: community quality of life, the local social environment, and community involvement.

To examine these issues, 99 communities between 500 and 10,000 in population that are not contiguous to a metropolitan area (cities with at least 50,000 population) were selected to represent Iowa's small towns. Questionnaires were completed by more than 10,000 residents in those selected communities, and the resulting information was provided to community residents and local leaders through a series of reports. Ten years later, in 2004, residents in the same communities were asked to participate in a similar study with the goal of learning how the social conditions have changed.

Another component was added in the 2004 study to examine the impact of relatively sudden events on the local economies of Iowa's small towns. Specifically, we wanted to learn how these sudden events, called "economic shocks", impact a community's quality of life.

This report presents the results of this research about changes over the ten-year period from 1994 to 2004. It consists of two parts. Part 1 highlights what we have learned about life in Iowa's rural communities in three areas: community quality of life, social capital, and community involvement. Part 2 discusses findings related to the effects of economic shocks on social capital and quality of life. To facilitate description of the results presented in Part 1, a hypothetical community called Sigma has been created to represent the typical or average rural community in Iowa. Sigma's characteristics are the average of the characteristics of the 99 communities that were part of the study. Part 1 describes patterns found in Sigma and changes that have occurred since 1994. The discussion in Part 2, however, does not apply to Sigma. Instead, Part 2 describes what we have learned about how small towns are affected by and respond to economic shocks.

This report and those for individual communities are available at the Rural Development Initiative website: <http://www.soc.iastate.edu/rdiweb/>.

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Last, but not least, we acknowledge the cooperation of the nearly 22,000 Iowa citizens who contributed to this research in both 1994 and 2004 by completing questionnaires or participating in telephone interviews. There is no better indication of the importance of small towns to Iowans than the fact that so many individuals voluntarily participated in a study of this type.

PART 1: LIVING IN SIGMA—1994 TO 2004

STUDY DESIGN

This study was designed to examine change in Iowa’s rural communities over the ten-year period from 1994 to 2004. As such, the communities selected for study remained the same in both years. However, the residents who participated by completing the questionnaires differed. The following section discusses the methods utilized to select towns and participants.

Probability sampling procedures were used to select participants in two stages: the selection of communities (in 1994) and the selection of residents (in both 1994 and 2004). First, one community was randomly selected from those between 500 and 10,000 in size and not adjacent to a metropolitan area (50,000 persons or larger) from each of Iowa’s 99 counties. (See the Appendix for a list of communities, their corresponding counties, and population.) Communities with fewer than 500 residents were excluded from the study because basic services are typically unavailable, and therefore cannot be evaluated. Second, telephone directories were used to select households located in and around the 99 communities. One hundred and fifty households were randomly chosen from the directories in each town. Within households, adult heads and co-heads of the household were randomly chosen by gender, with instructions that if the designated gender was not present, another adult member of the household should complete the questionnaire.

Questionnaires were mailed to selected participants. Two additional mailings were sent thanking respondents for their participation, and asking non-respondents to participate. Households for which the questionnaire was returned by mail and deemed undeliverable were replaced with another household. Table 1 shows response rate information for both years.

Table 1: Response Rate Information

	1994	2004
Number of Towns	99	99
Number of Respondents	10,798	9,962
Response Rate	72%	67%
Range of Response Rates per Town	62% to 83%	47% to 81%

A NOTE ON INTERPRETATION

Throughout this report, we will indicate with an asterisk (*) whenever changes are statistically significant. Statistical difference is a function of the range of differences for responses to each survey question among the 99 towns and the overall average across towns. As a result, differences of the same magnitude may not always be statistically significant. Moreover, a statistically significant change is not necessarily an important change. To create Sigma, we calculated an average for each characteristic from the residents in each of the 99 towns and then averaged the town averages to arrive at Sigma’s characteristics. There is less variation in averages than in the original responses from residents and this influences whether a change is statistically significant. Thus, a small difference is likely to be statistically significant for Sigma, whereas a similarly small difference would not be statistically significant for any one of the 99 towns. For example, a difference of two or three percentage points may be statistically significant in Sigma. For the individual towns, changes had to be between 11 and 13 percent before they were considered statistically significant. Statistical significance means that we are fairly certain that the difference is real for all small towns. It is up to the reader to decide if the difference is important.

DEMOGRAPHIC CHARACTERISTICS

Sigma has grown from a town of 1,842 persons in 1994 to 1,881 persons in 2004, an increase of about 2 percent.¹ In terms of racial composition, Sigma is still primarily white, although the non-white population increased from .8 percent to 2.1 percent.² This is likely due to the in-migration of Hispanics, resulting in their percentage doubling from 0.7 percent in 1990 to 1.9 percent in 2000. Youth under age 18 comprised 24.9 percent of the population in 1990, and 24.3 percent in 2000. Surprisingly, the percentage of residents over age 65 dropped from 23.2 percent to 21.4 percent. Educational attainment increased over the decade. In 1990, 11 percent of residents had earned at least a Bachelor’s Degree, while slightly over 13 percent achieved this level of education in 2000. Median income is up in Sigma, rising from \$22,811 to \$34,593. Unemployment dropped from 5.1 percent to 4.1 percent, as did the poverty rate. In 2000, 8 percent of Sigma residents were below poverty, down from 11.5 percent in 1990.

QUALITY OF LIFE IN SIGMA

Community quality of life is a broad term that refers to the extent to which the features of a local place serve to meet the needs and wants of its population. The availability and quality of local services and amenities, such as parks, grocery stores, public safety services, medical facilities, schools, and others, determines, in part, the quality of life for local citizens. Therefore, residents were asked to provide assessments of the services and facilities available in their communities and the extent to which they stayed in town to meet various needs.

GOVERNMENT SERVICES

Residents count on local governments to provide infrastructure, such as streets and water, as well as police, fire, and emergency response. Figure 1 shows the percentage of residents in Sigma who assigned ratings of “good” or “very good” to local government services in 1994 and 2004. For the most part, Sigma’s residents were pleased with the quality of their local government services. Indeed, ratings of the overall quality of government services increased since 1994. The vast majority in both years rated fire protection, emergency response, and garbage collection as “good” or “very good.” Over three-fourths assigned favorable ratings to the condition of local parks and the public schools, while roughly two-thirds were pleased with water services in Sigma. Police protection and the condition of Sigma’s streets received the lowest percentage of positive ratings in both years. Most of these patterns did not change over the ten-year period, however, the percentage of “good” and “very good” ratings decreased for the condition of Sigma’s parks and for the local public schools.

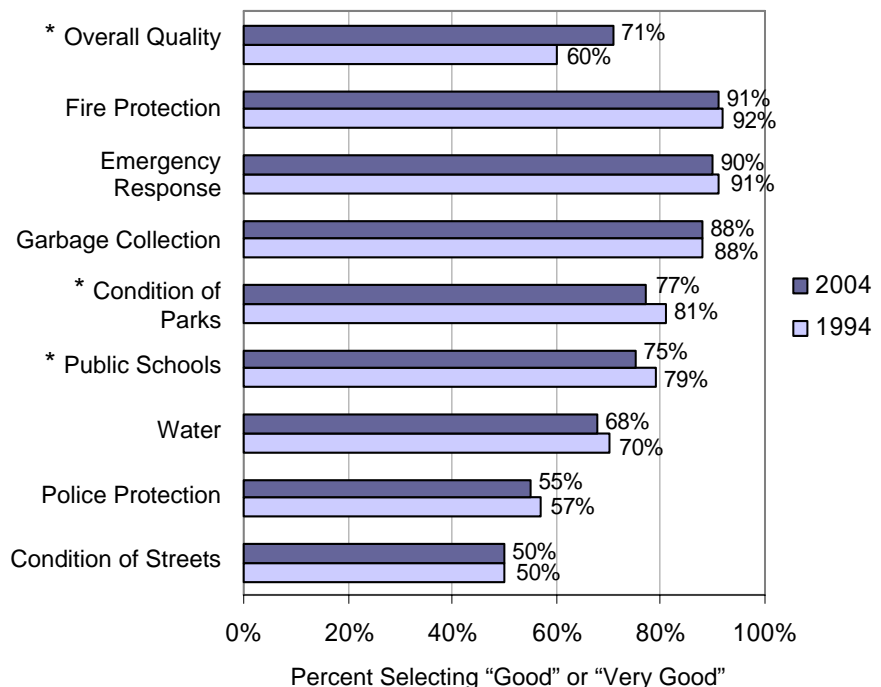


Figure 1: Ratings of Government Services

NON-GOVERNMENT SERVICES

Other features, such as the availability of jobs, housing, medical services, and shopping also contribute to the quality of life in small towns. Figure 2 shows the ratings assigned to services not normally provided by local governments. These services, for the most part, received less favorable ratings than those given to government services, and many changes occurred. Ratings for the overall quality of non-government services declined dramatically over the decade. However, there was an increase in the percentage of residents who assigned positive ratings to local housing. Ratings for child care services also increased since 1994. The percentage of favorable ratings decreased for other services, including programs for senior citizens, recreation, and jobs. No significant changes in ratings occurred for medical services, youth programs, and shopping.

