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conducted in the
Department of Geography
College of Earth and Mineral Sciences

A REPORT ON
ANTHRACITE OPEN PIT MINING

— A FEASIBILITY STUDY —

PART VII

**A PRELIMINARY COMMUNITY ATTITUDE SURVEY
IN THE MIDDLE ANTHRACITE REGION**

Report Exhibit No. 7

by

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I. INTRODUCTION

In an effort to determine opinions and attitudes toward mining and mining companies one hundred forty-nine interviews were conducted during the Summer of 1974 in three communities in Schuylkill County, Pennsylvania. Each of these communities are underlain by significant quantities of coal and all of the communities were "mining towns" in the late 19th and early 20th century associated with the deep mining of anthracite coal. At the present time only a very small proportion of the residents of these communities work for, or are associated with, mining companies. The amount of strip mining currently being undertaken, as well as the potential disruption to these communities if strip mining is increased, were the principal criteria for community selection.

Community I, Arnot's Addition, is a small town of approximately 100 households that is adjacent to a large open pit coal mining operation. This open pit is approximately 400 feet deep and one mile long with coal being mined from it for the past 15 years. Very few people in the community work for the mining operation although many residents worked for deep mine operations in the past. The majority of the people in the community are first and second generation ethnics from eastern Europe. Although the town is underlain by rather extensive coal seams there is little likelihood that it would be relocated in order to mine the coal.

Community II, Girardville, is the largest of the three towns with approximately 600 households. Although there is extensive evidence of deep mining around the town very little strip mining has taken place. The valley in which Community II is found is underlain by a very rich coal bearing seam and if extensive strip mining were to take place the town would likely be relocated in order to mine the coal. Therefore,

unlike Community I, there is a possibility that the town would be relocated. Also, the residents of Community II have not had as much experience with strip mining as those of Community I. The population of this town is also primarily composed of first and second generation eastern Europeans.

Community III, Heckscherville, is a town of approximately 100 households and is found in a valley that has experienced considerable deep and strip mining. Most of the inhabitants of the town are of Scottish and Irish descent. The principal reason for selecting this town is that it is owned by a coal company and within the next five years could be replaced by a strip mine.

II. QUESTIONNAIRE DESIGN

The questionnaire was administered to 149 residents of the selected communities. This included 21 interviews in Community I (Arnot's Addition), 108 interviews in Community II (Girardville) and 20 interviews in Community III (Heckscherville). The sample constituted approximately 15 percent of the households in each community. The interviews were conducted by five undergraduate students from Penn State. The students lived in the communities for approximately one month while conducting the interviews. Potential interviewees were randomly selected from telephone listings, and were contacted by phone for an appointment to undertake the interview.

The questionnaire was five pages long (see Appendix A) and took about one hour each to administer to the residents of the communities. The questionnaire was composed of a wide variety of question types including Guttman scaled responses and open ended questions.

The questionnaire was divided into four major categories of questions. The first section dealt with a variety of questions concerning the community. The purpose of this section of the questionnaire was to find out the attitudes of the residents towards the community in which they lived. The second section of the questions dealt with residents' knowledge and opinions about mining. This section included a wide variety of questions trying to ascertain how the residents felt about mining and coal companies. The third section dealt with residents' knowledge and opinions of reclamation. A variety of questions was asked dealing with the residents' experience with reclamation schemes and how they viewed the success or failure of these schemes. The final section of the questionnaire dealt with the residents' opinions of relocation. If there is to be a significant increase in the scale and amount of strip mining it will probably involve relocation of people.

The questionnaire therefore solicited a great variety of attitudes and opinions. The major sections of the questionnaire (Community, Mining, Reclamation, Relocation) were concerned with topics that are extremely important areas if there is to be an increase in the amount of strip mining in the Anthracite region. The questionnaire thus tried to assess attitudes and opinions so decision makers would have a better understanding of the inhabitants of these communities and how a decision to increase the amount of strip mining would be received. The following sections of this report will give the results of the questionnaire analysis.

