Application of a social value survey to the design of an economic development strategy.

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THE APPLICATION OF A SOCIAL VALUE SURVEY
TO THE DESIGN OF AN
ECONOMIC DEVELOPMENT STRATEGY

by

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Mark Mackin
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CHAPTER 1 INTRODUCTION

This paper is an exploration of the use of a methodology, the value survey, to gather information for economic development purposes. A value survey was designed and used in a preliminary study. An analysis of the study area, Jefferson County, was completed to provide a background, and factual data, and keep the strategy as closely related to the concerns, needs and limits of the study area as possible. The tentative data from the preliminary study was applied to the development strategy as if it were a full-scale study and recommendations were derived from this information. The usefulness of the value survey method and its application were then evaluated for economic development purposes.

The reader is forewarned that the results of the survey, though suggestive, are tentative. The number of respondents to this survey is a fraction of the accepted minimum sample required to provide reliable information about the population involved. Also, the respondents, particularly those returning the mail questionnaire, are not a statistically representative cross-section of the county population. The purpose of gathering this limited amount of information was to provide genuine experience in collecting the information and merging it with conventional development study information.

For the purposes of this study, a value survey is a poll taken to determine the value preferences of a specific population. In this case, the values of interest are those concerning the "good life" in terms that relate to economic development strategy directions. In essence, this is an attempt to interpret a general, unique concept of the good life in empirical terms.

The need for the investigation of this method arises because economic development is such a subjective area of human activity. At the same time, economic development is perceived by the public and treated by
decision makers as if it were an objective phenomenon that only requires proper economic technique to get the desired result.¹

The direction, strategy or vision of development is swamped in proposals and counter-proposals for tax incentives, tax abatements, changes in law to favor this or that reduction, or changes in regulations, and a multitude of very definite proposals, all promising utopian results. However, the character of the utopia is rarely clearly stated. If any concrete vision of strategy is mentioned as the guiding principle, it is usually "growth".

Growth and its corollary, "jobs", are the central metaphors for the narrow range of unspoken values that define economic development in Montana. The wider range of social values such as a clean environment, social cohesion, cultural identity and quality of work life are usually ignored or given short shrift.

This paper suggests using the value survey or some value-based approach to help bring all the other values back into the debate. In addition, by examining the value preferences of the community a more efficient use of economic development efforts may be made.

Another reason to use this method is to provide a check on other information-gathering methods such as hearings. Hearings provide a forum for individuals and groups to speak out on specifics and publicly declare a position. However, only a minority of the electorate can be accommodated at hearings and testimony is usually given by representatives of groups with a direct interest in the decision. It is risky to assume that the values of the community have been comprehensively and accurately expressed. Also, since people tend to take hardened positions at hearings and the procedure allows for little give and take or dialogue, it is one of the poorest mediums to use to develop a comprehensive strategy. In a recent article, Dan Kemmis noted that people can use hearings to block action or negate an initiative but not to get agreement or get things done.² The place to
initiate a dialogue, examine the problem and design strategy is well
before the final hearings when it is easier to change minds and
attitudes and before public positions have been established by the
various actors.

There is room to question the need for a value survey (or any survey)
in a representative democracy. From this point of view, any survey is
redundant at best, and at worst implies a failure of representative
democracy. Since representative democracy is designed to keep the
people at arms length from decision-making, polling of the people in
between elections is an intrusion on representative democracy. The
implication, then, is that representative democracy does not work or is
not working well at this time.

However, most economic development organizations are only indirectly
influenced by the democratic element of the political structure and few
provide voice or access to the community at large. Many times citizens
learn of a project only once it has begun, a poor position from which
to oppose or change the strategy. Even where development is managed by
the political structure itself it is far removed from the electorate,
dominated by the interest groups that are normally influential in this
environment, and often narrowly managed by a professional elite.3

Of course, why should policy makers care what the public thinks if
the policy makers believe that public input is a waste of time, will
make no difference, and may interfere with development? More
participation by all the parties concerned with an outcome may lead to
a greater degree of success in that outcome. For example, business
writers Thomas Peters and Robert Waterman demonstrated that the
companies that did well over a long period were those that listened
closely to their customers and actively recruited their ideas in
product and service development.4 Conversely, Alvin Toffler made the
point in Future Shock that in a complex system it becomes very easy for
one small segment of that system to bring it to a halt.5 In a modern
industrial society, the determined opposition of a small minority can
often halt or indefinitely delay projects of great magnitude. For a concrete example of this see Powerline, The First Battle of America's Energy War, by Barry Casper and Paul Wellstone.

This value survey method may also help to democratize and popularize the idea and practice of economic development. In looking at the idea of economic development the writer at first came to the conclusion that economic development means anything you want it to mean. This was a cynical reflection on the present manipulation of economic development practice and rhetoric for partisan and economic purposes. The generally accepted mythologies of growth and progress are part of this. Often, "growth" or, "what's good for our profits, union members, grain sales, etc., is good for everyone" has been made equivalent to development and therefore to social progress. This viewpoint permeates dominates the media and the political structure, not only the business community. Of course, this orthodox approach is hardly value neutral or objective and neither are its derivative economic and political prescriptions.

A second definition grew out of the writer's reflection on the nature of this problem. That definition is: economic development is the conscious change of the economic relationships of a community by that community or as changed by others. A more inclusive label would be community or regional development. The second definition is preferable because it recognizes that economic change is a product of human planning and decision making.

In this formulation, conscious change refers to a deliberate attempt to meet human standards for the good life. An economic relationship can be internal or external and refers to how people relate to the land and to each other to meet their material, emotional, intellectual and spiritual needs and accumulate and dispose of surplus wealth. The community may be object or subject in the development process, depending upon whether it is active or passive. Also, by provoking the asking of the basic questions, "What is the general good?" and "How
will I be affected?", it does not rectify the set of assumptions presently dominating economic debate. It allows citizens to challenge and question technicians and experts on more equal terms. Who is conscious of a need? Who creates the vision? Who changes whom? Who influences authority to redirect resources? Who implements the change? Who evaluates it? None of these questions has an a priori objective answer.

Further, the second approach allows for a more all-embracing approach to economic development. All of the character and values of a community can and should be considered before making any deliberate change in that community. Only when the values and preferences of a community as well as its material and geographical assets and liabilities are understood can strategies that promise progress toward that community's unique concept of a good life be developed. Thus, the issue of economic planning and policy-making - the of whom, by whom and for whom - needs to be addressed.


Special Section, The Great Falls Tribune, Sunday, March 22, 1987. Note that each "key player" has a favorite prescription for economic health.


3. See the charters and membership lists of development organizations on state and local level. See for example, the "Butte Futures" and Silver Bow Local Development organizations, the Governor's Select Committee on Economic Development. Virtually all of these are selected from the top down or self-selected and self-perpetuating. The membership consists of a majority of business and financial figures with a minority representing labor, government, the public or religious groups. There is no direct public control or accountability, even where public funds are used for operation or form the basis for investment or development assistance.


Vicki Itkowitz, "Minnesota Where the Grass-roots Approach Works", Challenge (HUD), (Vol. 10, 34) pp. 18-21. Cites limited successes using public involvement where success should not have been expected.


Survey Methods

Surveys or questionnaires became widely used in the 1920s and 1930s for social research and marketing research by businesses. Their use has increased phenomenally since then. With the availability of computing equipment in the 1960s and the widespread use of telephones, gathering and analyzing data became much cheaper and faster. Surveys and polling practices have spread into politics to the extent that some have suggested that they make elections obsolete!\(^1\) Clemens has suggested that polling techniques are an unrecognized revolution in political practice and democracy.\(^2\)

The primary use of surveys has been to gather information for developing or marketing a product, whether it be a toothpaste or a political program or candidate. The survey provides information that is primarily useful for design. Static data may reveal the present preferences of a given target population quite accurately. In the U.S., a nation of 260 million people, only 1,300 respondents are required for an accurate survey.\(^3\) The information gathered can provide a soap manufacturer with enough information to design a selling campaign for the product even though the context of the commercial message has nothing to do with the price or relative quality of the product.

The survey method that is proposed by this paper has all the forgoing elements, including its capacity for manipulation. However, it may just as easily be used responsibly. Survey techniques have so many advantages that their use is advisable in many instances.

Advantages

The survey method allows for the accurate "still picture" of the opinions or preferences of a sample population of the community. It is discrete. Target populations can be selected finely and the information
generated, once placed in quantitative form, can be subjected to many different kinds of analysis.

The information can be gotten cheaply. A full survey costs only a few thousand dollars for Montana, which requires only 300 to 500 responses.4 Telephone surveys are cheaper by far than personal interviews while generating more responses than the mailed questionnaire. There are usually no political costs to a survey if the information is gathered with consideration and circumspection.

Disadvantages

It is very difficult to design a survey. Much thought must be given to the entire process before the first question is asked. It is very easy to prejudice questions toward a particular outcome and strong incentives to do so often exist.

The survey designer must substitute his intelligence and perception for that of the population studied—an arrogant and highly questionable assumption. The designer must assume he can recognize the relevant or pertinent range of opinion in order to ask questions that will reveal that opinion. In the specific case here, the designer must create questions that reveal values, a subject more elusive than a preference for or against a certain flavor of toothpaste. Careless design may render the information gathered useless or of questionable validity. At its present level of development a survey has real difficulty measuring intensity of feeling on any issue.5

Further, the survey method is passive. It is not a substitute for an active dialogue that informs and stimulates thought and that may result in a change of opinion or perception. It is primarily descriptive, not educational or interactive. It can only take that static "still picture" mentioned above. It is not an agent of change by itself although it may occasionally provoke thought on the part of a respondent.
There remains the problem of validity or rather, reliability. The best known example is that of a major newspaper's prediction of the defeat of Harry Truman in the 1948 Presidential election, based on a telephone poll. The poll was done and analyzed correctly. Unfortunately, it had assumed that households with telephones would be representative of the population even though most people did not have telephones. Truman won.