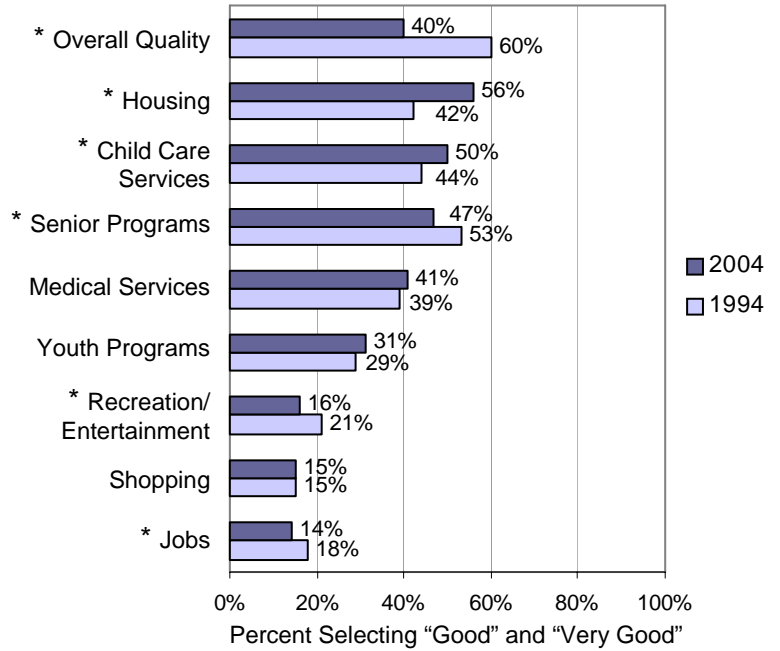


Figure 2: Ratings of Non-Government Services

LOCAL PATRONAGE PATTERNS

The ability to meet one's daily needs locally is an important component of the quality of life for residents. Figure 3 shows the percentage of residents who reported patronizing various services in Sigma in 1994 and 2004. For the most part, fewer residents reported patronizing local services and businesses in 2004 compared to 1994. A majority of residents in both years reported staying in Sigma to attend church or a place of worship, although fewer did so in 2004 than in 1994. The percentage of residents who remained in town to shop for daily needs or for "big ticket" items also declined over the ten-year period. The number of residents who indicated that they stay in Sigma for primary health care services did not change significantly, while, surprisingly, there was an increase in those who reported obtaining specialized health care locally. Finally, there was a decline in the percentage of residents who stayed in Sigma for recreation and entertainment.

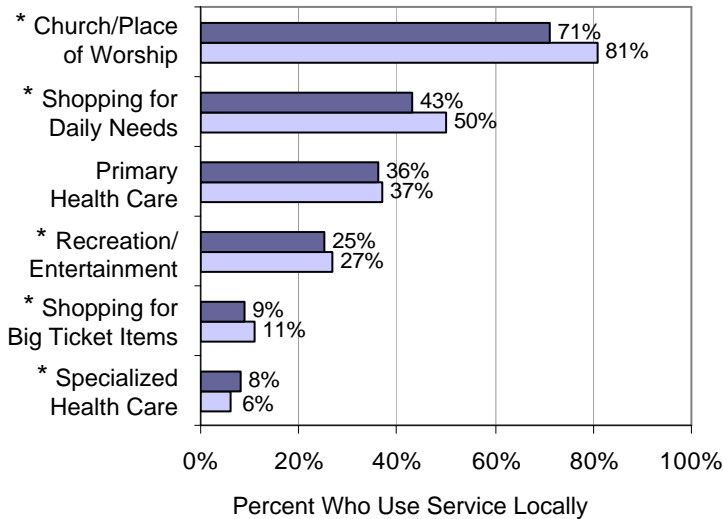


Figure 3: Use of Local Services and Amenities

compared to 1994. A majority of residents in both years reported staying in Sigma to attend church or a place of worship, although fewer did so in 2004 than in 1994. The percentage of residents who remained in town to shop for daily needs or for "big ticket" items also declined over the ten-year period. The number of residents who indicated that they stay in Sigma for primary health care services did not change significantly, while, surprisingly, there was an increase in those who reported obtaining specialized health care locally. Finally, there was a decline in the percentage of residents who stayed in Sigma for recreation and entertainment.

SUMMARY: QUALITY OF LIFE IN SIGMA

Overall, residents of Sigma remained satisfied with local government services and said that the overall quality has increased. Except for declines in ratings for city parks and public schools, ratings for services did not change since 1994. At the same time, the overall quality of non-government services has decreased according to residents, particularly for senior programs, recreation, and jobs. Positive ratings did increase, however, for housing and child care services. Fewer of Sigma's residents are obtaining services locally—more are leaving to attend church, to shop for daily needs or "big ticket" items, or for recreation.

SIGMA'S SOCIAL ENVIROMENT

In spite of the frequently publicized economic challenges faced by many of Iowa's small towns, they are regularly praised for having favorable social climates. A main goal of this project has been to determine the extent to which Iowa's rural towns possess favorable social environments. In both 1994 and 2004, three-fourths of Sigma's residents agreed that living in Sigma is "like living with a group of close friends," suggesting that, in part, Sigma has a positive social environment. The next few pages provide information about a variety of aspects of Sigma's social climate.

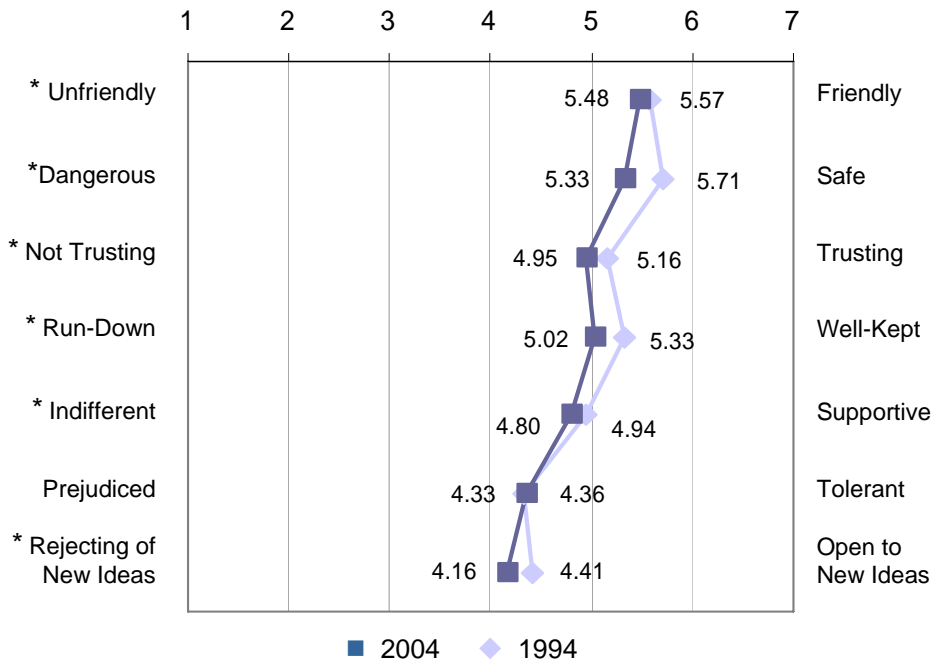


Figure 4: Average Rating of Social Qualities On a 1 to 7 Scale

Residents were presented with a list of social qualities and asked to evaluate their town on each quality using a 7-point scale. Figure 4 shows the average ratings for Sigma. In both years, Sigma's friendliness received the highest ratings, followed by the safety and trusting nature of the town. The lowest ratings were assigned to the extent to which Sigma is viewed by its residents as tolerant and open to new ideas. Since 1994, the average ratings for many of these qualities declined slightly. Residents rated Sigma as less friendly, less safe, less trusting, less well-kept, less supportive, and not as open to new ideas in 2004 than it was in 1994.

COMMUNITY ATTACHMENT

Are Sigma's residents attached to their community? Nearly all residents in both 1994 and 2004 indicated that they feel at home in Sigma, and over three-fourths said they would be sorry to leave if they had to move away (see Figure 5). However, there was a small decrease for both of these items over the decade. These responses indicate that most residents were still attached to their community in 2004, but the extent of community attachment is less than it was ten years earlier.

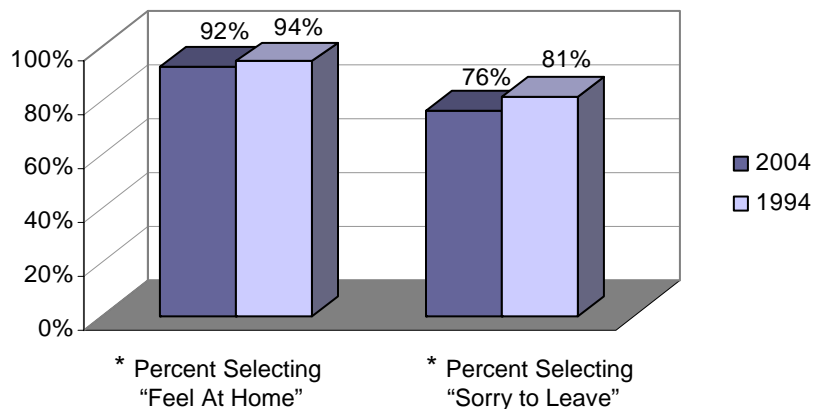


Figure 5: Community Attachment

SOCIAL CAPITAL IN SIGMA

An important feature of a local social environment is called “social capital.” Social capital is a term that refers to the relationships among residents—that is, how much local residents know and trust one another. There are two main components of social capital: social ties and trust. Social ties are the connections among residents—acquaintanceships, friendships, and family relations. Trust refers to the extent to which local citizens trust each other, even those they do not know personally. A community rich in social capital will usually have an easier time accomplishing goals and making decisions. For example, recruiting volunteers for a local festival or fundraising for the local fire department is much easier in a town where people know and trust each other than in places where this is not the case. Because of these important implications for communities, we wanted to know more about the extent of social capital in Sigma.