III. ATTITUDES TOWARD COMMUNITY

In order to ascertain the social impact of a proposed mining scheme it is necessary to see how residents of the affected community feel about their community. To the outsider, particularly people who have not spent

a lot of time in the Anthracite region, it might appear that the communities are run down with poor housing and an unattractive physical environment. However, what is important is how the people of the community evaluate their community. This section of the report deals with an analysis of how residents answered several questions concerned with community attitudes and ties.

In response to the first question: "How do you like this community?", there was a varied response. The overwhelming majority, however, 77.9 percent, believed that their community was a good place to live. Only 8.1 percent felt that their community was a bad place to live and 12.9 percent had mixed feelings about their community.

One of the reasons for this apparent high regard for their community may be that most of the residents had lived in the community for a long period of time and most of their friends and relatives also lived in the community. Table 1 gives the amount of time the residents had lived in

TABLE 1

Length of Residence

<u>Number of years</u>	<u>Percent of residents</u>
0-10	8.3
11-30	25.8
31-60	45.9
61 and over	20.0

their respective communities. As is obvious from Table 1 most of the residents of the communities had lived there for a long period of time.

A contingency table linking length of residence to opinion of the community (Table 2) indicates a weak relationship as suggested. However, the table does not indicate a statistically significant relationship.

In response to a question asking whether the residents intended to live the rest of their life in the community, 71.9 percent said yes, 12.2 percent said no and 15.8 percent were not sure. Another question asked the residents where most of their friends lived. Almost 82 percent said most of their friends lived in the same town; 9 percent said most of their friends lived outside the area. There is a moderately significant relationship between these variables (Table 3).

TABLE 2

Community Opinion and Residence

Like Community?

		No	Mixed	Yes	
Length of Residence in Community (Years)	0-10	1	0	9	
	11-30	6	2	21	Chi Square = 11.0980
	31-60	1	9	45	6 Degrees of Freedom
	60+	3	2	19	Significance Level = 0.10

TABLE 3

Commitment to Community and Location of Friends

Where do friends live?

		<u>Same town</u>	<u>In the area</u>	<u>Outside the area</u>	
Are you here for life?	Yes	10	2	5	Chi Square = 10.0894 4 Degrees of Freedom Significance Level = 0.05
	Uncertain	17	3	1	
	No	83	8	7	

Another question dealing with community attitudes asked whether the residents would like their children to live in the same town. In response to that question 52.1 percent said yes, 23.9 percent said no, and 23.9 percent said it would be up to the children if they wanted to live there. There is a strong and statistically significant relationship between opinion of community and desired location of children (Table 4). Those who felt positively about the community felt more positive about having their children remain in the community.

TABLE 4

Community Opinion and Children's Location

		Like Community?			
		No	Mixed	Yes	
Want children to leave here?	No	9	8	10	Chi Square = 45.9759 4 Degrees of Freedom Significance Level = 0.005
	Mixed	1	5	29	
	Yes	0	2	58	

From the foregoing data it appears that most of the residents in the communities have strong ties to their community. They like it where they live and most of their friends live in the same town. The majority of residents also would like their children to live in the same community.

In order to determine what features of the community were liked or disliked by the residents, a series of questions were asked. Table 5 gives the responses to a question which asked: "What are some of the good things about living here?" It is apparent from Table 5 that the major attraction of these communities is their social atmosphere. Surprisingly, the physical environment also ranks very high among attractions. To the outsider, this would seem strange in light of the fact that much mining

TABLE 5

Good Aspects of the Community

<u>Response</u>	<u>Percent of Responses</u>
Social Atmosphere	51.9
Physical Environment	14.3
Safe Place to Live	10.0
Economic Situation	6.9
Nothing	6.0
Good Facilities	5.6
Miscellaneous	5.2

has taken place around these communities and they do not seem to be particularly attractive environments. The safety of the communities seems to be another important attribute.