All polling or survey technique incorporates a margin of error that is related to the mathematics of statistical deviation. This can be overcome by larger samples to some extent, but the sample may only be so large before increased costs overcome the advantages of increased accuracy. Mistakes in assumptions, design, or technique can only add to the risk. Most practitioners and consumers of surveys are confident that the risks are small enough for prediction, based on past experience.

In a larger context, there is a temptation to substitute survey technique for actual contact with citizens and communities. There is a preference for nice, neat objective numbers to feed the increasingly technocratic decision making by large social institutions. This is most noticeable in business and government administration and to some extent in legislative bodies.

Another and related problem is that survey techniques may be used to avoid public involvement in affairs. Polling may be seen by legislative bodies as a substitute for an open and democratic decision making process. Decision makers may assume that the survey is all they need from the public and proceed as if they have been fully informed. Decision makers can rationalize this course of action based upon expediency and cost as well as the idea that -- we were just giving them what they said they wanted; what does it matter if they had no direct input into the decision.
The classic political tactic applied to economic development would be to use a survey to isolate the "swing" areas of the jurisdiction and target programs -- for instance, "bricks and mortar" or business development -- to those areas, hoping to sway a majority to favor the faction that delivered the goods. These methods, though generally accepted and used, are essentially manipulative. They rely upon persuading the electorate to "buy" a marketed product that may not be as advertised. In other words, these are attempts to control what people perceive to influence their behavior.

While the list of potential disadvantages is longer than the advantages, much of the list has to do with the use of the tool. Technically, there are enough obvious advantages to retain it. It is certainly not a substitute for democracy, but it does help to fill the gap until more direct participation can be mobilized. Likewise, it can be used in the context intended for this paper to create a broad strategy outline as a starting point for dialogue and participation in economic and community development.

Terminal Values

A value is as difficult to define as thought. Thinking is a process that is difficult to examine and cannot exist in static form. The results of thinking may be examined in written or verbal communication. These results are generally referred to as thought as if thought were an object. So it is with values.

As defined in the New Webster Encyclopedic Dictionary, value means "worth, that property or those properties of a thing which render it useful or estimable;...; importance;...". Values are the objective renderings of valuing. Valuing means to decide on the importance of a thing, idea or action. Values, as nouns, are descriptions of feelings about what is important. Moral and ethical choices are also value choices about preference in the behavior of ourselves and others. We only detect the values in the choices or
preferences themselves as they are revealed by our behavior. Value choices can be expressed verbally or in writing but the surest test is to observe the human making choices in the course of everyday living.

Values, therefore, cannot be measured with precision since they are not things. To directly ask "what are your values" and get absolutely reliable responses or even generally reliable responses is not likely. There are many examples of the disparity between people's public affirmations and their private behavior. One example is the official domestic policy of the U.S. as a land of equal opportunity and the reality of continuing second class citizenship for minority groups.

As can be seen by the discussion above, values must be measured indirectly. One test of values is to force a choice. The respondent should not be allowed to give all choices equal importance but is required to choose between option A and option B. Unfortunately, this test of values is the most difficult to do and technically demanding. Still, useful information may be elicited by other means. The assumption here is that enough people will discriminate differently over a range of choices and within a range of intensity of response that the results will be useful; even though direct preference comparisons were not made. Most research on values use scales of intensity of preference for one value rather than total preference choice.

Two types of values generally have been measured. Milton Rokeach made the distinction between terminal and instrumental values in his study on the quality of life. Instrumental values are defined as relating to means (i.e., What ways of doing things are appropriate?). Terminal values relate to ends. Honesty is an example of an instrumental value; a materially comfortable life exemplifies a terminal value. The writer has chosen Rokeach's concept of terminal values to structure the survey and to focus on values most directly applicable to economic development.
In this case, terminal values will be broadly representative of a spectrum of concepts in economic development. Specific results with a regard to the material or market economy will be tested along with the larger range of social values referred to in the introduction. For example, questions will be asked about an increase in personal income as well as social cohesion and a clean environment.

A business development or conventional economic development survey would concentrate more on instrumental values because there is already a fixed definition of the good life inherent in the outlook that if you only do more of what you are doing or do it better you will be successful. What constitutes the good life is already assumed. The question is how to arrive there. This is why values are used rather than a survey that would ask about specific concepts such as tax breaks, wages, and appropriate industries.

The use of terminal values does not accept any conventional, orthodox, or radical version of the good life as a given. It does try to define the parameters of the question in a way that sheds light on the development question and allows for an information analysis.

Gathering the Data

Presently the telephone survey is the most often used technique. The two others are mailed questionnaire and the personal interview. The survey may be targeted randomly or targeted to a specific category of persons.

Mailed questionnaires have the advantage of not requiring much labor time until the information comes back. The major disadvantage of a mailing is that not much information will be generated. According to David Nachmius, the average response rate for a single mailing is 23.8%. This was also the writers experience.
A mailed survey is not likely to be random. Responses from certain populations such as extra-legal aliens or English illiterates will be ruled out. The mailed survey also relies on the motivation of the potential respondent whether or not to respond. This can skew a survey dramatically even if it were randomly targeted to begin with.

Mailings are best used for specific issues and populations where high response can be expected. In the case of values, a mailed questionnaire would offer one advantage. Respondents could be asked to compare between complex value choices. It is easier to deal with more information when it can be viewed on a written page than to keep the elements of a complex comparison entirely in mind while deciding.

Personal interview surveys are the most expensive in labor and time but are also the most versatile. The respondents can be chosen exactly and the questionnaire can be much more complex and flexible. This method is more open to criticism of a lack of objectivity because of the greater likelihood of interaction between interviewer and respondent; but these criticisms can be avoided by careful survey design and execution. This perceived disadvantage is even an advantage as it allows more latitude in procedure and interpretation. This technique is not used for gathering statistical data except where great amounts of information from an individual are desired, such as in the U.S. census. The census has a minor variant, the elite interview, where a few people are chosen for a nonstatistical study.

The telephone interview is cheaper than the person to person interview, usually more expensive than mail, and can be conducted in less time than either. The time factor is often important. It allows a more sharply defined snapshot. There is less chance of outside events skewing respondents perceptions and opinions while the survey data is gathered.

Further, the limited amount of interaction keeps personal and methodological variables to a minimum while still providing a good
medium for checking on the design of the questionnaire. Now that most people have telephones, an accurate cross-section of society can be sampled and literacy is not a barrier. Language is a negligible concern in most areas and can be overcome where it may be a problem.

Thus, the telephone technique was initially chosen for this survey to minimize cost, time, and the possibility of shifts in opinion due to outside influences. The area of the survey has a very high telephone installation rate. According to Penny Copp of Mountain Bell, the telephone installation rate in this area at 95% is higher than the national average of 92.5%. More important is the time of day that the telephone is used. According to Lenihan, interviews taken in the evening increase the number of responses per dialing and include more employed people in the survey.

The number of respondents required for a valid survey in an homogenous community the size of Montana or less is a 300 minimum with 400 preferred. This assumes a generally accepted level of statistical reliability of plus or minus 6%. Since to do a total of 300 to 400 complete interviews requires much time, the writer chose to do a preliminary study and use the data collected as if it were reliable. The preliminary study was initially planned for 30 respondents from each of the three areas in the chosen region. This was done to reduce the total time and expense to a reasonable amount for the purposes of this paper.

A pretest is usually done as part of the design phase of a survey. The survey is created then reality tested by using a small sample. The feedback from this pretest is used to refine the design of the survey. If major changes are made it is normal to pretest again. No pretest was planned for the survey. However, when the telephone survey was started, the writer perceived that the range of response categories was not broad enough to allow sufficient discrimination by respondents. Another category was added and the data from the first five respondents was deleted.
The writer ran the telephone survey in the Whitehall area and found the process unsatisfactory. The survey took longer than anticipated even though each completed interview took less than 10 minutes. Polling other communities at long distance rates was prohibitive.

A mail questionnaire was subsequently drafted, and 50 copies were mailed to both Boulder and Northern Jefferson County. (See Appendix A.) While the response was lower, as expected, it greatly accelerated the data collection. The writer regarded the total of twenty-two mail survey responses as adequate for a preliminary study.

No need was seen to either stratify or weight the survey results. Stratification, or getting a certain percentage of responses from certain groups within the sample, was seen as unnecessary since the region is relatively homogenous in racial and ethnic terms. Also the nature of the survey is orientated to the general values of the population.

Weighting the survey means giving higher value to the responses of groups that do not tend to respond in proportion to their numbers in the population. Weighting is not needed since accuracy in calculating the response to the entire population is less important than getting enough information to initiate a dialogue.

The Scripts

A script was written for the survey and was followed verbatim to minimize external variables. (See Appendix A.) The preliminary study revealed problems with the script and highlighted areas needing improvements. The script consists of three parts: introduction, vital
data, and value questions. The introduction tells the respondent what is expected and lays the ground rules for the interview.

The vital data questions refer to factual information given about the respondent. The value is twofold. First, it provides the analyst with the best clue as to whether the survey is random. By comparing the information on income, sex, age, etc. with census data, the accuracy of the sample can be checked. Second, vital data can be used to answer questions asked of the survey beyond those apparent from the direct responses. For example, the analyst may want to know how responses varied between the sexes or occupations. A number of statistical procedures can be applied. However, it requires a reliable sample size large enough to have reliability in the subgroups.

For convenience, the values questions are arranged in batteries of three. In the actual script and questionnaire they were mixed. Two or more questions are asked in each category to discover indecisiveness on an issue category. Each battery of questions was written to test the general attitude about a value category.

Each battery of questions tests a particular range of social values. The values chosen were extrapolated from Rokeach's list of terminal values and from other sources that asked people why they liked certain places. Each value is briefly explained below.