SOCIAL TIES

Overall, the extent of social ties in Sigma has declined over the ten-year period. In 2004, 52 percent of residents reported knowing the names of half or more of the people in Sigma, down from 55 percent in 1994. At the same time, one in ten residents in both years reported that they know the names of few or no other residents. Similarly, the percentage of residents who reported that half or more of their close personal friends live in Sigma declined from 54 percent in 1994 to 51 percent in 2004. Sixteen percent in 2004 and 14 percent in 1994 said that they either have no friends or none that live in Sigma. Twenty-two percent of residents in 2004, down from 24 percent in 1994, indicated that half or more of their adult relatives and in-laws live in Sigma.

TRUST

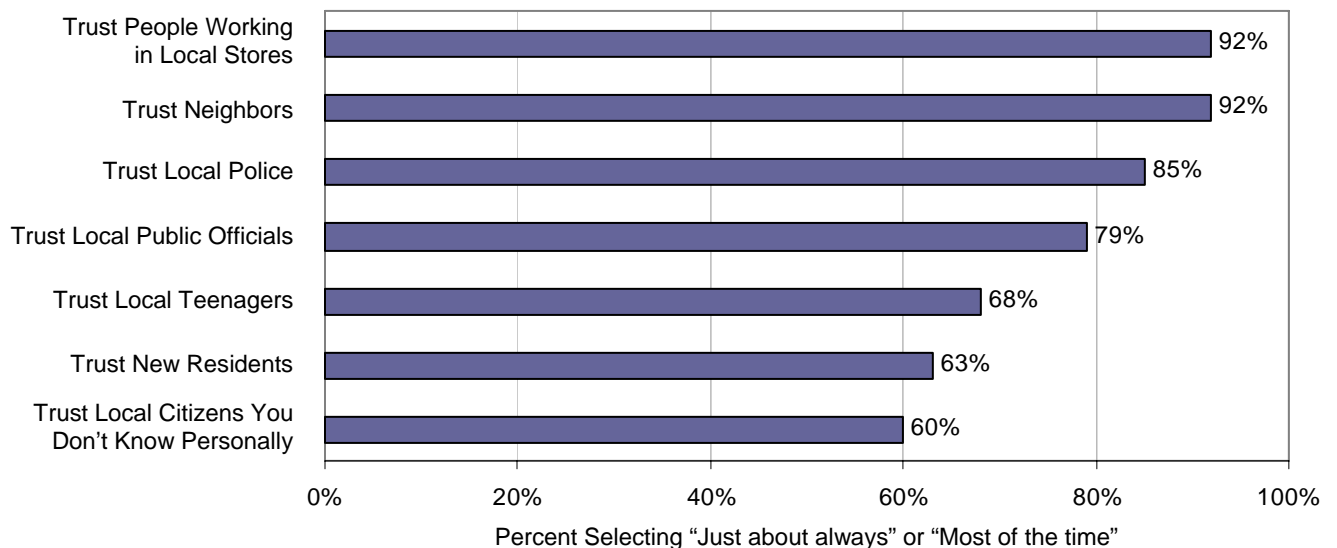


Figure 6: Trust in Residents and Local Officials (2004 only)

During the 1990’s, research showed a general erosion in the amount of trust Americans have in institutions and each other. For this reason, we added a set of questions in 2004 to measure trust in Iowa’s small towns. For the most part, Sigma’s residents trust local people and authorities—even those they do not know (see Figure 6). Almost all residents (92 percent) reported that they “just about always” or “most of the time” trust the people working in local stores and their neighbors. Over three-fourths had trust in local police and public officials, while teenagers were trusted by about two-thirds of Sigma’s residents. Both new residents and local “strangers” were trusted by a about six in ten of Sigma’s residents.

LOCAL GATHERING PLACES

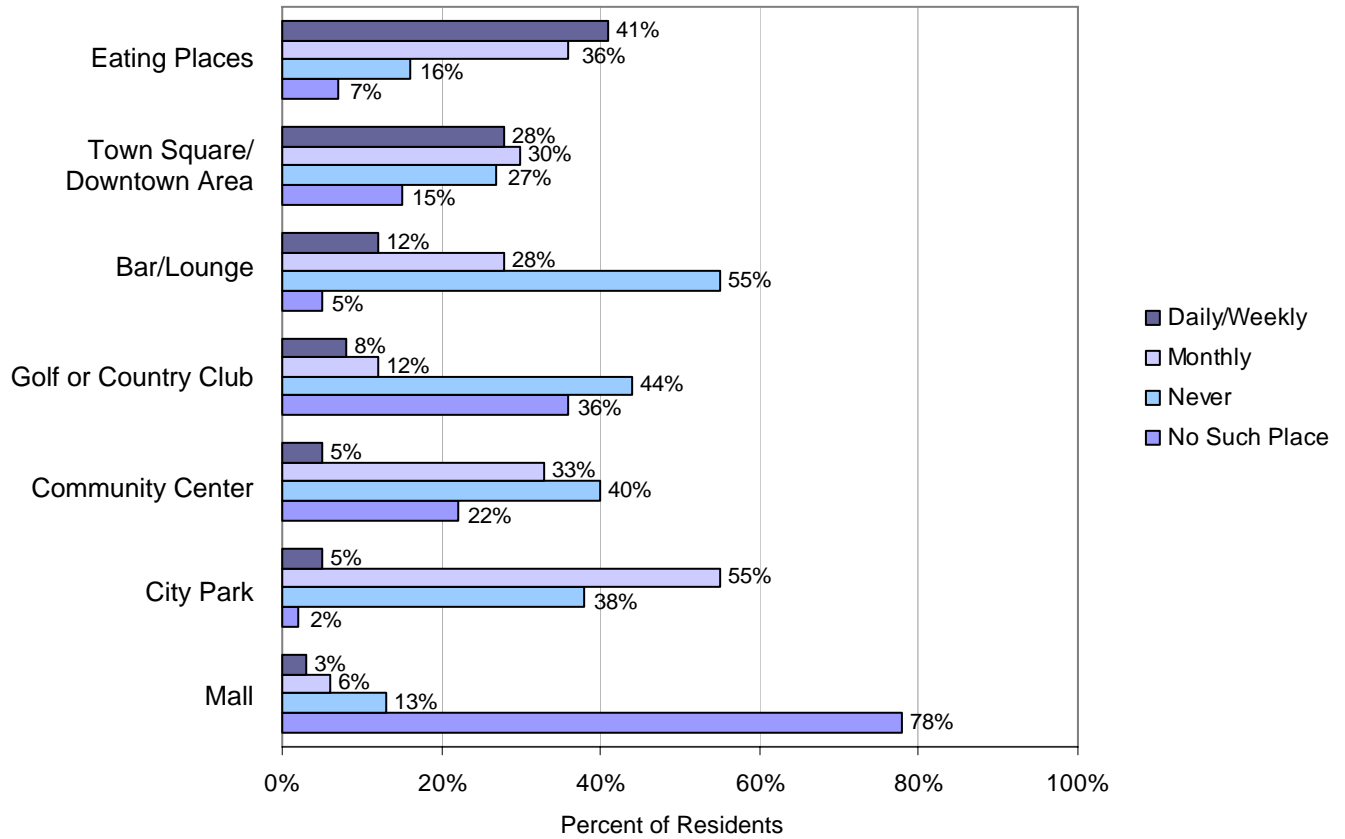


Figure 7: Gathering Places (2004 only)

Local gathering places serve an important role in facilitating social interaction among community members. Unlike one's home, where social interaction typically occurs only with close friends and family, gathering places provide opportunities for informal socializing among a wide variety of local residents, promoting the formation and growth of social ties and trust. Although nearly 3 percent of residents said they never visited local gathering places of any kind, most people in Sigma visited at least one. Figure 7 shows the percentage of residents who reported visiting gathering places of various types. Eating places, such as restaurants, delicatessens, or coffee shops, and the “Main Street” or town square area were the most frequently used gathering places for local residents. Four in ten residents visited local eating places daily or weekly, and over one-third did so monthly. Twenty-eight percent said they went to the town square or downtown area daily or weekly, while another 30 percent visited this area monthly. Over half of Sigma’s residents visited the city park at least monthly. Very few residents reported gathering at a golf club or mall, likely because of the lack of availability of such places.

SUMMARY: SIGMA’S SOCIAL ENVIRONMENT

By and large, Sigma continues to possess a favorable social environment, although many indicators showed small declines over the period from 1994 to 2004. Ratings for the friendliness, safety, trusting nature, and appearance of Sigma were relatively high, however all have decreased since 1994. Similarly, the extent of community attachment is less than it was a decade ago, although nine in ten residents still felt at home in Sigma, and over three-fourths would be sorry to leave. Significantly fewer people knew each other or had local friends and relatives compared to 1994. In 2004, a majority of residents believed that most other residents and local officials in town can be trusted most of the time. A variety of gathering places exist in Sigma—residents most often visited local eating places, the town square or “Main Street” area, and city parks.