Another question asked the residents what the bad things were about their community. The responses to this question appear in Table 6. These

TABLE 6

Bad Features of the Community

<u>Response</u>	<u>Percent of Responses</u>
No jobs	29.0
Lack of facilities	24.5
Poor water	14.3
Mining damage	13.4
Negative attitudes	7.1
Nothing	7.1
Miscellaneous	4.5

data show a wide variety of negative aspects of the communities; however, many of these negative aspects can be directly related to mining activities. The "poor water" is primarily due to acid mine drainage from previous mining operations. The "mining damage" is obviously a direct result of mining activities. The lack of jobs and facilities seem to be more economic in nature. Strangely enough, it would seem that if mining activities increased, they would help solve the problem of unemployment and would bring revenue into the communities to provide more facilities. On the one hand, community residents contribute many of their problems to mining operations; on the other hand, increased mining operations could help solve other problems.

A further question asked residents was what could be done to make things better in their community. The responses to this question appear in Table 7. The responses in Table 7 are very similar to Table 6 with

TABLE 7

How to Improve the Community

<u>Response</u>	<u>Percent of Responses</u>
New jobs	31.3
Upgrade facilities	28.9
Improve physical environment	17.6
Don't know	5.7
Political changes	4.5
Miscellaneous	11.9

the largest percent of responses aimed at providing employment and upgrading facilities. Also, improvement of the physical environment was a fairly high priority of the residents.

In order to summarize attitudes toward the community, a Guttman scale was constructed and residents had to make one choice from amongst seven alternatives. The question given the residents was: "Overall, how would you describe living in this community?" The respondent had seven choices as indicated in Table 8.

TABLE 8

<u>Description of the Community</u>	
<u>Response</u>	<u>Percent of Responses</u>
Very Bad	4.1
Bad	4.8
Moderately Bad	7.5
Neutral	6.2
Moderately Good	19.2
Good	35.6
Very Good	22.6

In summary, the overwhelming majority of residents of the communities felt that their community was a good place to live. According to Table 8, only 16.4 percent of the respondents had an overall negative rating of their community. Although many residents felt their community had several problems, they still had positive assessments of their community. It appears from the foregoing data that if mining operations are to be expanded, this expansion will affect community structures and systems and most likely a sizeable portion of residents will not want their community disrupted.

Although only three communities were selected for analysis, these communities may be representative of much of the Anthracite region. The

social and economic structure of the chosen communities is very similar to that of many other communities in the Anthracite region. Thus, this study may give an indication of the community attitudes of many residents of the region.

IV. ATTITUDES TOWARD MINING

The second section of the questionnaire dealt with the attitudes of residents toward mining operations and mining companies. A variety of questions dealt with the problems caused by mining, knowledge and opinion of strip mining, and the good and bad aspects of strip mining.

Because all of the selected communities had a long history of mining activities, the first question asked of residents was: "Has mining helped or hurt this town?" The largest percentage, 43.8 percent said mining had helped the people whereas 27.0 percent said that mining had both positive and negative aspects. The responses to this question seem to indicate an overall positive attitude toward the past experience of residents with mining operations.

Another question asked residents what kinds of problems had mining caused. The answers to this question appear in Table 9. Analysis of Table 9 points out a broad variety of ways in which local mining had caused problems. Blasting and the dangers involved in mining activities appear to be the most important problems although water problems, aesthetic considerations and social and economic exploitation also appear to be important. The answers in Table 9 reflect how local mining activities have caused problems.

In order to get at a more individual level, residents were asked if local mining had caused them any problems personally. In answer to that

TABLE 9
Mining Problems

<u>Response</u>	<u>Percent of Responses</u>
Blasting	14.4
Health and safety	13.7
Water problems	12.9
View destroyed	11.8
Air and noise pollution	11.0
Social and economic exploitation	10.3
Subsidence	9.5
Open pits	8.4
No problems	8.4

question 55.8 percent said no and 44.2 percent said yes. Thus, it appears from the data that, although a great many problems have been associated with mining activities, less than one-half of the residents have actually had personal problems because of this activity.