1. Stability is the value of permanence and an absence of great change in a short time.
2. Growth is the value of increasing the amount of market indicators in the community, the amount of money and people being prime examples.
3. Community is the value of wanting to preserve connectedness and a sense of belonging or closeness in the community.
4. Individual values are those related to personal satisfaction and material comfort.
5. Work life refers to the value of enjoyable work and whether others appreciate it.
6. Equity refers to the democratic values of sharing resources and decision making power.
7. Natural Environment is the value of a clean environment and some degree of solitude.
8. Man-made Environment refers to the quality of services and public infrastructure.

Asking more than one question in each category helped get better information. The intent was not to obtain precise information but to identify preferences. Each statement in the script in Appendix A has an annotation on the page following the script that explains what information the statement is intended to elicit unless it is self-explanatory. In Appendix A all of the questions are organized by value battery; in the actual survey they were mixed.

The survey interview took less than 10 minutes to complete. Time tests indicate that each question required about 15 seconds if time is included for the instructions. The script included 24 value questions, one evaluation question, and 8 statistical data questions.

The questions asked respondents to grade the quality of life in their community was included for three reasons: (1) to get a sense of how people feel about their community, (2) to compare the quality of life grade with the answers from the value survey and the material conditions of the community, and (3) to provide a crude baseline for measuring the results of any development effort.

Sampling Method

For the telephone survey, the number of people listed for Whitehall in the telephone book was divided by the sample size. The resulting number will be the number of names to be skipped between calls. A number between one and twenty-six was randomized to choose an initial last name letter and a number between one and 100 was randomized to choose the first phone number in that letter group. No answers and
incomplete responses caused the interviewer to dial the next number in the book.

For the mail survey, the Helena phone book did not list the northern Jefferson County addresses separately. Therefore, the first appropriate address found on every other page was selected after first randomizing the starting letter. This was an unsatisfactory method for good distribution across the range of potential respondents and a better method should be devised for a complete survey.

Analyzing the Survey Data

The survey data will be used to guide the choice of priorities for a tentative recommendation of an economic development strategy for the region and communities. The responses to each question are reduced to a mean for each community. (The community means are also used to create a regional mean for each question.) The means for the three questions in each value battery are then reduced to a net mean for that battery. This is done for each community and for the region.

The value means are then set in order from high to low numbers. Higher numbers indicate a higher overall rating of value preference by respondents. A table showing the ordinal position of the values is included in Chapter 4. The higher rated values were given priority in the strategy recommendation while the low values were de-emphasized.

In Chapter 3, previous development plans and actions are evaluated and factual data about the communities and the region is analyzed. This will establish the material and social limits and advantages of the region and the social needs that a development strategy must accommodate and satisfy. Within chapter 4, the factual data and the value survey data are resolved into a coherent strategy recommendation.


8. Ibid.


15. Rokeach, *Values*, p. 359.;
CHAPTER 3 THE COMMUNITIES AND THE REGION

Criteria For Choice

The first criteria for choosing the subject communities for the preliminary study is that they be easily and cheaply accessible to the writer. The second is that each of the communities within the region are distinct from one another and preferably are not all bedrooms to a larger community. Finally, they should be contiguous. The writer chose Jefferson County as the region. In addition to meeting all the criteria above, it is a distinct political entity. The region divides nicely into the three areas of Northern Jefferson County, the middle Boulder-Basin part and the southern Whitehall-Cardwell area. This does give short shrift to Elk Park and some other outlying places.

Regional Description

Jefferson County lies on the Eastern slope of the Rockies beginning near East Helena and continuing south to the Jefferson River valley. Its geography is primarily mountainous with population centers in the valleys that contain the towns and agricultural areas. The resources of the county are quite varied. There is some fair to good arable land and much more pasture, minerals, usable timber, and a great deal of aesthetic beauty. Just as important, in an arid climate with 8 to 15 inches annual rainfall; there seems to be adequate ground and surface water to support present development. Minimum altitudes are about 4,000 feet and the county has cool weather patterns.

Landownership is a significant 53% federal and 4% state. The 43% left in private and county hands is concentrated in the valleys.

Transportation routes include two major highways, I-90 from Butte to Bozeman and I-15 from Butte to Helena. A good state highway connects Whitehall to Boulder and I-15 as well as South to Dillon. Rail service is nil. Formerly well served, the county has lost the Milwaukee
The southern line is little used. A new company, Rail Links, has just purchased the southern line and it remains to be seen how that company will fare. The southern line connects Whitehall East, West and South. The BN has an active spur line to Montana City. The remainder that served Basin has been salvaged. There is no rail service in Jefferson County other than the spur line to a cement operation in the extreme northern part of the county. Highways are good to excellent and main highways are kept open all year. Air service is available in Butte, Bozeman, and Helena. Whitehall and Boulder both have small airfields.

The county population is 8,100 people at present. It is divided about equally between the three community areas with the larger share in the Boulder Census District. The northern part of the county is growing faster than the other two. The population of Jefferson county tended to be younger than other Montana counties and the labor force was expanding as of the last Economic Development Plan, done in 1979. Population may have stabilized or even fallen with the latest economic slowdown. Per capita income is low and there is a large welfare budget. Seventy-one percent of the county has a high school education or better. This is not significantly lower than the state average of 75%.

The primary economic activity is public sector jobs. The State of Montana's Boulder River School and Hospital (BRSH) at Boulder dominate this category. State, Federal and local government employees including the schools account for 55% of employment in the county if out of county employment held by county residents is considered, public employment may account for over 60% of the jobs held by county residents.

Retail and service sectors account for 25% of jobs and all other categories were well below this. Two mines have opened, changing the portion of employment in mining but it cannot have risen above 5%. Agriculture has declined from 18.9% in 1973 to 6.9% in 1983.
As of 1985, Jefferson County had moved from last place in 56 counties to 40th in per capita income at $8,543. This is related to the higher number of well-paying jobs in mining. The situation may have changed upward since the opening of the Centennial Tunnels mine near Jefferson City.8

The Overall Economic Development Plan of 1979 (EDP-79) reports a low tax base in terms of population. The county infrastructure reflects this in the condition of roads, bridges, schools, etc.9 The increased revenues from mining activity is now being used for infrastructure improvements. Unemployment is chronic in Jefferson County, although Boulder has the greater share. Some of the unemployment and underemployment may be voluntary. Northern Jefferson County has the least unemployment.

Community 01, Northern Jefferson County

This is an aggregated area from Jefferson City through Clancy to Montana city on I-15. Clancy is the only town of any size. It is unincorporated and provides limited services. Except for the new Centennial Tunnels mine, agriculture and some logging, the residents travel into Helena or East Helena to work. While the Permanente cement mill is in Northern Jefferson County, most of the workers travel from Lewis and Clark County. The prime arable lands are being converted into subdivisions or parcels 20 acres and larger. Incomes are above average for the county.

Community 02, Boulder-Basin

Boulder and Basin are in the middle of the County. Basin is nine miles West of Boulder, off of I-15. Basin is a distinct community but is economically tied to Boulder by employment opportunities at BRSH. Boulder is an incorporated town and its primary income source is the state school for the disabled at BRSH. It dominates both the economy
and the thinking of the town. Its existence is regarded as continually in doubt and this is of great concern to the town and residents.

The other elements of the Boulder economy are tourism, recreation and ranching. There is a geothermal springs at Boulder with economic potential. Some residents work in Helena.

Community §3, Pipestone-Whitehall-Cardwell

This community lies mostly in the Jefferson River valley and effectively incorporates residents of Northern Madison County who live on the other side of the river into its economic influence. It has the most open land and agriculture would dominate if it were not for the tourist traffic off I-90 and employment effect of the Golden Sunlight Mine (a subsidiary of Placer-Amax, Inc.) five miles east of Whitehall. The incorporated town of Whitehall has a population of about 1,000. Eighteen hundred more live in outlying areas. Much of the out of town development is residential only. Many of the newer residents work in Butte. The Whitehall community has been more assertive in developing its service sector than the other two communities.

Similarities

All these communities have in common a preference for the small-town or rural way of life or lifestyle. Many people seem satisfied with a lower standard of living and services in return for the benefits of a rural setting. There is a desire for economic betterment but many residents are skeptical of development since it often threatens their values and way or quality of life. There is some irony in this rural preference as few residents are supporting themselves from the traditional rural land-based activity such as agriculture or logging. More use it as a recreation opportunity.

The market economy is heavily influenced by public employment in each community. Also, all of the communities have economic sectors that
depend upon cheap energy such as tourism, agriculture, or commuting out of county to work. Boulder and Whitehall have marginal non-market economies that depend upon borrowing, bartering or sharing and this may be characteristic of some of the smaller North Jefferson settlements as well.

Differences

The greatest differences in the communities are found in their economic relationships. Northern Jefferson County is dominated by Helena. Boulder is dominated by BRSH. Even the more diversified community of Whitehall relies heavily on Butte for goods and services and employment. Whitehall's agricultural ethic is exaggerated in light of agriculture's actual place in the market economy. Boulder has a younger population while Whitehall's is older. North Jefferson residents tend to have more schooling and a higher income.

In summary, Jefferson County is a mosaic of small and smaller communities each with an individual and parochial sense of identity. There is no general sense of identity as a county or region. Jefferson County, the region of concern, is more a politically defined administrative region whose main function is to provide a range of basic services such as road maintenance and sanitation. For instance, only since 1985 has a Jefferson County Fair been revived in the county seat of Boulder.

Development History

Prehistorically, Jefferson County was a migration route and a source of raw materials, particularly flint. The recorded history of Jefferson County development begins in the mid-nineteen hundreds with early settlement in the gold fields. This development era was dominated by private individuals seeking quick returns in precious metals, timber,
and cattle. The era was remarkable for its boom and bust character that persisted into the 1930s. In the late teens and 20s of this century, many communities experienced the boosterism that was common to most smaller American communities of the time and in particularly exaggerated form in the West. Private development efforts were cooperatively spearheaded by local chambers of commerce or booster clubs with the idea of attracting new immigrants. Real estate and banking interests were particularly active in these promotions. Later, Jefferson County enjoyed some activity by the Civilian Conservation Corps and other depression era institutions. These were terminated by the manpower requirements and economic boom of WWII.