COMMUNITY INVOLVEMENT

Community involvement is an important feature of small towns. Many local accomplishments depend on local citizen's willingness to volunteer their time on behalf of community goals. Citizens can get involved in their communities in formal ways, through local organizations and planned projects, and in informal ways, such as donating money to a fundraiser or participating in a spring clean-up. The trend in current times is for citizens to be less involved in their communities. This decline in "civicness" makes it more difficult for local communities to accomplish goals. The following three pages present the patterns of community involvement among Sigma's residents.

FORMAL COMMUNITY INVOLVEMENT

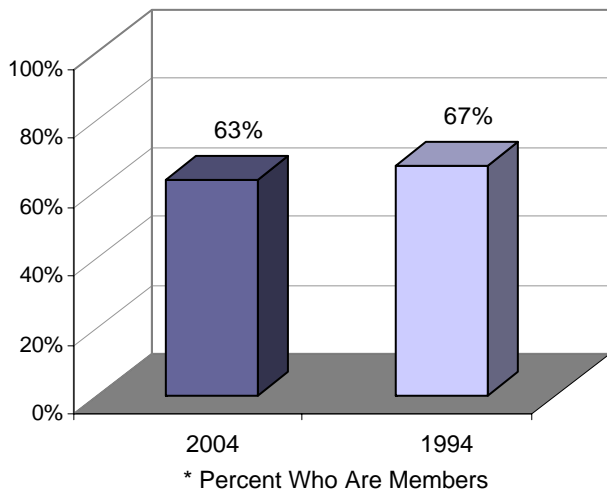


Figure 8: Membership in Local Organizations

Local organizations play a key role in bringing people together to facilitate activities of various types. These organizations sponsor fund-drives or lead the planning and implementation of events. The ability of local organizations to facilitate local action depends, to some degree, upon the extent of the willingness of the local citizenry to join organizations and actively participate in them. In Sigma, well over half of the residents in both years reported that they were a member of at least one local organization (see Figure 8). However, that percentage has declined from 67 percent in 1994 to 63 percent in 2004.

There are a variety of types of organizations present in many communities. They range from church-related (such as bible study or youth groups) to those with a political or civic focus (such as local development or historical groups) to service and fraternal groups (such as the Lion's or Kiwanis clubs). In Sigma, residents participated in a variety of types of groups, however, membership declined over the ten-year period for all types (see Figure 9). Still, over half of Sigma's residents in both years reported that they belonged to a church-related group, while one-fourth in 2004 and one-third in 1994 belonged to recreational groups. The smallest percentage of residents in both years reported membership in job-related and service or fraternal groups.

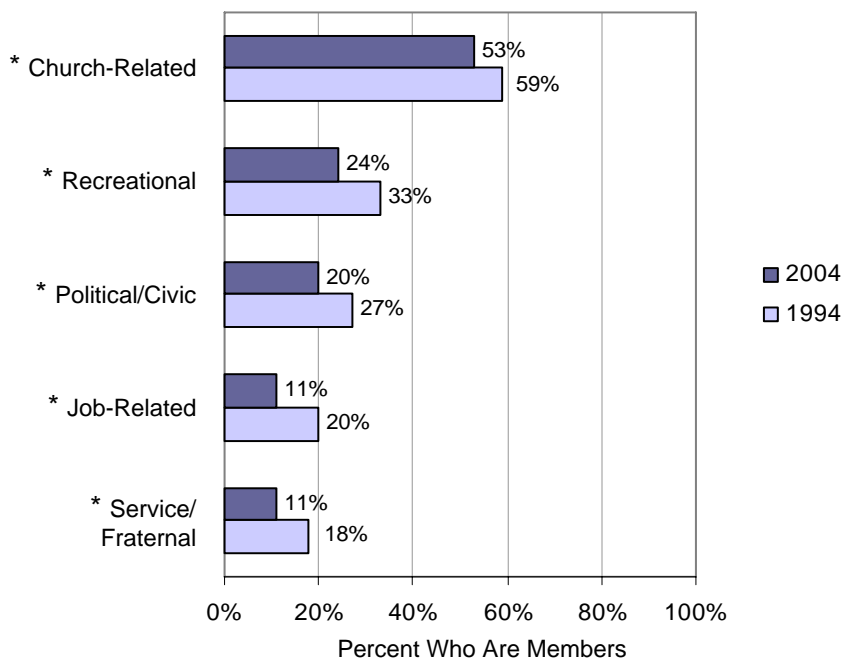


Figure 9: Membership in Local Organizations by Type of Organization

PARTICIPATION IN COMMUNITY PROJECTS

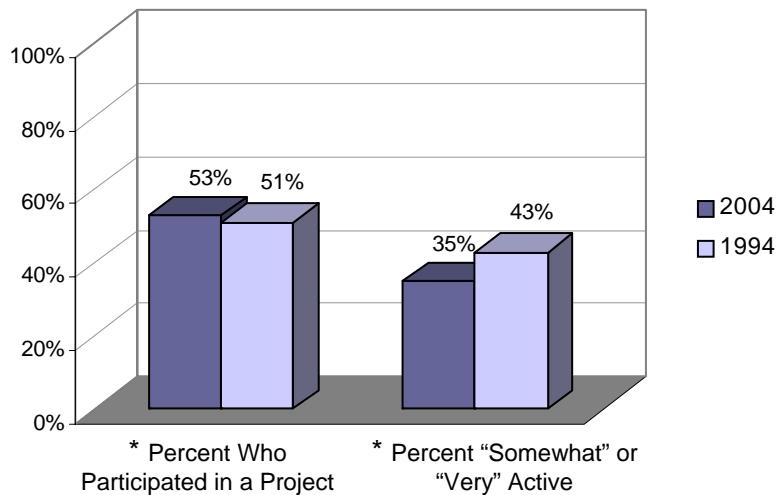


Figure 10: Project Participation

While membership in local organizations is an important feature of rural towns, of utmost importance is the extent to which the local citizenry is actively involved in the community, even to the extent of being willing to participate in the completion of local projects. In Sigma, only about one-third of local residents considered themselves to be somewhat or very active in the community in 2004, down from 43 percent in 1994 (see Figure 10). However, over half in both 1994 and 2004 said that they had participated in a local community improvement project during the year prior to the survey. Addition-

ally, the percentage of residents who reported participating in a local project increased over the ten-year period. Interestingly, while residents described themselves as less active in the community, more reported actually participating.

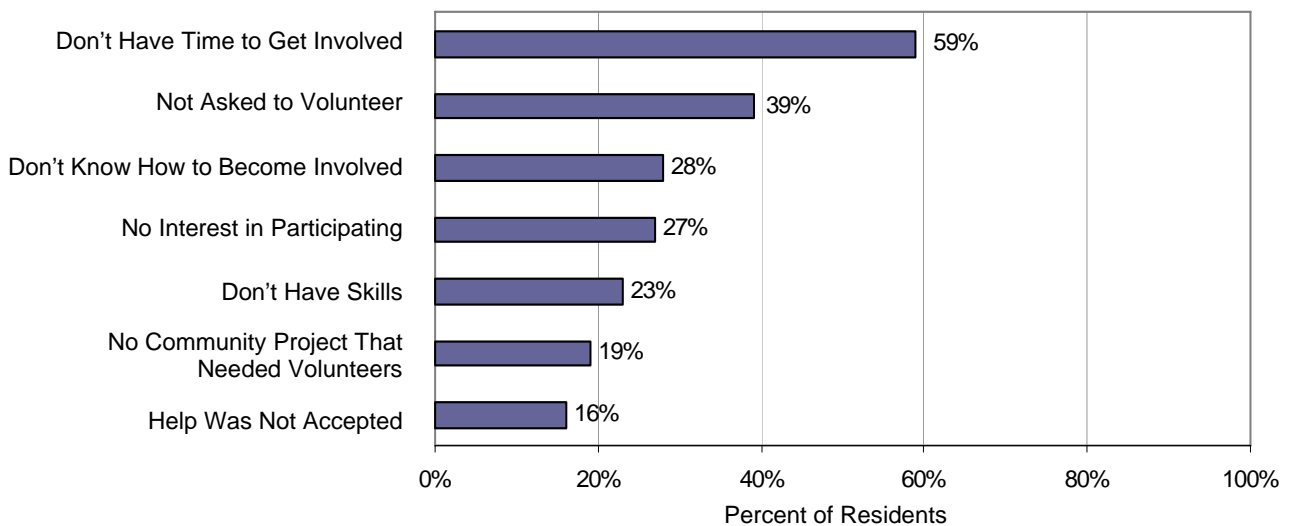


Figure 11: Reasons For Not Being Involved in Community Projects (2004 only)

Because community involvement is so important to the success or failure of many local projects, we wanted to learn more about the reasons people do NOT get involved. Therefore, residents were asked in 2004 whether or not a variety of factors served to limit their involvement in community improvement projects. Not surprisingly, a majority of residents (59 percent) indicated that lack of time limited their involvement (see Figure 11). However, nearly four in ten residents said they do not participate because no one had asked them to volunteer, and over one-fourth said they simply don't know how to become involved. Twenty-three percent felt that they did not have sufficient skills to help with projects, 19 percent indicated that there were no community projects that needed volunteers, and 16 percent said that they tried to help out with a project, but that their help was not accepted.