A further question asked residents if they ever complained to anyone about the adverse effects of mining activities. Only 10.2 percent of the residents said that they had actually complained to a public or private organization about the mining activities. Of those who complained, 76.9 percent said their complaint was to a coal company and 23.1 percent said they made their complaint to a government agency. An analysis of the reasons for the complaint reveal that 66.7 percent of the complaints were because of blasting, 20.0 percent of the complaints were because of dust generated from trucks and the remaining 13.3 percent of the complaints dealt with the adverse effects of falling rocks.

It appears from the preceding data that although a great many people were aware of problems associated with coal mining, less than half of the people felt that they had been affected personally by mining operations. Of those affected personally, only 10 percent had actually registered a complaint to a coal company or a government agency.

Another question asked residents what they thought could be done to solve the problems associated with coal mining. The answers to that question appear in Table 10. Table 10 indicates that the largest group of residents either don't know what can be done or are so pessimistic that they feel nothing can be done. Another large percentage feel that backfilling and reclamation of mine land would be of considerable help. A smaller group felt that more strict regulations and enforcement of regulations is the answer.

TABLE 10

How to Solve Mining Problems

<u>Response</u>	<u>Percent of Responses</u>
Don't know	27.4
Nothing can be done	14.5
Backfill	25.0
Reclaim land	18.5
Strict legal enforcement and restrictions	10.5
Stop blasting	10.5

Another section of the questionnaire dealt with residents' knowledge of, and opinion about, strip mining activities. Of all the residents interviewed, 75.0 percent said they had seen strip mining activity. A question asked residents if strip mining should be done in their area.

The results from that question appear in Table 11. Table 11 points out that about one-third of the residents are opposed to strip mining in their area. However, the majority would not object to strip mining if it was necessary, and if there was proper reclamation of the land after mining operations.

TABLE 11

Should There be Strip Mining in Your Area?

<u>Response</u>	<u>Percent of Responses</u>
Yes	39.4
No	33.3
Yes, if there is reclamation	12.1
Yes, if necessary	12.2
Don't know	3.0

A further question very similar to the one in Table 11 asked residents where they thought strip mining ought to be done. The answers to that question appear in Table 12. A comparison of Tables 11 and 12 reveals

TABLE 12

Where Strip Mining Should Take Place

<u>Response</u>	<u>Percent of Responses</u>
Wherever the coal is	38.5
Don't know	16.5
Nowhere	15.6
Anywhere if reclaimed	13.8
In low impact areas	11.1
Anywhere but here	1.8
Miscellaneous	2.8

some interesting perceptions. Although one-third of the residents felt that there shouldn't be any coal mining in their area, considerably less than one-third, 15.6 percent (Table 12) said there shouldn't be strip mining anywhere. It appears that a large portion of the residents will not allow mining in their area but are willing to allow mining elsewhere; although a sizeable percentage of residents are willing to have strip mining in areas of low impact or where proper reclamation techniques are practiced.

The residents of the communities were asked what they thought the benefits from strip mining were. The results of that question appear in Table 13. Analysis of Table 13 shows that the largest benefit perceived by the residents is in employment. The need for fuel and the fact that

TABLE 13

Benefits of Strip Mining

Employment	30.2
Need fuel	25.7
Cheapest and most efficient mining method	13.4
No benefits	10.4
Safer than deep mining	9.4
Don't know	5.4
Miscellaneous	5.4

strip mining is the cheapest and most efficient method of mining was also rated as important. The safety of strip mining was also perceived as an important benefit of that form of mining activity.

The negative aspects of strip mining were also ascertained in the questionnaire. A question was included in the questionnaire that asked the residents to state the bad things about strip mining. The results of that question appear in Table 14. It appears from Table 14 that aesthetic factors are perceived as the worst aspect of strip mining with the danger involved with open strip pits of secondary importance. Environmental deterioration as a result of strip mining was another important factor as well as the negative aspects of blasting. A small percentage of residents, 5 percent, felt that the social and economic decay after mining operations ceased was an important factor.