Although various development schemes for dams and roads have been advanced and finished by private and government interests, the first Jefferson County development effort as it is understood today was in 1972 with the formation of an Overall Economic Development Committee. The committee’s work was reported in the Jefferson County Overall Economic Development Program of 1972 (OEDP-72). A second and similar venture occurred in 1979 under the same name and a second report was issued under the name of the Jefferson County Economic Development Plan (EDP-79). Both committees were nominally under the control of the County commissioners and both analyzed the county as an economic unit and set tasks and goals for the county to meet.

The 1972 Plan

The 1972 committee outlined a number of county problems. These included the usual, lack of capital and a dependency on distant markets to purchase raw materials produced here and a lack of low and moderate income housing. Problems unique to the region (county) included a limited service infrastructure, the seasonal nature of employment as well as general unemployment and the low state of development of recreational and tourism opportunities.
The 1972 report was guardedly optimistic in its conclusions, stating, "In spite of its problems and deficiencies, Jefferson County has sufficient potential for growth to cause some optimism." The report referred particularly to tourism and meeting local service needs with local service enterprises. The committee qualified its development goals by stating that natural resources have potential "...if they are carefully developed in an overall pattern that is compatible with preservation of the amenities of the land". The committee did not set any standards for such development but did recommend a countywide land planning effort in their goals.

The committee made some recommendations to accomplish the "...primary goal of decreasing unemployment." These goals, in essence, said to take advantage of visible trends and improve basic transportation and public services. A number of specific "action programs" were outlined. Of those nine ideas only one, the Whitehall housing project, was soon completed. Some of the programs mentioned here were already required by law, such as meeting Federal Environmental Protection Agency (EPA) guidelines for solid waste, or were out of the hands of the committee, such as the then proposed Homestake Mining development. A tenth item mentioned a group of minor goals. These were the expansion of a post and pole plant and a vermiculite mine as prospective activities. Interestingly, these latter have apparently taken place where major "action programs" withered.

Existing evidence of followup by the 1972 committee is scant. The county did go through a land use planning process in 1976 but only the subdivision regulation provisions were implemented and these had been required by state law MCA 76-3-501.
The 1979 Plan

The 1979 EDP was done by a nominal committee one fourth the size of the '72 effort and was supported by a professional planning consultant firm, the Meadowlark Group of Helena. It laid out the need for development in qualitatively different terms than the 1972 OEDP. The '79 plan defined Jefferson County as an "extremely underdeveloped economy". While in-migration was increasing and "...sources of basic employment have been declining...", there was less tax base to provide services to people who worked out of county and lived in the county. The county private sector was not sufficient to meet local service needs and dollars were leaking back to Helena and Butte that could easily have been kept in-county.

In the '79 plan each area of the county was given a separate analysis and goals, a recognition of the unique problems, advantages and character of each. Changes noted from 1972 were the continued in-migration, the increase in mining activity (mostly exploration at this point), less rail service, new highway construction, and the decrease in employment at BRSH. The county population had continued to grow while the per capita tax base had declined. This latter is a definite indication that Jefferson County is seen as a good place to live in spite of the apparent economic difficulties.

The '79 plan was more technical and tended to emphasize problems and strategies of business development rather than community development. There was more technical analysis on specific problems, in particular the Boulder commercial district. Further, it offered more specific suggestions to solve the perceived problems.

Four overall goals were set for the county:

1. "Reduce unemployment and improve local income levels."
2. "Encourage economic stability" while retaining the quality of life
3. "Strengthen the tax base" with emphasis on more employers or
more intensive land use.

4. "Improve public and private services".24

No measurable criteria were set for any of these goals. However, on page 61 the plan mentioned that $7,000,000 in new investment was needed to bring the tax base even with the per capita tax base of other counties in the state.

Local communities were given goals as well. The plan recognized that "Jefferson's county-wide economy is a cumulation of three discrete subeconomies.25 Economic development needs in one area do not necessarily correspond to needs in other areas. The most obvious needs shared countywide are for enlargement of the county's tax base and diversification of the county's economic base. Problems related (to) unemployment, low income levels, welfare dependency and transportation are more localized."26 In other words, the counties' problems are identified as taxation, the tax base and service delivery, while the communities have their own local sets of problems such as unemployment.

The local goals of each community, apart from expanding its local tax base if it were incorporated, were:

For Northern Jefferson County, to develop land use policies that require new developments to pay their own way, increase the retail services in the area and reduce the transportation costs to Helena commuters.

For Boulder, the goals were to reduce unemployment, increase local income levels, strengthen the economic base, revitalize the commercial sector and diversify the economy, and in particular to "...get away from its dependency on the state school.27

For Whitehall, the goals were to increase local income levels, reduce transportation costs for Butte commuters and reduce the dependency on the Butte economy.
The region and each locality were given strategies to follow for reaching these goals. See Appendix B. The committee also suggested a number of development options to implement the strategies. Most of the attention was focused on Boulder. Either Boulder had the greatest need of the three communities or the most influence on the committee.

Boulder was to form a standing committee to lobby on behalf of BRSH, and to explore the use of BRSH land for an industrial park or other county development. The commercial development of main street Boulder included beautification and capturing more of the service dollar. An industrial park that would take advantage of the local geothermal resource was recommended along with lines of investigation for financing.

The committee formed a sub-committee called the Committee in Support of the Montana Developmental Center, also referred to as the Boulder River Task Force. There was some initial funding by the county but this ended in 1985 with a change in the balance of county commissioners. The committee lobbied in support of the school at the Montana Legislature and also did educational work. Presently, the same committee meets on an "as needed" basis to lobby the state legislature. Some BRSH land in the form of the unused dairy farm is now being used as a county fair grounds under the jurisdiction of the Jefferson County Parks and Recreation Committee. The county leases the land from the state for nominal fee.

A subcommittee was formed by Boulder businessmen to "enhance the physical appearance" of the towns' commercial district. Definite progress was made here. The Montana State University Architectural program was enlisted to develop a Boulder Beautification Plan. Some new store fronts and paint have noticeably improved the appearance of the main street. George Ammen, committee member, stated that "Some were done. Some fell by the wayside." There was no date for completion of
the recommendations in the beautification plan and Mr. Ammen could not make any estimate of the degree to which the plan was completed.32

The Plan recommended the further commercial development of Boulder very strongly. According to the Plan, "At a minimum, Boulder has the potential to double ancillary employment and income".33 This assumes the continued presence of the BRSH as the income basis for supplying these needs. The uncertainty of this is the primary factor in reluctance to invest in new enterprise or expansion. The plan stated a 25% expansion in new capital would not be unreasonable and this would help other businesses by keeping trade in the community that is presently going to Helena. Although there have been changes in the nature of Boulder's main street there is no indication of significant new investment. According to John Larson, the Jefferson County Assessor, the value of Boulder's commercial property has remained constant from 1979 to the present.34

In the same way, Boulder's geothermal springs remain largely unexploited. An industrial park based on this resource was suggested for energy efficiency reasons. The establishment of a local development corporation was recommended as a vehicle for this and as a requirement for getting available grant money. Neither has been done.35

As for the other communities, the recommendations to do something about the transportation expenses were not followed up even to the extent of doing studies. No identifiable progress has been made on small manufacturing or the expansion of existing small manufacturing plants.

As for mining, since "...there is really very little a community can do to successfully induce mining activity..." little has been done.36 The county and communities have worked with mining companies to mitigate the effects of the mining activity on local communities and services. This latter is generally satisfactory to the parties involved. The county has not avoided losing rail service, however.
The timber resource benefit is still going out of county. No sawmill has materialized. The post and pole operation at Clancy has expanded and the one at Pipestone has declined. Overall, progress on the recommended projects has been marginal.

According to Bobbie Sutherlin, OED Committee Secretary, the Overall Committee formed sub-committees on tourism, BRSH, Whitehall Business, Boulder Business, and Industrial Development. Only the Boulder Business committee and the BRSH committees met. The BRSH committee still meets for legislative sessions, but county support was withdrawn as of 1985 with a change in commissioners.

The momentum of the 1979 OED Committee died rather quickly. Cornelius Grant, regional Economic Development Administration (EDA) officer, stated that his last records of Jefferson County were from 1979. The committee or the county should have submitted progress reports but the EDA file is empty. However, Jefferson County is still on the eligibility list for EDA funding. The Jefferson County files are also empty of any followup reports or studies.

Evaluation of the 1979 Plan

Overall, the options undertaken with at least partial success were the land use policies, the Boulder Beautification Plan, and mitigation of mining company effects on community services. It is a matter for conjecture whether lobbying the legislature on behalf of BRSH and Boulder has been effective, since no definite commitment by the state to funding or longevity could be gotten. Still, it should be evaluated as beneficial.

On its face, the results appear marginal when compared to the scope of the plan. However, it must be noted that those options that received attention produced some results. As for the county development strategies as noted on page 73 of the Plan, there are now policies in
place to require new developments to pay more of their own way than pre-'79 and the county did actively plan for community service impact from the Centennial Tunnels mining venture.