INFORMAL COMMUNITY INVOLVEMENT

Community involvement is not limited to participation in formal organizations or projects. A citizen can be “civic” by doing a wide variety of activities that help out the local community. Figure 12 shows the percentage of residents who said that “most,” “about half,” or “few” Sigma residents would volunteer their assistance toward a variety of situations. Over two-thirds felt that most residents would volunteer to conserve water or would help during the aftermath of a tornado. Nearly half (47 percent) said that most Sigma residents would donate canned food for the needy. On the other hand, over one-third of respondents indicated that only a few residents would provide donations to sustain a locally-owned grocery store or would volunteer to deliver meals to elderly residents. As for a community wide clean-up, 23 percent of residents felt that most other Sigma residents would participate, while 51 percent said that about half would volunteer their time.

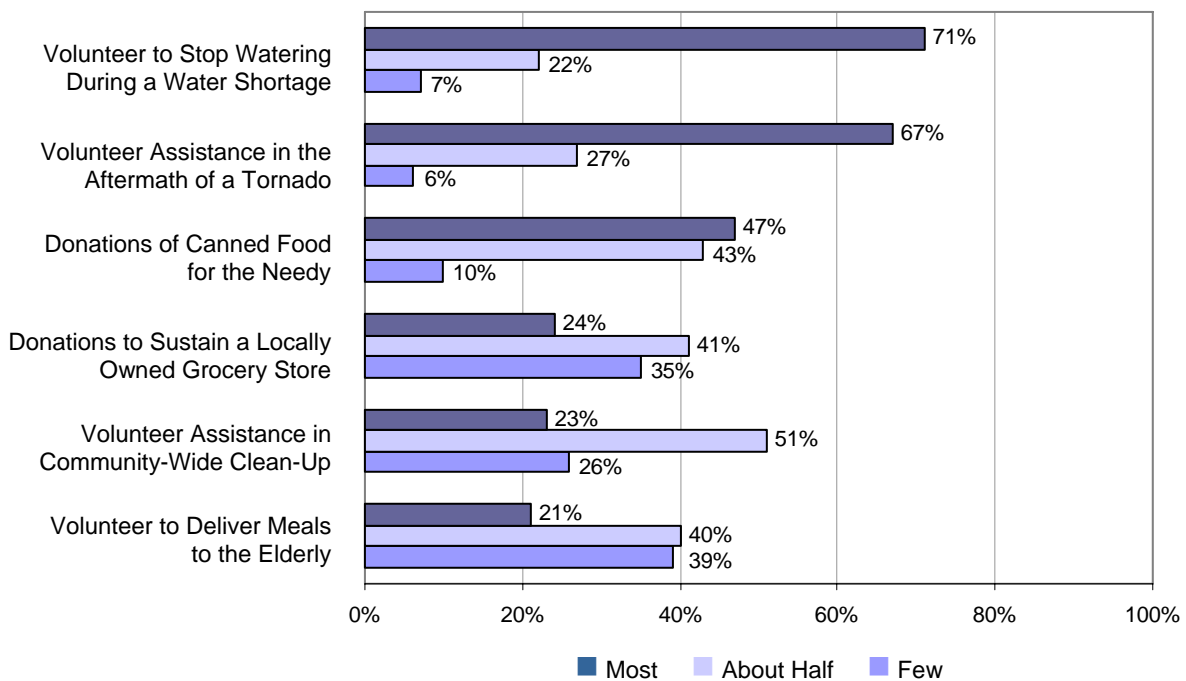


Figure 12: Helping Behaviors Among Town Residents (2004 only)

SUMMARY: COMMUNITY INVOLVEMENT

Overall, community involvement in Sigma has declined over the period from 1994 to 2004. The percentage of residents who consider themselves to be active in the community declined by 8 percent. Additionally, the percentage of residents who belong to at least one local organization decreased, as did membership in a variety of types of organizations. This pattern is consistent with national trends showing a decline in civic behavior. However, Sigma’s residents are still involved. Regardless of the decrease, over half of residents in both 1994 and 2004 reported belonging to at least one local organization. Further, the percentage of residents who reported that they participated in a community project increased over the ten-year period. And, in most cases, residents believe that their fellow citizens will help out informally when needed. The fact that such a large number of residents did not get involved in community projects because they were not asked or did not know how suggests some strategies that could help increase involvement among Sigma’s citizens.

PART 2: ECONOMIC SHOCKS AND IOWA'S SMALL TOWNS

The state of the local economy has a significant impact on all aspects of community life. A community with a thriving economic sector will have greater ability to provide residents with services and amenities than one experiencing economic downturns. But, what happens when a town is faced with a sudden challenge to its economy? We sought to answer this question by studying towns that have experienced “economic shocks,” which are defined as relatively sudden events that have an impact on a community’s economy. We looked at the impact of shocks on features of the local community related to quality of life for residents, such as the quality of local services and facilities, community involvement, and community attachment. The next several pages present the results of our study of economic shocks and community quality of life in Iowa’s rural towns.

CHARACTERISTICS OF ECONOMIC SHOCKS

To identify the significant economic events, we contacted five to eight community leaders in each of the 99 towns and asked them to list all the events occurring from 1990 through 2003 that had a significant impact on the local economy. They were also asked to rate the impact of the event on a one-to-five scale, to tell us whether the event was positive or negative for the community, and whether it was locally planned or externally generated. Those events mentioned by at least two persons and having a minimum average rating of 2.0 on the one-to-five scale of significance are designated as economic shocks.

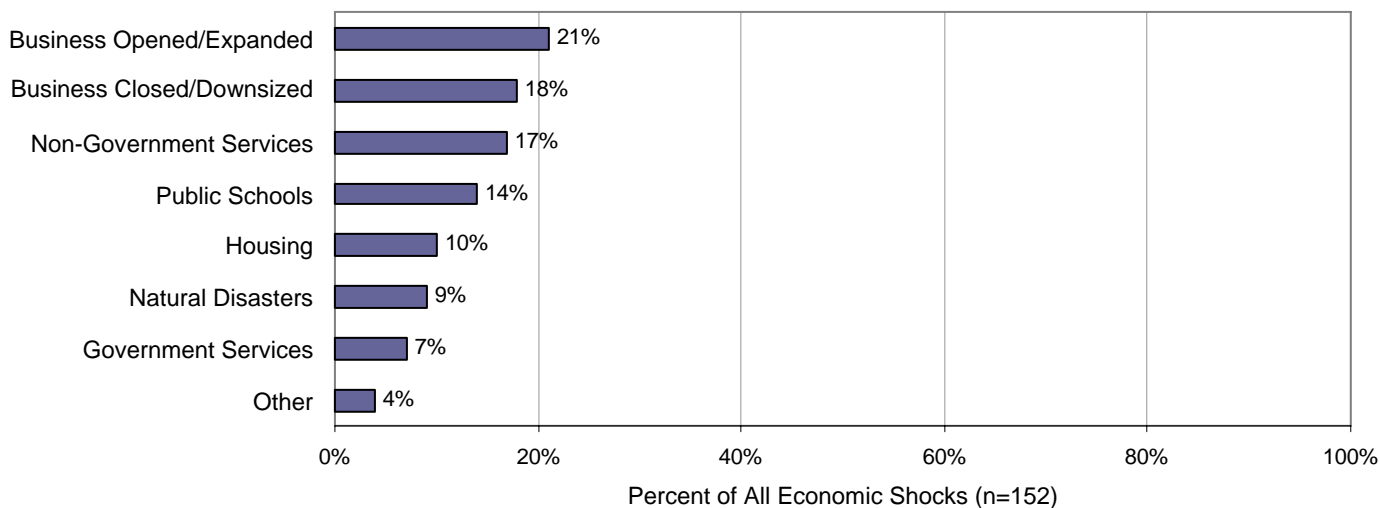


Figure 13: Types of Economic Shocks

Altogether, respondents identified 152 economic shocks of various types occurring in 74 of the 99 communities. Twenty-five towns did not experience an economic shock. We grouped the shocks into seven categories as shown in Figure 13. Nearly four in ten shocks had to do with changes in local businesses. Twenty-one percent involved businesses opening or expanding in the community, while 18 percent involved business closures or downsizing. Seventeen percent of the shocks were changes to non-government services, such as medical centers opening or closing or the development of golf courses. School closures, consolidations, or new schools opening comprised 14 percent of identified shocks. Ten percent of the economic shocks had to do with housing development, including housing options for the elderly. The flood of 1993 had a major impact on many communities, and made up a majority of the 9 percent of shocks in the natural disaster category. Seven percent of the shocks involved changes to government services, such as the addition or movement of major highways in or near town or mandates to improve water and sewer services.

ORIGIN AND IMPACT OF ECONOMIC SHOCKS

Economic shocks differ in their origin and their effect on the community. Some shocks, such as a natural disaster or an unfunded state or federal mandate, originate from sources outside of the community. Others are initiated by the community, such as efforts to attract or sustain businesses. Shocks can have positive or negative effects on the community. For example, the closing of a major employer typically results in increased unemployment for local citizens and decreased tax revenue for the community. On the other hand, if a new business opens in the community, the effects are often positive. More available jobs can attract new residents and help stabilize a local economy. Of the shocks identified by community leaders in this study, 60 percent originated from within the community (see Figure 14), and two-thirds were considered to have positive effects on the community (see Figure 15). Not surprisingly, most positive shocks were internal in origin, while negative shocks most often came from sources external to the community.