TABLE 14

Bad Things about Strip Mining

Ugly landscape	37.2
Holes are dangerous	23.4
Pollution	14.2
Blasting	11.5
Nothing bad	6.0
Social and economic decay	5.0
Don't know	2.8

Two further questions asked the residents dealt with their experience with coal companies and their opinion of coal companies. Residents were asked if any member of their family had ever worked for a coal company. The overwhelming majority of residents, 91.9 percent, had worked for the coal companies themselves or had a member of their family work for a coal company. The residents of the communities, therefore, had considerable

experience with coal companies. The second question asked residents their opinion of coal companies. The results of that question appear in Table 15. The results in Table 15 show that the largest number of residents had negative opinions of coal companies. Many residents felt that the coal companies were exploitative and powerful as well as being corrupt.

TABLE 15

Opinion of Coal Companies

<u>Response</u>	<u>Percent of Responses</u>
No opinion	17.6
Negative	42.2
Positive	21.9
Neutral	18.3

A smaller percentage of residents felt the coal companies were fair in their dealings. A sizeable proportion of residents either stated no opinion of coal companies or had neutral attitudes.

In order to summarize residents' opinions of strip mining, a Guttman scaled question was asked to the residents where they had to make one choice from among seven alternatives. The question asked the residents was: "Overall, what is your opinion of strip mining?" The respondents' choices are indicated in Table 16. An analysis of Table 16 shows that the largest number of residents have neutral attitudes toward strip mining; however, a sizeable percentage of respondents, 37.6 percent, had negative opinions of strip mining and 22.9 percent had positive attitudes.

Assembling several categories for analysis, there is a strong, statistically significant relationship between opinions of coal companies and

TABLE 16

Overall Opinion of Strip Mining

<u>Response</u>	<u>Percent of Responses</u>
Very bad	14.2
Bad	14.2
Moderately bad	9.2
Neutral	39.0
Moderately good	13.5
Good	8.7
Very good	0.7

opinions of strip mining (Table 17). Those who dislike and distrust coal companies also feel negatively about surface mining.

TABLE 17

Opinion of Coal Companies and Strip Mining

Strip Mining is . . .

		<u>Bad</u>	<u>Neutral</u>	<u>Good</u>	Chi Square = 18.4986 4 Degrees of Freedom Significance Level = 0.005
Attitude toward coal companies	Negative	32	20	6	
	Neutral	13	9	13	
	Positive	5	13	12	

Analysis of this section deals with attitudes toward strip mining and mining companies. A large percentage had neutral attitudes although a sizeable proportion of residents had decidedly negative opinions of strip mining operations and mining companies.

V. ATTITUDES TOWARD RECLAMATION

The third section of the questionnaire was concerned with residents' attitudes toward reclamation. A series of questions was asked dealing

with residents' knowledge of reclamation schemes and legal requirements for reclamation in the community. In the previous section on attitudes toward mining, a significant number of residents felt mining would be more tolerable if proper reclamation was undertaken. This section, therefore, explores the knowledge of, and attitudes toward, reclamation.

A majority of the residents, 56.4 percent, said they were familiar with strip mine reclamation laws. However, a majority of the residents, 53.2 percent, said that the laws were not accomplishing anything. A smaller number, 29.4 percent, of the residents felt that reclamation laws were bringing about an improvement in reclamation practices. Only 17.4 percent didn't know how valuable reclamation laws were.

Another question asked the residents dealt with whether or not they thought anyone was legally required to reclaim land after it had been stripped. The majority, 62.3 percent, felt that the law legally required reclamation after strip mining. Several residents, 28.8 percent, didn't know and 8.9 percent thought no one was required by law to reclaim land after mining.

Residents were also asked who they thought should pay for the reclamation work. An overwhelming number of residents, 91.1 percent, felt the coal companies should pay for the reclamation work. A few residents, 3.4 percent, said the government should pay, even fewer residents, 2.1 percent, said both the coal companies and the government should pay.