On the other hand, the railroads have all but abandoned the county. It is questionable whether the county or its communities had any real leverage in the matter. Also, no long term capital improvements plan has been implemented. According to Commissioner Janacaro, capital improvements are being made from the general fund. No program exists because, according to Janacaro, state law requires that funds allocated to the program be spent only for that purpose and the financial situation of the county was such that the commissioners preferred the flexibility of the present situation.40

The County was to endorse various projects on behalf of Northern Jefferson County and Boulder and no doubt did so, since endorsements are usually pro forma. The county did not do an analysis of the impact versus the benefits of the Montana Power Company and Bonneville Power Administration powerline project as recommended. A special meeting on the MPC-BPA powerline construction was held by the Jefferson County Planning Board on May 13, 1980. This file held some published information and correspondence. No analysis or report was on record from any county agency.41

Nothing came of the Montana Power Company's (MPC) magneto-hydrodynamics plant siting plan. Whitehall asked to be considered as a site but the project was dropped by MPC about the time the plan was done. The Whitehall Business Association did, however, pursue a similar "assessment and input" process with Placer Amex, Inc. in their development of the Golden Sunlight Mine. Linda Ziesing, Whitehall resident and co-chair of the OEDC, said that there was no action on other development projects for Whitehall, and attributed this to a lack of specific direction in the Plan.42
As to the overall goals for the county itself, unemployment has not been reduced but the per capita income has risen as well-paying mining jobs at the Golden Sunlight and Montana Tunnels mines have moved mining up to 15% of total county payroll. The county has not seen the multiplier effect in the lower-paying service jobs that usually accompany industrial development since the in-county employees do much of their shopping in Helena and Butte. Ordinarily the existence of these service jobs would have the effect of lowering the average per capita income, often to the pre-startup levels of a new industry. The effect of the mines has been to stabilize employment and keep it from slipping as other sectors, particularly agriculture, deteriorate. The low level of the multiplier effect occurring because county workers and residents meet many of their needs in Helena and Butte inflates the effect of the per capita income statistic so long as only Jefferson County and not a larger region is considered and is not a good indicator in this situation.

While the county has remained statistically stable from an income point of view, it has changed structurally away from the long-term stability of agriculture toward the short term of mining. The mainstay of public employment remains the same. The quality of life has been generally retained although as more agricultural units are broken up or subdivided the region will inevitably lose its present rural character.

The tax base has been increased by the recent mining development. Seven million dollars was needed to bring the tax base even with the average per capita standards of other counties in the state. In 1987 property taxes were reduced, an indication of the better tax base situation in the county. The Golden Sunlight mine is projected to operate until the early 1990s. The Montana Tunnels Mine will last about the same. Gold and silver prices remain high for the time being and these are what will determine the extent and duration of precious metal mining in the county.
The overall goal was to improve public and private services. New private businesses have been started in Whitehall and in the Montana City area of Northern Jefferson County. Public services have been cut back because of a county budget crunch in 1985 and have not been restored as the tax base improved.

At the bottom line there has been progress toward the four overall goals. However, much of the claim to progress must rest on the fortunate timing of mining development. Historically, this has been temporary rather than structural. The best that can be said is that the plan readied the county and communities to facilitate these events and absorb the impact.

Evaluation of Planning Efforts

The writer sees the weaknesses of these economic development planning efforts to be the following. The absence of a committed coordinating group or individual, little or no funding, the apparent absence of broad-based community participation or support, and lack of social cohesion in the county that could lead to a unified county effort.

There was no identifiable person or group who had an immediate personal stake in the success of the plan or its components. Peters and Waterman pointed out in In Search of Excellence that "product champions" were a big factor in successful product or service development and marketing in private enterprise. Public ventures require issue or program champions who are motivated to see a development program through its difficult stages, usually by continuing to motivate others and keeping the effort on track.

The 1979 committee did its work on four thousand dollars, including one thousand from the county. This was a small commitment when hiring professional services is included. There seemed to be little anticipation of funding needs for the implementation phase, especially
the crucial initial stages where technical help is often needed. Funding continuity was needed until Federal, state, foundation or private seed money could have been attracted. That funding could have come from the county, volunteer efforts or some other source, but should have been anticipated in the plan. Continuity will inevitably suffer if resources are lacking to carry on even the minimal coordination tasks.

Based on the number of listed members of the committees, participation seems to have been lower in 1979 than 1972. Community participation and support for a comprehensive development effort was not evaluated in either plan. The absence of adequate funding and the rapidity with which the committees became inactive is an indicator of the level of public interest or knowledge of the effort. Public commitment to the plan could have resulted in funding for an interim period or for specific projects.

Unfortunately, there is a lack of geographic, economic, and social cohesion within the county that would keep the members of the overall development committee working together as a group and create a county commitment to work toward common goals. Once the 1979 Plan was drafted, each sub-committee worked only on its own narrow assignment. It is likely that the absence of oversight and continuity contributed to this and without positive reinforcement the energies and time of the committee members were drawn into more personally rewarding activities. The county is more a political-geographic entity than a regional community. The three communities in the county have fewer social and economic relationships with each other than with extra-county entities such as Helena and Butte. They are also noticeably different in their needs and outlooks. Any further county development effort must face these organizational problems squarely.

Both plans were as good as other contemporary plans, though different in character. The '79 plan offered more specific direction and outlined some implementation measures. The '72 plan tended more
toward community development while the '79 plan used a business development methodology.

Neither plan set measurable goals for the success of the plan or its minor elements. Neither plan openly stated its theory or model of development or methodology, although this is not common. There was no indication of what should come first if goals were contradictory or how projects could help one another by occurring in sequence. The '79 plan did establish some priority projects and implementation timetables for the geothermal park and the BRSH committee. There were no overt feedback methods provided to assure accountability. While re-organization for the implementation phase was outlined in the '79 plan (not in the '72 plan) attention should have been given to organizing funding for the transition and oversight of implementation.

There was little analysis of the political context of the plans. This might be forgone if conditions did not require a political commitment on the part of the communities and the county, or if adequate funding could be tapped, such as in a large metropolitan area, but it certainly creates problems in a region with limited financial resources.

The '79 plan fared better than the '72 plan but both tended to lose momentum quickly. It cannot be over-emphasized, however, that those projects that got attention did well in proportion. The recommendations of the '79 plan tended to be more grandiose and business oriented than the '72 plan. In both plans, it was the smaller, more do-able short-term projects that made the most headway, particularly those that did not require a lot of capital. Agriculture got short shrift in the '72 plan and was totally ignored in the '79 plan, yet it is one of the areas where quick results can be achieved with minimal investment.

Regional Update

At present, the county remains stable in its trends. Public employment is stable while mining is increasing and agriculture is
decreasing. So long as metals prices remain high the mining will continue and may increase. Recent improvements in cattle prices has helped but the portion of market share going to beef has decreased as prices rise. Consumer preferences also work against increased beef production. Cereal prices cannot be expected to improve soon. There has been no addition to manufacture or timber production. The stability of public employment is presently good, but has seen a loss of purchasing power in the last few years.

The subdivision development in Northern Jefferson County continues, though it has been slower in the last four years. This can be expected to continue because of low energy and land prices and the current fashionable status of country living. This continues to establish a base for development of service businesses in places where development occurs while increasing demands for public services and delivering fewer taxes than consumed.46

Another type of residential development occurring near Boulder and Southwest of Whitehall are large areas of land being split into 20 acre parcels. Aspen valley Ranches is west of Boulder Hill several miles North of Boulder and Pipestone Ranch is West of the Pipestone Pass highway near the Continental Divide. These lands are being sold off without any features other than minimal grading of access roads. They are rapidly being purchased by people who range from near-indigent to retirees with adequate income. Two sections of land near the Pipestone Highway have been broken up and more is expected. The motivation of purchasers seems to be the romance of Montana and the remoteness of the location.47 Some are no doubt speculative purchases.

The consequences of these developments are increased demands on local services as well as increasing unemployment and public welfare costs since neither development has an economic base. The Pipestone development is near enough to Butte for people to work there as easily as in Whitehall.
There are some on-going agricultural development efforts. Both the Soil Conservation Service (SCS) and the Madison-Jefferson County Agricultural Extension office is promoting alternative crops and improved farming and marketing methods. In the Cardwell-Harrison area Montana Agricultural Producers Incorporated (MAGPI) has established itself to act as a marketing entity, similar to the cranberry cooperatives in Minnesota. Montana Market Development, headquartered in Butte but with participation by area ranchers is looking to find direct markets to present customers, new customers for specialty crops like malting barley, or customers that want crops grown to certain standards.

The Local Development Corporation of Whitehall has sold its medical clinic and is presently looking for another opportunity.

There is no noticeable increase in light manufacture in the county, but if this has emerged as a cottage industry then it is not likely to be obvious to the casual observer of statistics or main street. Cottage industry tends to be underground until it makes the transition to full-time or storefront operation.

Based on income, Jefferson County continues to have a strong middle class. It has changed from an agricultural and mining region to one whose residents depend on income from public employment. Many of the low income people are elderly. Existing inequalities in wealth and status are not obvious and are not cause for much dissatisfaction. There are no changes so great in the county that would render the content of either development plan obsolescent, although both could be updated. Elements of both still wait on implementation and are still relevant.
Advantages and Disadvantages of Jefferson County, As Stated in Economic Development Plans of 1972 and 1979

Table 3-1 summarizes the advantages and disadvantages of Jefferson County as listed in the 1972 and 1979 Economic Development Plans.

<table>
<thead>
<tr>
<th>Year</th>
<th>Advantages</th>
<th>Disadvantages</th>
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<tbody>
<tr>
<td>1972</td>
<td><strong>Natural Beauty</strong>&lt;br&gt;Natural resources, incl. water</td>
<td>Low employment in derivative jobs&lt;br&gt;Seasonal employment&lt;br&gt;Export of resources&lt;br&gt;Lack of capital&lt;br&gt;Lack of &quot;front end&quot; money to get started&lt;br&gt;Lack of developed recreational sites&lt;br&gt;Lack of full range of community services and facilities&lt;br&gt;Lack of sufficient housing&lt;br&gt;High transportation costs&lt;br&gt;Limited sales market in area&lt;br&gt;Outside perception that MT is cold and isolated</td>
</tr>
<tr>
<td>1979</td>
<td><strong>Excellent Highways</strong>&lt;br&gt;Central between Missoula, Great Falls, Bozeman and Billings&lt;br&gt;Surolus Labor&lt;br&gt;Potential for expansion of community services&lt;br&gt;Timber&lt;br&gt;Positive attitude of cooperative people.</td>
<td>High unemployment&lt;br&gt;Local government fiscal problems&lt;br&gt;Majority of land owned by Federal govt.&lt;br&gt;Railroad abandonments&lt;br&gt;Low tax base&lt;br&gt;Residential sprawl&lt;br&gt;Low public service base&lt;br&gt;Location between urban business centers</td>
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**Note:** Some 1972 disadvantages are listed as 1979 advantages Example: Surolus labor vs. Unemployment<br>Note: The 1979 list does not repeat items already listed in 1972
Advantages Expanded

Labor Force - There are many unemployed and underemployed people in the county and the characteristics of this potential labor pool have not been well analyzed. For example, it is characteristic of the work force in this area to be multi-skilled. There are a number of elderly people living on pensions with free time and experience. There are also people in the county who choose to have more leisure than income. Both of these categories would have to be wooed into enterprises that offer more than minimum wage financial incentives.