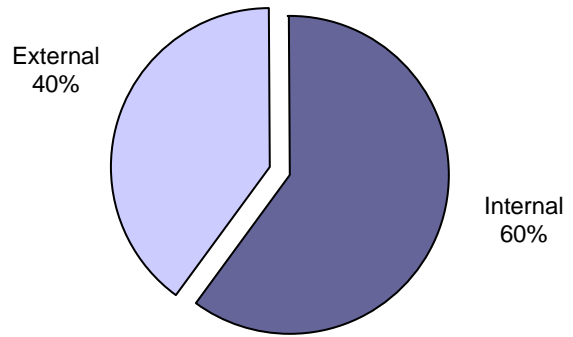


Figure 14: Origin of Economic Shock

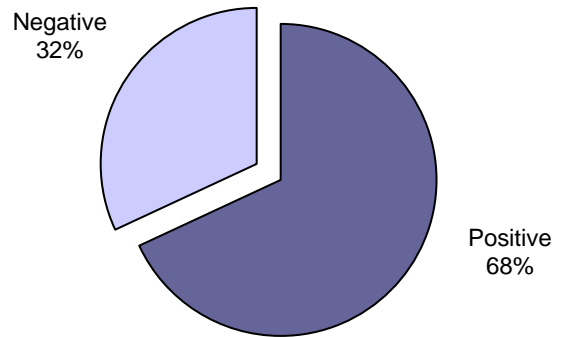


Figure 15: Effect of Economic Shock

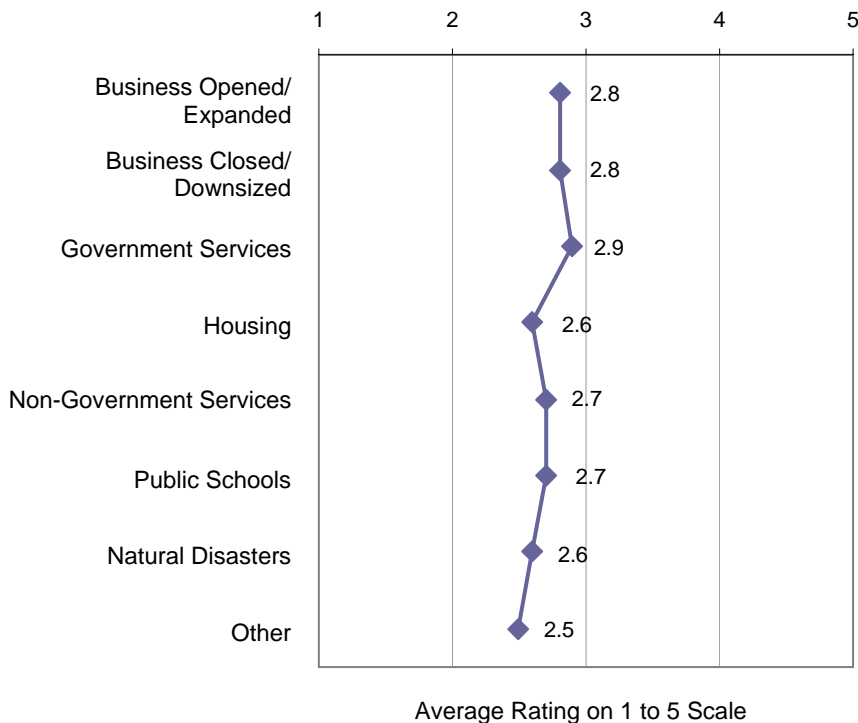


Figure 16: Average Significance by Type of Shock

For each economic shock, respondents were asked to rate the significance of its impact on their community's economy. Figure 16 shows the average rating given to each type of shock across all 74 communities. Shocks related to government services had the highest rating, followed closely by businesses opening or expanding and businesses closing or downsizing. Next in line were changes to local schools, either building closures or the opening of new facilities, and shocks involving non-government services. The development of housing and those economic shocks in the miscellaneous category had the least impact, on average.

NET SHOCK SIGNIFICANCE

How do economic shocks affect small towns? Experiencing several small shocks within a span of 13 years may have as much impact on the local economy and community quality of life as experiencing one major one. Additionally, communities may experience shocks with both positive and negative impacts. Of the 99 communities studied, 74 (74 percent) experienced one or more economic shocks during the period from 1990 to 2003. While only one shock occurred in 33 percent of communities, 19 percent experienced two shocks, and three or more shocks occurred in 22 percent (see Figure 17). Over half (51 percent) of the communities experienced at least one shock deemed as having a positive impact, while shocks with a negative impact occurred in 36 percent of towns. Similarly, shocks that originated in the community (internal in origin) occurred in about half of the towns, while 44 percent experienced shocks originating outside of the community.

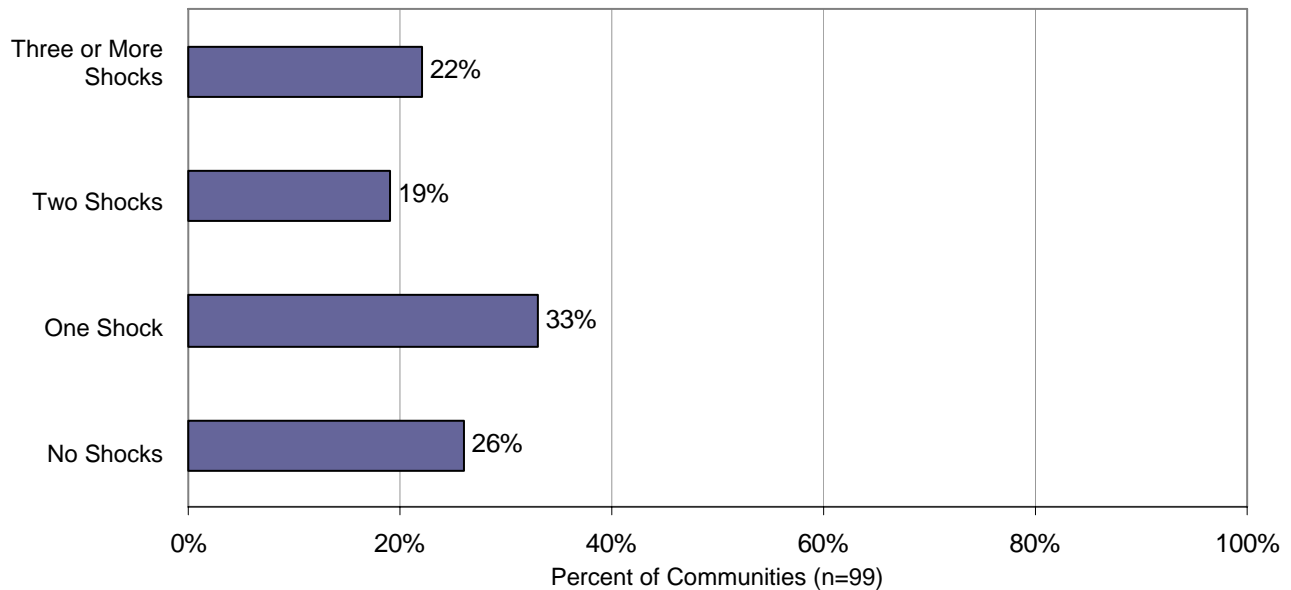


Figure 17: Communities Experiencing Shocks

To take the “summative” impact of multiple shocks into account, we created an indicator of “shock significance” by adding together the significance scores assigned to all the shocks experienced by each town. Significance scores for negative shocks were given a negative sign so that for towns experiencing both positive and negative shocks, we could roughly estimate the net effect of positive and negative shocks. The shock significance scores ranged from -7.2 to 16.9 . Because the significance of individual shocks was scored from 1 to 5, a score of -7.2 indicates a town with at least two negative shocks during the study period. A shock significance score of 16.9 indicates that more than three positive shocks occurred in that town from 1990 to 2003. For the studied communities, 42 percent of shocked towns (31) had a net negative shock significance where the significance of the negative shocks was greater than the significance of the positive shocks. Fifty-eight percent of shocked towns (43) had a net positive shock significance where the significance of the positive shocks was greater than the significance of the negative shocks.

ECONOMIC SHOCKS AS THEY RELATE TO THE SIZE AND LOCATION OF TOWNS

Thus far we have treated all Iowa small towns as if they face the same economic, social, and geographic circumstances. But we know that is not true. For example, at the time of this report, towns in the southeast part of the state do not have access to an interstate highway. Towns in the central portion of the state have access to two interstate highways. This may differentially impact their ability to attract and retain businesses and residents. Small towns in a metropolitan county or adjacent to a metropolitan county may have more opportunities to attract some kinds of businesses but face the loss of retail dollars to the metropolitan area as compared to more remote small towns. Furthermore, towns with less than a thousand residents may face significantly greater challenges in maintaining infrastructure and services than towns of 5,000 to 10,000 in population, creating a downward spiral of economic and population decline for them. In this section of the report, we consider how town size and location in the state are related to economic shocks. Later we will consider how social capital and quality of life are impacted by these factors.