Another question asked what type of reclamation activity should be undertaken. The results of that question appear in Table 18. It appears from Table 18 that most of the residents would like to see backfilling of mined areas as well as replanting of vegetation. A small percentage, 17.6 percent, felt the land should be returned to its original condition prior to mining activity.

TABLE 18

Type of Reclamation

<u>Response</u>	<u>Percent of Responses</u>
Backfill	50.3
Replant	25.6
Return to original condition	17.6
Build safety fences	3.0
Miscellaneous	3.5

Residents were also asked if they had ever seen any reclamation in their area. The majority, 63.7 percent, had not seen any reclamation in their area. The remaining residents, 36.3 percent, said they had seen reclamation in their area. A similar question asked residents how much faith they had in the agencies, government or private, who have promised to do land reclamation. Survey results show that 41 percent had no faith at all, 45.9 percent said they had very little faith, 8.3 percent said they had faith in the agencies, and 4.9 percent were not sure. These data seem to indicate that residents of the communities have very little or no faith that reclamation will be undertaken.

The residents were also asked how they felt reclamation would improve life in their community. The results of that question appear in Table 19.

The principle benefit to communities would be aesthetic in nature, although many residents felt reclamation would enhance development prospects as well as reduce environmental damage and make the communities a safer place to live. A substantial number of residents, 21.2 percent, felt reclamation would have no significant effect on the community.

TABLE 19

How Reclamation Would Improve the Community

<u>Response</u>	<u>Percent of Responses</u>
Beautify community	37.6
Make no difference	21.2
Reduce environmental damage	14.4
Safety	13.5
Enhance development prospects	12.9

In order to sum up opinions about reclamation, another Guttman scale item was used. The residents had to choose one of seven alternatives in regard to the question: "Overall, what is your opinion of strip mine land reclamation in this area?" The answers to that question appear in Table 20.

TABLE 20

Overall Opinion of Strip Mine Reclamation

<u>Response</u>	<u>Percent of Responses</u>
Very bad	28.0
Bad	24.5
Moderately bad	8.4
Neutral	16.1
Moderately good	12.6
Good	6.3
Very good	4.2

In summary, it appears that most of the residents have a very low regard for the reclamation efforts that have been undertaken. Most residents are aware of reclamation schemes and reclamation laws, but in general don't have much faith in the agencies or firms that implement reclamation.

The overwhelming majority of residents feel that coal companies should pay reclamation costs. Also, most residents feel reclamation would have a positive effect on their community.

VI. ATTITUDES TOWARD RELOCATION

The final section of the questionnaire dealt with residents' attitudes toward relocation. If mining activity is to be increased it could involve relocation of people. Either individual families, or in some cases perhaps whole communities, could be relocated. A series of questions was asked concerning relocation in order to see how the residents felt about relocation and how likely they thought it would be that they would be relocated due to strip mining activities.

In response to a question asking the residents if they knew about anybody who had been relocated because of strip mining operations, 52.8 percent said yes and 47.2 percent said no. Another question asked residents what they would do if there were plans to have them relocated. The majority of respondents, 43.7 percent, said they would move whereas 35.9 percent said they would resist attempts to have them relocated. The remaining 20.3 percent said they were not sure what they would do. Therefore, it appears from the above data that a significant proportion of residents would resist relocation efforts.

Another question asked residents if there were any local organizations that would help them resist relocation efforts. Most residents, 61.9 percent said there were no local organizations, 7.5 percent said there were organizations to help residents resist relocation efforts. A significant number of residents, 18.4 percent, did not know if there were any organizations and another 12.2 percent of the residents felt organizations would quickly form if there were plans for relocation by mining companies.

Residents were also asked if they thought coal companies could forcibly relocate them. The largest number of residents, 73.9 percent, felt they could be forced to relocate while only 15.9 percent said they could not be forced to relocate. The remaining residents, 10.2 percent, were not sure if they could be forced to move.