Energy - Only the wind and geothermal energy resources of the area have been evaluated. The wind potential in Whitehall is third-rated in the state, though not commercially feasible at present prices. The geothermal resource ranges from very promising at Boulder to fair at Pipestone and Clancy (Alhambra). The springs at Pipestone are totally unused at the moment while the others get minimal use. The number of sunny days in the area is high, making solar applications attractive. Hydro-power opportunities have not been evaluated.

Remote and Pristine - While the area is neither so remote nor pristine as some prefer to believe, these attributes are more often listed as disadvantages. The area is unspoiled by comparison with major metropolitan areas. It is one reason why the area is a desirable place to live. Remoteness, inaccessibility and ruggedness as well as wildlife and recreational opportunities are all qualities that appeal to tourists and recreationists and can be capitalized upon.

Small-scale enterprise - There are many people in the area who have the experience to handle small scale agricultural and mining enterprises. There is considerable equipment available and not fully employed.

Water - Water is the most important factor in an arid climate. The supply of water is at least sufficient to support present levels of
development. No comprehensive study is available to evaluate the extent of the groundwater resources and the surface water resources may vary with such activities as logging, grazing, etc. The recharge capacity of the groundwater table should be investigated before major developments occur that would depend upon it. The quality of the water is extremely good in most places. The extent of the water available and our ability to use it efficiently without disturbing natural systems establishes the limits to human use and occupation of the area. Management of the watershed is a critical determinant of the long-term availability of both ground and surface water and should be considered in any development scheme. Under present management it is questionable how long water quality and quantity may remain an advantage.

Unique Ecosystem - The Northern Rocky Mountains are a set of unique ecosystems. Many of the plants here have special botanical properties used in medical or industrial products. Many more plants exist in the area and may have useful properties. There is an immediate opportunity to cultivate these plants here at a market advantage since this is their natural range. For example, wild Arnica has been gathered for income in Jefferson County in the recent past. Numerous plant species that are highly adapted to this region and formerly used by Native Americans for food and medicine are unused now, but have high potential.

Disadvantages Expanded

Land Use - The land resource in Jefferson County is disaggregated. It is spread amongst many small actors and the several government agencies who do not cooperate well because they have differing priorities and internal procedures. Land resources are difficult to reorganize in this situation and will remain so without comprehensive land use planning that involves all the actors.

Capital - While capital(savings) is regarded as inadequate in the previous plans, this may have more to do with access to this money than the amount of savings in existence. No analysis has been made of the
overall short and long term capital needs for the development projects recommended to date. Without these estimates it is premature to conclude that there is a need to attract outside capital. Local entrepreneurs' inability to borrow from local sources may have more to do with the lending policies of those sources than the inadequacy of deposits. Loans can also be gotten from nearby cities. The main problem may be the "... insufficient local "front end" money to finance business and community development feasibility and technological studies..." as mentioned in the '72 plan. This is the social task of venture capitalists, the EDA, the Montana State Department of Commerce and the public and private sectors of the communities and region involved.

Social Cohesion - Jefferson County has a weak infrastructure on which to build a county development effort. Residents of the county have little sense of a common identity. For example, there is no county-wide newspaper, radio or other communications. Because of the disparate social and economic situations the county does not have an integrated "grapevine" that can readily transfer information and feedback. Aggravating this, many of the newer residents live in widespread residential developments or individual ranchettes and have not been integrated into the existing communities or established their own connections. In Northern Jefferson County, many residents put their children into the Helena schools, missing another opportunity for social interaction. No on-going comprehensive forum for communication exists other than periodic elections and these are ill-suited to sponsor collective action. The social and economic situation creates a political climate that is indifferent to development on a county basis.

Services - While Jefferson County is a desirable place to reside, nearby Helena and Butte can better serve the mid to large size enterprises, public and private, that may locate in the area. Jefferson county is more likely to get the residential development that goes along with business location UNLESS it takes a DIRECT role in establishing them or encouraging their location.
Some Opportunities Overlooked By the Previous Plans

The classic export model requires that we export raw or semi-processed materials to get the cash to buy finished goods such as autos and food. Our service economy and local industries are merely appendages of the limber, mineral, and agricultural industries or consumption that relies on those incomes. Montana has a system of production organized to external markets and a system of consumption organized by those same external markets. There exists an opportunity in reversing this model and producing directly the goods that are imported.

These opportunities are pervasive. Every thing now consumed in the region except some food, livestock and feed, recreation, posts and poles, and firewood are now imported or purchased elsewhere. Energy is one area where the county is greatly dependent and need not be. There is as much potential for production as for conservation.

Food production and processing also has potential within all of Jefferson County and particularly in the more temperate South and North. Sixty percent of Montana's food was imported in 1979. The cost of food was $1,330 per capita or over $100,000,000 worth of food purchased by the residents of the county, Butte, and Helena. There can be no doubt that much of this food was shipped out of state to be processed and then shipped back. For example, in 1979 Montana cherry growers produced over three times the amount of cherries Montanans would purchase - yet three-fourths of the cherries bought by Montanans were brought in from out of state!

There are numerous small-scale, feasible opportunities that have not been mentioned by the Plans, which by their nature tend to concentrate on larger scale, more credible activities. Small-scale community-based activities tend to offset major disadvantages such as distance to markets, lack of capital, etc. Some examples of these are: festivals and fairs that can attract and promote market activity as well
as stimulating community cohesion and encourage cottage industry and small business. A community can consider a small business or cottage industry incubator. One example of a private effort in this direction is the craft mall established in Bozeman where a single store front is managed by one person and sells the crafts of many different producers on a commission basis.

Local farmers markets, food cooperatives, garden clubs and community gardens for those who do not have access to land have been successful in many communities. A seasonal program to put town people in contact with farmers who need seasonal labor and are willing to work for a crop share have worked in some areas. Other communities have provided workshops on do-it-yourself building using local materials. Some have established barter or hybrid barter/local currency systems.

Use of the local media or establishing a local media to serve the region is useful, with newspapers and radio the most popular. Local small-business and service directories are helpful and raise awareness of locally available services or products beyond what can normally be seen on main street. There are number of other self-help opportunities that can be managed by communities and are labor-intensive, low capital, high fun approaches to stimulating economic and community development.

Community Advantages and Disadvantages

Each community has particular strengths and weaknesses. Any development strategy must take these into account.

Northern Jefferson County's population is well educated and has generally higher income than the rest of the county. The residents that work in Helena are often well connected in public and private institutions. The environment there is pleasant and there is plenty of room. For development purposes, however, there is little economic base to start with. Worse, with the perception of some smaller, old time
settlements, there is little sense of community or identification with Jefferson County or its other communities. Helena has "captured" the area, or at least that part from Clancy to the north.

Boulder lies in an area rich in geothermal energy, minerals and recreational opportunities. BRSH provides a base income flow with few environmental disadvantages, even though this is of indefinite duration. There is a good highway so access is not a problem while at the same time it has a sense of isolation. However, it is isolated enough that it is unrealistic to expect businesses to seek it out as a location. The attitude of the residents is dominated by the dependency and insecurity associated with BRSH.

Whitehall has agricultural potential and a regional agricultural support system. It is on a main East-West interstate traveled by tourists and commercial vehicles. However, it has a growing attachment to Butte and has not yet integrated the large number of new residents. Its present economic stability rests on short-term or uncertain foundations.

Conclusion

At present Jefferson County is poorly constituted to undertake an economic development effort as a county. The county lacks the internal social, political and economic cohesion to develop countywide as a region. The development plans implicitly reflect this when they limit county strategies to those intimately affecting government operations and service delivery.

Yet, even before the 1972 plan, Whitehall had established a Local Development Corporation to fund a medical clinic. The clinic has expanded and the physicians working there have bought it. One of the practitioners remarked that people some from all over the Jefferson valley and Northern Madison and Beaverhead counties and he also has
patients from Butte! Obviously, the clinic acts as a service attractor for the Whitehall business district.

In both Whitehall and Boulder there are effective volunteer ambulance units. Volunteer fire districts serve most of the county. Whitehall recently built a library largely with volunteer help and private contributions and presently a volunteer committee is constructing a swimming pool as the first step in development of a community park. There is an abundant pool of talent and energy in all of the Jefferson County communities. However, the tendency is to work on unrelated projects that are of immediate local concern. Obviously, the potential for effective community and business development is present in Jefferson County. In the absence of some overall organizing principle to coordinate resources and efforts it will remain difficult to maintain a comprehensive and coordinated effort.

The county's plentiful resources and opportunities usually express themselves in relation to the communities. This means that while the county can help facilitate and coordinate development, the real effort must occur in the base communities. Economic development will be ineffective as a strictly county effort. This speaks more to the need for community development aided by the county as opposed to county economic development. The revival of the Jefferson County Fair is a positive step in this direction.

The second major concern of any development effort will be consistency and accountability. There has not been a coherent long term effort. Volunteers are essential and should never be avoided but strictly volunteer efforts have not worked well for the county and its communities. Performance has been erratic and uneven.

Larger communities can afford Chambers of Commerce, full-time Local Development Corporations, or other consistent leadership to mobilize elite and public opinion around issues, whereas the Jefferson County communities may be reluctant to support a full-time effort by a
specialist. Jefferson County is better placed to serve that need. It could also be served by an extra-regional entity that included the county.