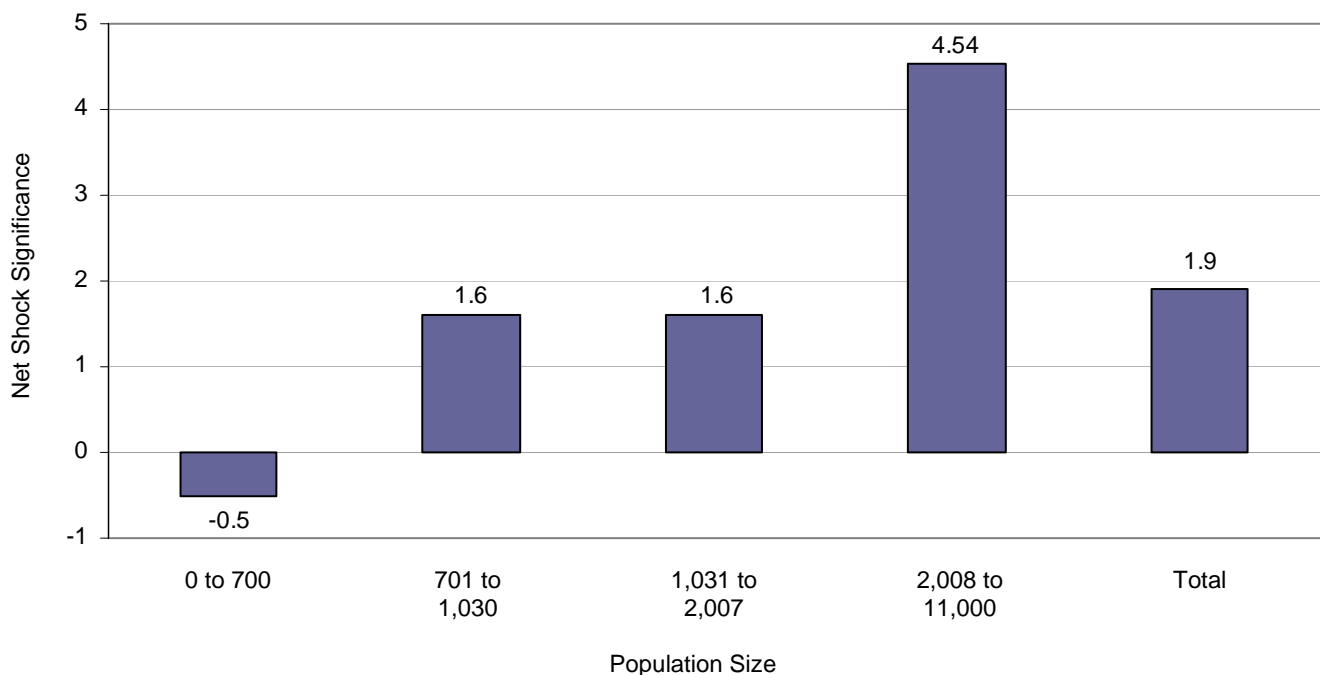


Figure 18: Net Shock Significance and Population Size

Among our group of small towns, the likelihood and significance of shocks was not related to either their closeness to a metropolitan area or where they are located in the state. However, population size was related to shock significance. We divided the 99 towns in our study into quartiles. One fourth of the towns are between 500 and 700 in size, one fourth between 701 and 1,030, and so on. As shown in Figure 18, larger towns had, on average, greater net positive shock significance. Towns with less than 700 in population had a net negative shock significance over the period.

ECONOMIC SHOCKS, SOCIAL CAPITAL, AND QUALITY OF LIFE

Changes in a variety of aspects of quality of life, social capital, and community involvement were addressed previously in this report. For this section, however, combined measures of each are used in order to ease interpretation of the results. Quality of life is measured by residents' evaluations of the overall quality of government services and non-government services, and the proportion of residents who agree that their town has more going for it than other towns of similar size. Social capital is determined by combining questions about the proportion of residents who are known on a first name basis to respondents, the proportion of respondents' friends and family members who live in the community, and the level of trust in the community. Community involvement is measured with two items: the proportion of residents who describe themselves as active in the community and the proportion of residents who reported participating in a community improvement project in the last year. Each of these measures represents the average proportion of positive responses on the questions for the full sample. Values for each range from 0 and 100.

CHANGES IN QUALITY OF LIFE, SOCIAL CAPITAL, AND COMMUNITY INVOLVEMENT, 1994 TO 2004

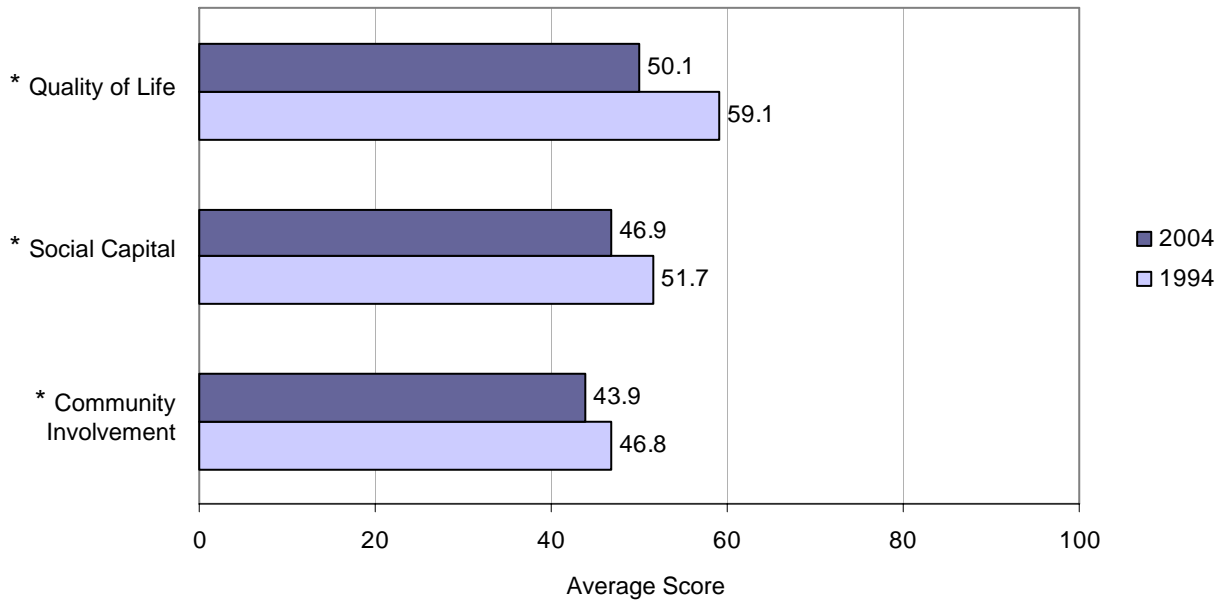


Figure 19: Changes in Level of Quality of Life, Social Capital, and Community Involvement from 1994 to 2004 (n=99)

Figure 19 shows the average levels of quality of life, social capital, and community involvement in 1994 and 2004 for all 99 communities. Community quality of life decreased substantially, from an average of 59.1 in 1994 to 50.1 in 2004. There was also a decline in the level of social capital. Community involvement is down as well, from an average of 46.8 in 1994 to 43.9 in 2004.

While not related to economic shocks, it is interesting to note the impact of town size on the change in community quality of life. All sizes of towns experienced a statistically significant decline in quality of life between 1994 and 2004, but as can be seen in Figure 20, community quality of life in the largest towns declined the least. Furthermore, these towns had the highest quality of life in 2004 compared to smaller towns.

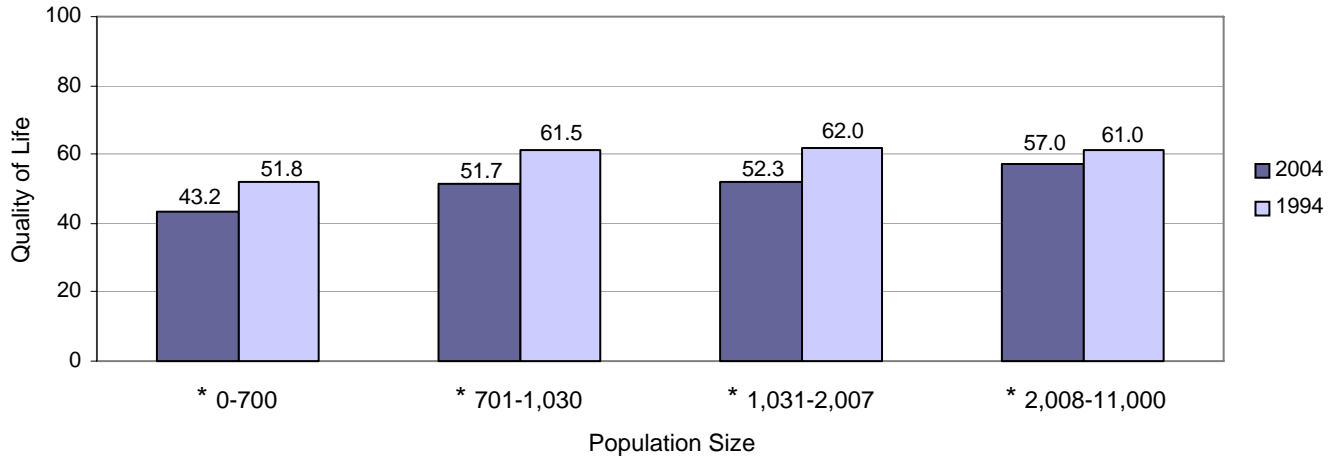


Figure 20: Population Size and Quality of Life, 1994 and 2004.