The residents were also asked if they thought there was coal under their property and who owned the coal. All of the selected communities are underlain by coal deposits; however, 7.9 percent of the residents said there was no coal under their property and 12.2 percent did not know. In response to the question on who owns the mineral rights, 43.4 percent did not know for certain who owned the mineral rights. Answers to the above questions were surprising in light of the fact that most of the residents had lived in the communities for a long period of time and had been associated with coal companies. The answers were particularly surprising because 86.0 percent of the residents owned their homes. One would think home owners would be more cognizant of mineral rights and whether there was coal under their property.

Residents were also asked how they thought their friends and relatives felt about relocation due to strip mining. Answers to the above question appear in Table 21. Answers in Table 21 seem to indicate that most residents think their friends and relatives would have a negative response to relocation.

TABLE 21

How Friends and Relatives Feel About Relocation

<u>Response</u>	<u>Percent of Responses</u>
Very Bad	63.2
Can't fight it	13.2
Neutral	10.3
Good for some	6.6
OK if compensated	6.6

In order to ascertain the kinds of problems that would be confronted by residents if they were forced to move, a question to that effect was asked of the residents. The results of that question appear in Table 22.

TABLE 22

Problems from Relocation

<u>Response</u>	<u>Percent of Responses</u>
Getting adjusted to a new place	23.2
Finding a new house	22.1
No problems	22.1
Financial cost	12.2
Getting a new job	8.3
Too old to move	6.0
Emotional adjustment	6.0

It appears from Table 22 that getting adjusted to a new place and finding another home are the most significant problems associated by residents with relocation. Several residents felt their age would be an important factor in relocation as well as emotional adjustment problems. A sizeable proportion of residents, 22.1 percent, felt there would not be any problems.

Residents were also asked where they would go if they had to relocate. The largest number of residents, 44.4 percent, did not know where they would go; 21.1 percent of the residents said they would stay in the area with 19.5 percent saying they would move to an urban or suburban area and the remaining 15.0 percent indicated that they would move to a rural small town.

Another question asked the residents was: "If the entire community was forced to move, would you rather relocate to the new community or relocate by yourself? Responses to the question were rather interesting.

Most residents, 48.2 percent, would rather relocate by themselves. Quite a few residents, 33.1 percent, would elect to move with the community. About 18 percent of the residents were undecided as to which course of action they would prefer.

In order to determine what the residents felt the likelihood of forced relocation was, a Guttman scaled question was asked of the residents. The results of that question appear in Table 23. Most of the residents either feel there is little likelihood of being forced to relocate, or they do not know what the likelihood of forced relocation is.

TABLE 23

How Likely is Forced Relocation?

<u>Response</u>	<u>Percent of Responses</u>
Very unlikely	24.1
Unlikely	23.4
Moderately unlikely	6.9
Don't know	29.0
Moderately likely	6.9
Likely	5.5
Very likely	4.1

In order to summarize attitudes toward relocation, a final question was asked ascertaining their overall opinion of relocation from strip mining. The results of that question appear in Table 24. Responses in Table 24 point out the fact that most residents have negative attitudes toward relocation although 42.9 percent have neutral or positive attitudes.

In summary, it appears from the foregoing analysis that relocation is an important aspect of increased strip mining activities. Many residents are concerned with relocation and feel it would be disruptive to their family and community.

TABLE 24

Overall Opinion of Relocation

Very bad	20.0
Bad	25.0
Moderately bad	12.1
Neutral	21.4
Moderately good	9.3
Good	7.9
Very good	4.3

APPENDIX A
QUESTIONNAIRE

COMMUNITY

1. How do you like this community? Do you believe it is a good place to live?
2. Has your family lived in this area a long time?
3.
 - a. Do you intend to live here for the rest of your life?
 - b. Would you like your children to live here?
 - c. Where do most of your friends live?
4.
 - a. What are some of the good things about living here?
 - b. What are some of the bad things about living here?
 - c. Are things getting better or worse around here? Why?
 - d. What could be done to make things better here?
 - e. If we made those improvements (above), how would you feel about living here then?
5.
 - a. Do you think life would be better someplace else? Would you like to move?
 - b. Where would you rather live?
 - c. What would it take to get you to move from here? Under what conditions would you move away from here?
6. Overall, how would you describe living in this community?