Spending money for the activity would require higher taxes or further cuts in other services. The strong political pressure to rearrange a budget or raise taxes is unlikely without the political and social cohesion in the county to perceive the need and mobilize pressure. Thus, there is a cycle that renews itself in favor of inaction or more accurately, letting other actors such as the nearby cities and mining interests determine the character of Jefferson County development.

Great potential in people and natural resources exists in Jefferson County, but simply has not been organized. If this is not done by the residents of the region and its communities, it will continue to be largely a function of external entities acting in their own interests.


2. Conversation with anonymous former Burlington Northern Railroad employee, December 1987. The former employee related that the last rail shipments out of Whitehall were salvaged track materials. In the former employees opinion, no railroad is likely to restore service to Whitehall or anywhere in Jefferson County without a major commodity to carry. Also, the former employee thinks that Rail Links, Inc. does not have the capital backing to carry on indefinitely and its organization is a means to allow BN to abandon lines it finds unprofitable.


5. Planning Board, Development Plan, p.27.


7. State Lands, Tunnels EIS.


15. Jefferson County, Development Plan, p. 34.

16. Ibid, p.35.

17. Ibid, p.35.

18. Ibid, p.36.

19. Ibid, p.36.


22. Ibid, p.58.

23. Ibid, pp.62,73.

24. Ibid, p.73.


27. Ibid, p.91.

28. Telephone interview with Bobbie Sutherlin, Secretary of the Overall Economic Development Committee and member of the BRSH subcommittee, 3 November 1987.

29. Telephone interview with County Commissioner Joyce Janacaro, 5 January 1987. Commissioner Janacaro stated that the county had been given a "free hand" with the property.

30. Planning Board, Development Plan, p.76.


32. Ibid.

33. Planning Board, Development Plan, p.75.


35. Bobbie Sutherlin interview.
36. Planning Board, Development Plan, p.86.
37. Personal observation.
38. Bobbie Sutherlin interview.
40. Commissioner Janacaro interview.
47. "20 Acre Parcels Selling Quickly West of Whitehall", Whitehall Ledger, 2 December 1987, p.1;
Interview with Mark Turner, Madison-Jefferson County Extension Agent, January 1988.
49. Kirkendall Interview;
50. Telephone Interview with Betty Monforton, Local Development Corporation Officer, 8 November 1987.
53. Jefferson County, Development Plan, p.35.
55. Ibid, p.3.
56. Ibid, p.58.
58. Betty Monforton interview.
Residents county-wide and in each community regard their general quality of life as better than the average. Whitehall and Boulder respondents scored their communities as significantly above average at 3.06 and 3.00 respectively, while Northern Jefferson County scored their community at 2.25. Interestingly, the average respondent of Northern Jefferson County had more schooling and a higher income but this did not influence them to rate their community higher.

Value Preferences

In the region and for all the communities, the value statements related to the Natural Environment category came out highest. (See table 4.1 and data tables in Appendix B.) Surprisingly, the Quality of Work Life category came out ahead of the rest of the categories including Growth. Quality of Work Life was chosen as second in all the communities and the region, and was very close in number to the Natural Environment category.

Even more surprising, the Growth and Stability categories were number seven and eight out of eight. These indicated that while the region does not have a high regard for stability, it had an equally low regard of growth as popularly conceived. This is an indicator that change is acceptable if it is in a direction consistent with community values. Whitehall was the only community that rated Growth (eighth) lower than Stability (seventh). The preference rankings of the communities are quite similar, suggesting that the region is essentially homogeneous in its value preferences. See Table 4-1.
Table 4-1 was derived from the data in Appendix B. Preferences numbered one and two received the highest and second highest ratings in the preliminary value survey. Preferences numbered seven and eight were lowest in the survey, respectively. The table demonstrates the ordinal relationship among the values surveyed. For a graphic representation of the relative differences in community and regional response to each value, see the bar graph in Table 4-2.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Whitehall</th>
<th>Boulder</th>
<th>Northern Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Natural Environment</td>
<td>Natural Environment</td>
<td>Natural Environment</td>
</tr>
<tr>
<td>2</td>
<td>Quality Work Life</td>
<td>Quality Work Life</td>
<td>Quality Work Life</td>
</tr>
<tr>
<td>3</td>
<td>Community</td>
<td>Manmade Environment</td>
<td>Community</td>
</tr>
<tr>
<td>4</td>
<td>Personal Benefit</td>
<td>Personal Benefit</td>
<td>Personal Benefit</td>
</tr>
<tr>
<td>5</td>
<td>Manmade Environment</td>
<td>Community</td>
<td>Manmade Environment</td>
</tr>
<tr>
<td>6</td>
<td>Social Equity</td>
<td>Social Equity</td>
<td>Social Equity</td>
</tr>
<tr>
<td>7</td>
<td>Stability</td>
<td>Growth</td>
<td>Growth</td>
</tr>
<tr>
<td>8</td>
<td>Growth</td>
<td>Stability</td>
<td>Stability</td>
</tr>
</tbody>
</table>

Table 4-1
In Table 4-2, the following values are depicted: Individual Benefit, Growth, Natural Environment, Man-made Environment, Community, Stability, Work Life, and Social Equity. At the far right of the chart, the Quality of Life grades are included. The verbal responses were converted to a numerical scale of 1 to 4.

Comparison of Results of Survey
Jefferson County, 1988
The high and low value preferences are nearly identical. The high and low values are most likely to be securely held by the respondents. This means that the value preferences that fall in the mid-range of the preference scale tend to be unstable. In one survey they will be higher in the mid-range and in a later survey they may be lower. Respondents are more certain of those values they feel strongly about, whether negatively or positively. For this reason, only the top and bottom two categories are used as controlling criteria for the strategy. The mid-range values are not to be ignored, however. They still are preferred to the lowest ranked values, but will not be emphasized in the discussion.

In Chapter 3, Jefferson County was identified as a good place to live because of the natural environment and rural life. The high rating for natural environment probably reflects the premium residents place on the environment and recreational and rural opportunities. Obviously, maintaining a high quality environment must be a priority. Respondents wanted work that they could enjoy, that was respected by others, and that would provide a living. This is consistent with a national trend.

Both previous plans mentioned the need to preserve the natural environment while allowing for growth and use of natural resources. The growth-related questions included more job openings, more goods and services, and more people. Respondents wanted more job openings but not the people that come with conventional economic growth. So the need to minimize population increases must be part of the strategy.

The low preference for Growth, and simultaneously, a low preference for Stability seems paradoxical. Ordinarily, the writer would have expected a Stability value to be low if Growth were high and vice versa. A review of the specific value questions from which the numbers were derived did not resolve the question but did form the basis of a pragmatic interpretation.
The Stability value questions were strongest on avoiding "boom and bust" development. There was a low marking for fast change and this is consistent with the low preference for boom and bust development. Since Stability is valued low overall, this may mean that people are willing to accept change at this time though it should not be perceived as rapid or destructive, particularly to the natural environment or quality of work life. The writer has used this subjective interpretation for the purposes of this study.

Montanans have always lived in a less stable environment than other places since so much of our market or cash economy is dependent on outside events. The low value of stability may be more a recognition of reality than a preference. More work should be done to clarify this.

Suggested Strategy

The overall strategy consists of two guiding elements: First, the information in Chapter Three indicated that the region and the communities are presently under-developed economies; therefore, the region and communities will do best to concentrate on community development of a social, small business, and self-help nature before taking on larger projects. Second, the value survey analysis indicates that the region and communities rank the natural environment and quality of work lives highest and growth and stability lowest of the survey values. Therefore, development measures should feature enhancement of the natural environment and work life as well as employing people already in the area. Instability would be tolerated.

The following tentative recommendations satisfy these two sets of criteria that define the development strategy. The recommendations of the former plans and those introduced in this study were tested against the strategy criteria and those that could meet the criteria were recommended.
Once the idea or project is found to be consistent with the strategy, then it was evaluated for how easily or quickly it could be accomplished. Alternatives that required low capital inputs and low technologies, and could be rapidly completed were preferred and given first priority on the development schedule at the end of this chapter.

For example, both the alternative marketing of agricultural products and the Boulder Geothermal Park schemes appear relatively benign environmentally. Both can be developed in a way that encourages the formation and expansion of small businesses, though care may have to be taken with the Geothermal Park to meet this criteria. Alternate marketing arrangements created by existing producers are unlikely to increase the population. The Park could increase the population unless enterprises that fit these criteria are targeted for development and recruitment. This may require giving hiring preferences to local residents in order to meet this criteria. Both projects will require change but neither need be of the "boom and bust" nature. Both schemes pass this stage of consideration, though the Geothermal Park is conditional.

The next step is to determine the relative difficulty and completion time. The alternative marketing can be initiated immediately with a low cash requirement. Returns can be anticipated in less than five years. The Geothermal Park, however, will require a large amount of technical research, planning and investment of money and time before a single dollar is returned or job is created. The Park is obviously long-term and perhaps is best conceived and developed as spin-off of other projects.

Any recommended project must still pass a third test, that of technical and financial feasibility. This last test is beyond the scope of this paper and was not considered.
Tentative Recommendations, The County's Role

The county does not have strong internal cohesion and will find it difficult to manage development on a strictly regional basis. The similarities in values at the high and low end of the value preferences are a plus, however. The county will not have to deal with communities or subregions that have wide variations in values. The county will have to take into account the existing differences in interests, advantages, needs, and motivation.

The recommendation here is for the county to provide administrative and occasionally material support to the initiatives of the communities. The county government is well placed to facilitate community development and business development and may be crucial to the success of both. Particularly, the county can initiate the continuity and accountability that has so far been lacking.

The county should consider undertaking those development projects that look promising but are geographically, socially, or economically outside the communities and their integral support groups. This would include agriculture in particular and various recreational or timber enterprises as well. Farmers and ranchers are quite diverse in their needs and have difficulty organizing to meet them. Also, the communities may perceive agriculture as a development area beyond their capacities or that does not suit them. A county-wide or perhaps inter-county coordinator is needed here. The County Extension Office and the Soil Conservation Service are already in place and designed to support agriculture.