What role did economic shocks have in influencing changes in local quality of life, social capital, and community involvement? We anticipated that both positive and negative shocks would disrupt relationships in the community. Positive shocks may be associated with the in-migration of new residents, and negative shocks with the loss of residents (who are friends, family members, and neighbors) due to out-migration. The decline in social capital that might come from changes in relationships may be offset for towns with positive shocks by greater optimism and generally greater trust. One would expect that negative shocks would be followed by a decline in community quality of life and positive shocks by an increase in the quality of life. Indeed, our results confirm these expectations.

<p>The more negative shocks a town had:</p> <ul style="list-style-type: none"> • The lower its quality of life in 2004 • The greater its decrease in social capital in 2004 <p>The more positive shocks a town had:</p> <ul style="list-style-type: none"> • The higher its 2004 quality of life • The higher its 2004 social capital 	<p>Towns with positive shock significance scores had:</p> <ul style="list-style-type: none"> • An increase in quality of life in 2004 compared to all other towns • A greater increase in social capital in 2004 compared to all other towns
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Community involvement was not related to the number of shocks, either positive or negative, nor to shock significance. However, towns with greater social capital in 1994 had higher quality of life in 2004 and significantly higher levels of community involvement when compared to other towns.

SUMMARY: ECONOMIC SHOCKS AND QUALITY OF LIFE IN IOWA'S SMALL TOWNS

About three fourths of Iowa's small towns have experienced at least one economic shock between 1990 and 2003. These shocks varied in nature from changes to local businesses to the development of local parks to the 1993 flood. This study highlights that small Iowa towns have experienced more positive shocks than negative shocks. Additionally, positive shocks tended to be initiated by the community, while most negative shocks had external origins. However, we did not examine slow-motion shocks, such as the restructuring of agriculture.

As expected, experiencing a positive economic shock between 1990 and 2003 was followed by an increase in perceived quality of life and social capital in 2004. Negative economic shocks were followed by a decrease in perceived community quality of life in 2004, but no change in the level of social capital in 2004. Towns with negative shocks did experience a significantly greater decrease in social capital compared to other towns. Also, high social capital in 1994 was followed by a better quality of life in 2004.

A quarter of the towns in the study were between 2,000 and 10,000 in population in 1994. These towns fared better in having higher positive shock significance and higher quality of life in 2004 than did smaller towns. The very smallest of the towns, those with fewer than 700 residents, were more likely to have negative shocks, and along with towns with less than 2,008 population, had the greatest decline in quality of life between 1994 and 2004. Truly, the decade of the 1990's was a challenging time for the smallest of Iowa's small towns.

ENDNOTES

¹ Population estimates for 1994 and 2004 are from the following sources:

U.S. Bureau of Census. *Annual Estimates of the Population by Sex, Race, and Hispanic or Latino Origin for States: April 1, 2000 to July 1, 2004.*

U.S. Bureau of Census. *Annual Population Estimates by Age Group and Sex, Selected Years from 1990 to 2000.*

² Racial composition, age, educational attainment, income, unemployment, and poverty data is from the following sources:

U.S. Bureau of Census. *1990 Census of Population and Housing, Summary Tape File 3 (STF 3).* Generated by Monica Whitham using American FactFinder. (September 2005)

U.S. Bureau of Census. *Census 2000, Summary File 3 (SF 3).* Generated by Monica Whitham using American FactFinder. (September 2005).

Copies of reports and other information about this project can be found at the Rural Development Initiative website: <http://www.soc.iastate.edu/rdiweb/>.

APPENDIX

Community	County	1990 Population	1994 Population Estimate	2000 Population	2004 Population Estimate
Afton	Union	953	955	917	887
Agency	Wapello	616	652	622	648
Ainsworth	Washington	506	532	524	542
Albert City	Buena Vista	779	776	709	691
Albia	Monroe	3870	4045	3706	3694
Albion	Marshall	585	572	592	578
Allerton	Wayne	599	595	559	559
Altoona	Polk	7242	7964	10345	12107
Anita	Cass	1068	1087	1049	1173
Atkins	Benton	637	754	977	1202
Audubon	Audubon	2524	2435	2382	2264
Bancroft	Kossuth	857	830	808	771
Batavia	Jefferson	520	570	500	497
Battle Creek	Ida	818	811	743	720
Bayard	Guthrie	511	524	536	534
Bedford	Taylor	1528	1658	1620	1540
Bloomfield	Davis	2580	2649	2601	2604
Buffalo Center	Winnebago	1081	1059	963	910
Calmar	Winneshiek	1026	1033	1058	1069
Center Point	Linn	1693	1810	2007	2177
Chariton	Lucas	4616	4505	4573	4644
Cherokee	Cherokee	6026	5924	5369	5121
Clarence	Cedar	936	923	1008	989
Clarinda	Page	5104	5157	5690	5493
Colo	Story	771	766	868	826
Columbus Junction	Louisa	1616	1790	1900	1888
Corning	Adams	1806	1726	1783	1717
Correctionville	Woodbury	897	937	851	868
Denison	Crawford	6604	6624	7339	7386
Donnellson	Lee	940	967	963	924
Dumont	Butler	705	692	676	655
Eagle Grove	Wright	3671	3638	3712	3521
Elgin	Fayette	637	602	676	653
Elk Horn	Shelby	672	659	649	620

Community	County	1990 Population	1994 Population Estimate	2000 Population	2004 Population Estimate
Elma	Howard	653	651	598	581
Epworth	Dubuque	1303	1393	1428	1602
Estherville	Emmett	6720	6622	6656	6401
Everly	Clay	706	691	647	646
Farmington	Van Buren	655	651	756	729
Fontanelle	Adair	712	834	692	681
Fruitland	Muscatine	511	491	703	873
Garnavillo	Clayton	727	719	754	745
George	Lyon	1066	1102	1051	1025
Gilbertville	Black Hawk	748	756	767	772
Glidden	Carroll	1099	1109	1253	1246
Gowrie	Webster	1028	1000	1038	1056
Graettinger	Palo Alto	813	795	900	875
Grand Mound	Clinton	619	610	676	666
Hamburg	Fremont	1248	1361	1240	1216
Hartford	Warren	768	786	759	762
Hartley	O'Brien	1632	1620	1733	1527
Hills	Johnson	662	693	679	633
Hopkinton	Delaware	695	699	681	660
Hospers	Sioux	643	689	672	674
Humboldt	Humboldt	4438	4508	4452	4367
Jefferson	Greene	4292	4500	4626	4451
Kanawha	Hancock	763	738	739	693
Lake Park	Dickinson	996	973	1023	1016
Lamoni	Decatur	2319	2267	2444	2379
LeClaire	Scott	2734	2888	2847	3054
LeMars	Plymouth	8454	9040	9237	9318
Madrid	Boone	2395	2604	2264	2416
Mapleton	Monona	1294	1337	1416	1256
Mediapolis	Des Moines	1637	1690	1644	1574
Missouri Valley	Harrison	2888	2892	2992	2909
Monroe	Jasper	1739	1750	1808	1836
Montezuma	Poweshiek	1651	1679	1440	1434
Moulton	Appanoose	613	573	658	677
Mount Ayr	Ringgold	1796	1735	1822	1723
Murray	Clarke	731	708	766	788

Community	County	1990 Population	1994 Population Estimate	2000 Population	2004 Population Estimate
Nashua	Chickasaw	1476	1510	1618	1559
Neola	Pottawattamie	909	914	845	834
Nora Springs	Floyd	1505	1494	1532	1483
Northwood	Worth	1940	1988	2050	2016
Olin	Jones	663	669	716	719
Pacific Junction	Mills	548	552	507	511
Pleasantville	Marion	1536	1516	1539	1605
Pocahontas	Pocahontas	2085	2085	1970	1916
Pomeroy	Calhoun	762	761	710	659
Quasqueton	Buchanan	579	628	574	568
Radcliffe	Hardin	574	562	607	580
Sabula	Jackson	710	708	670	672
Sac City	Sac	2516	2424	2368	2210
Saint Ansgar	Mitchell	1063	1184	1031	953
Saint Charles	Madison	537	577	619	671
Sheffield	Franklin	1174	1146	930	1004
Sibley	Osceola	2815	2828	2796	2732
Traer	Tama	1552	1572	1594	1601
University Park	Mahaska	598	580	536	545
Ventura	Cerro Gordo	590	631	670	668
Villisca	Montgomery	1332	1342	1344	1300
Waukon	Allamakee	4019	4498	4131	4056
Waverly	Bremer	8539	8976	8968	9092
Webster City	Hamilton	7894	7816	8176	8105
Wellsburg	Grundy	682	684	716	689
What Cheer	Keokuk	762	721	678	662
Williamsburg	Iowa	2174	2305	2622	2727
Winfield	Henry	1051	1088	1131	1121
Woodward	Dallas	1197	1219	1200	1271