<u>very bad</u>	<u>bad</u>	<u>moderately bad</u>	<u>neutral</u>	<u>moderately good</u>	<u>good</u>	<u>very good</u>
1	2	3	4	5	6	7

MINING

7. a. Has mining helped or hurt this town?

b. What are some of the problems that local mining has caused?

c. Has local mining ever caused you any problems personally?

d. Have you ever complained about a mining operation? About what?
To whom?

e. What do you think should be done to solve mining problems locally?
8. a. Has the area around here ever been strip mined that you know of?

b. Have you ever seen strip mining going on?

c. What do you think about strip mining? Do you think it is necessary?

d. Do you think they should strip mine around here?

e. Where do you think they ought to strip mine?

f. Do you know of any anti-strip mining organizations? Which group?
What do you think about them?

g. Would you contribute money to this group? How much?

h. What would you do if they wanted to strip mine in this area?
9. a. What do you think are some of the benefits that come from strip mining?

b. What are some of the bad things about strip mining?

10. a. Has anyone in your family ever worked for a coal company?

b. How do you feel about coal companies? What is your opinion of them?

11. Overall, what is your opinion of strip mining?

<u>very bad</u>	<u>bad</u>	<u>moderately bad</u>	<u>neutral</u>	<u>moderately good</u>	<u>good</u>	<u>very good</u>
1	2	3	4	5	6	7

RECLAMATION

12. a. Are you familiar with new programs of strip mine land reclamation?

b. What do you think these land reclamation programs will accomplish?

c. Do you think anyone is legally required to reclaim land after it has been stripped?

13. a. In your opinion, who should be responsible for land reclamation work?

b. What do you think they should do?

c. Have you heard of any land reclamation work being done in this area?

d. Have you ever seen any land reclamation in this area? What was done?

e. How much faith do you have in the agencies which have promised to do land reclamation?

f. How would land reclamation improve life in this community?

14. Overall, what is your opinion of strip mine land reclamation in this area?

<u>very bad</u>	<u>bad</u>	<u>moderately bad</u>	<u>neutral</u>	<u>moderately good</u>	<u>good</u>	<u>very good</u>
1	2	3	4	5	6	7

RELOCATION

15. a. Do you know anybody in this area who has had to move because of strip mining? How do you feel about it?

b. Suppose you heard that they were planning to strip mine this area and were planning to move this town and your house. How would you feel about that?

c. Would you move? Would you resist? Where would you like to go?

d. Are there any local organizations which would help you resist? Would you join them? Contribute money to them?

16. a. Can you be forced to relocate?

b. Who owns the mineral rights here? Is there coal under this place? Do you own or rent your house?

17. How do you think your friends and relatives feel about relocation due to strip mining?

18. a. Assume that you are not given any choice, you are forced to move because of strip mining. What kinds of problems do you think this relocation would cause you?
- b. Who do you think should pay for the move?
- c. Where would you go?
- d. If the entire community was forced to move would you rather relocate to the new community or relocate at a location by yourself?
19. How likely is it that you will be forced to move out of this community because of strip mining?

<u>Very</u> <u>unlikely</u>	<u>unlikely</u>	<u>moderately</u> <u>unlikely</u>	<u>don't know</u>	<u>moderately</u> <u>likely</u>	<u>likely</u>	<u>very</u> <u>likely</u>
1	2	3	4	5	6	7

20. Why did you pick the above answer?

21. Overall, what is your opinion of relocation due to strip mining?

<u>very</u> <u>bad</u>	<u>bad</u>	<u>moderately</u> <u>bad</u>	<u>neutral</u>	<u>moderately</u> <u>good</u>	<u>good</u>	<u>very</u> <u>good</u>
1	2	3	4	5	6	7

SPECIAL RESEARCH REPORTS

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