Likewise, the county should continue to be the primary intermediary for the region on mineral development and with state and federal land controlling agencies. The county will have a strong role here in protecting and enhancing the natural environment since it is the closest authority.
The county could serve as the most effective tourism coordinator unless private organizations in the county were willing to take on this responsibility. This might be best organized on a multi-county basis. The combined recreational resources of several counties, for example, Jefferson, Madison, and Broadwater, would be more attractive as a package.

County Opportunities

Those ideas that preserve and conserve the character of the natural environment while also offering a high quality work life are to be preferred. Agriculture, tourism, self-employment, self-sufficiency, and professional services fit this description provided they are on a scale small enough that people can control the quality of their work lives. A huge resort with a few well paid managers and many minimum wage service employees would not fit the second criteria and might not fit the first as well.

There are interesting opportunities in agriculture. Tourism and recreation have potential provided that the marketing can be worked out ahead of time. Import substitution of basic commodities will rely on development preferences at the local level but the opportunities are nearly unlimited in this. Since Jefferson County is a good place to live and adequate transportation and communications are available, non-site specific professional services can be offered.

For example, Association Management and Consultation (AMC), a management consultant firm for nonprofit organizations, is happy in Boulder. A book-keeping firm that operates by computers linked by telephones and handles no cash also fits this model. These enterprises require an up-to-date communication and transportation net in addition to other normal infrastructure. This type of development can fit the strategy, but improvements in the public and private infrastructure will be required to facilitate it.
The Communities

In each community the first recommendation is to encourage as much self-sufficiency or import substitution as possible. This will require some community development effort to first establish the needs and opportunities and educate the community to the possibilities. Once more money, time, and energy are concentrated in or focused on the local community, other more ambitious projects can be taken on. Also the necessary confidence and managerial skills will have been learned. Self-sufficiency projects tend to be environmentally benign (not all are) and to encourage acquiring the skills of planning and management as well as those of production and distribution, including marketing of goods and services.

Quality of work life is greatest when people have more control over their work. This need can be met by small proprietorships, small partnerships, corporations, and cooperative and democratically managed business. People will also find satisfaction in knowing they are both productive and contributing to the welfare of themselves and their communities. These opportunities are ideal for the low income and the elderly as they are labor intensive and require little starting capital.

This will be greatly facilitated by a community development strategy that emphasizes community integration and self-help in addition to technical assistance for small business and crafts. This should initially be applied by localities that already have some degree of social cohesion. It does not have to be an incorporated community—Jefferson City, Basin, and Cardwell all have this advantage.

Northern Jefferson County

Community development is most important to Northern Jefferson County. First, to establish social cohesion within each of its small communities and later in the area as a whole. This will be difficult because aside
from those local communities that already have some cohesion, the
attraction exerted by Helena is very strong. The best initial
direction is to concentrate on what Helena does not offer. The question
may well be asked at this point, "Why is this part of the county rated
lower by respondents in overall satisfaction?"

Northern Jefferson County rated the desire to have more people lowest
of all. If this holds true, then it is time to begin discouraging
further subdivision and other residential development. At the very
least, development should be consolidated for more efficiency. This
will also encourage social cohesion. New subdivisions should be
discouraged until existing subdivisions are fully occupied. This could
only occur with strong county leadership in comprehensive land use
planning and taxation policy, and strong community support.

The recommendation in the 1979 Plan to increase the level of private
services available should be followed. New services should be clustered
in order to cooperatively share resources and reduce the tax load.

Decisions to locate or attract midsize or larger enterprises, would
require additional standards so as to make them consistent with quality
of work life and environmental values. The 1979 Transportation Plan
should be revised to accommodate rapidly to changes in energy prices.

A Northern Jefferson County community development plan would be
difficult to create. An idea has been advanced by Boulder High School
teachers would to attract as many school children to the local school
system as possible. While not the primary goal of the teachers, this
could have a positive effect on social cohesion.

Boulder-Basin

Boulder-Basin has some concrete advantages to exploit. The BRSH
support committee should be maintained and the 1979 recommendation that
private services be increased should be followed. However, except for
the upgrading of main street services, all other development should be undertaken as if BRSH had disappeared! Starting from scratch is one way to circumvent the dependency and insecurity that is Boulder's main development problem.

Boulder would do well to follow the recommendations for evaluating its geothermal resources. It also could be the center of county recreation and tourism. The present Boulder Hot Springs is under-utilized. It has an ideal winter season location. It could provide the infrastructure for a number of small businesses—a recreation/tourist business incubator. The radon mines would also add to this.

Basin already has some artisans and evokes a western mining town appeal in an area full of recreational opportunities. Basin could continue its development along these lines.

Boulder could also develop non-site specific businesses, patterned on AMC. Eventually, some of BRSH buildings may be sold or leased. It is ready made for shops, offices, and a community center. By encouraging small businesses, jobs will be added for local people without drawing as many new people as large business development would.

Cardwell-Whitehall-Pipestone

Cardwell, Whitehall, and Pipestone already have a diverse base to build on. Agriculture, however, is concentrated in a few areas of commodity production. This could be diversified at low cost and little impact on the environment. Whitehall could easily grow more of its own food rather than importing it.

The Pipestone geothermal resource could be applied to space heat residential or agricultural buildings. The wind resource at Whitehall could be harnessed for pumping water or producing electricity. The Town Pump I-90 Interchange development could be enhanced by adding a diesel
truck repair center. The existing small stove manufacturing and a computer assembling businesses could be expanded by help with marketing.

This area is ideal for recreation and tourism development. Communities could cooperate to enhance facilities and services.

Conclusions

The foregoing includes a number of recommendations from previous plans that are relevant and consistent with the values of the community. Some of the strategy possibilities are new. These ideas should be presented for public participation in expanding or refining the strategy to become something the community could accept, enjoy, and support.

DEVELOPMENT SCHEDULE

Regional (County)

Stage I  Re-establish a small (no more than 15 persons) county wide development committee on a community basis. Use the committee to define the county's role in development and provide communication with local communities.

Stage II  1. Promote community discussion on issues, needs and projects.

2. County-wide review of water and land use and infrastructure.

Stage III 1. Determine the appropriate role for the county consistent with available resources and expressed needs of the county and communities.

Northern Jefferson County

Stage I  1. Build social cohesion around schools, churches, fairs, etc. Reinforce the present cohesion of small communities. (The first step is to evaluate
whether this is worth doing in light of Helena's dominance.)

2. Do feasibility studies on additional commercial services.
3. Do feasibility plan on transportation for commuters.
4. Study means to control development sprawl.

Stage II  Depends greatly on the social cohesion efforts in Stage I.

Boulder-Basin

Stage I  1. Build a positive -- action oriented -- image for the community.
   a. continue up-grading main street.
   b. Promote recreation activity and business in Helena, Butte, and Bozeman.
2. Energy conservation measures.
3. Do feasibility studies on expansion of commercial services and a recreation/tourist business incubator.

Stage II  Conceptual development and feasibility study of Geothermal Park.

Whitehall - Cardwell - Pipestone

Stage I  1. Reinforce social cohesion by integrating new residents.
2. Study marketing help for small manufacturers and alternative marketing of agricultural commodities.
3. Recreation promotion in Helena, Butte, and Bozeman.
4. Do feasibility study on transportation plan for commuters.
5. Feasibility studies on more commercial services.

Stage II  1. Investigate agricultural product processing alternatives.
2. Investigate geothermal resource at Pipestone and study wind energy applications.

3. The strategy is not anti-growth or anti-stability. All the other values are preferred to growth, for example, if it threatens them and, in particular, the top two values. Growth measures that meet the criteria of the suggested strategy are deliberately incorporated. The growth element the recommendations concentrate on de-emphasizing is an increase in the population of the region or communities.


This statement is based on an extrapolation from existing quality of work life literature. Most studies have been done of large industrial, commercial or public institutions. The categories involved, numbering from five to eleven depending upon the author, are reducible to three —

1. meeting the basic material needs of self and family,
2. meeting individual needs for growth and work satisfaction,
3. and meeting the need for social involvement and recognition.

Small, democratically or cooperatively managed firms can meet all three needs. It is not advisable to go too small, however. The balance of family and social life with work life may be severely stressed by financial and time pressures in very small businesses.

CHAPTER 5 CONCLUSIONS, EVALUATION OF THE METHODOLOGY

This experiment with the value survey method addresses the following questions: Can it reduce the present imbalance of other social values with the value of growth without making a judgment that any value should be superior? Can it provide a check on information gathered at hearings and other sources? Finally, can it help to democratize and popularize the concept of development planning? A further, unspoken question that must also be answered in this chapter is, is the method appropriate and practical?

Positive Aspects

On the first questions the answer is yes. A value survey can balance the other social and individual values with the growth value and weigh it equally. There is as yet no evidence that the method can provide a check on information gathered at hearings and other sources. However, this approach could provide some of the most important information for hearings.

Whether the approach can help to popularize and democratize planned development is much more questionable. The value survey increases contact with people in the region or community of concern. It focuses attention on the end goals of the people and gives that equal priority with the factors of production and distribution. The values of the people in the region may be given preference over the demands of the market economy or other regions. Elements of the development strategy can be clearly linked to factual development needs and regional potential. The value survey can be used to set a clear course of development for clearly understandable reasons. That alone might endear it to the public. Democratizing the development process and decision making would be helpful to all involved.

As an added bonus, it invites planners (professional or other) to consider what development methods are appropriate to accomplish the
desired goals. This may force the questioning of original assumptions.

As to its practicality, it is an easy method to apply and integrate into the design framework. Most of the technology already exists and is generally accepted. It is practical and appropriate in most instances provided that the method is valid and accurate.

Negative Aspects

On the negative side, the design is as crude as it is simple and wants further development and testing. It is also more time consuming initially, and since the approach is used in addition to paper studies, it will add to the expense of any study.

Fanciers of the myth of objective decision making will find that it does not eliminate subjective choices and perhaps worse, actually exposes them to view. The human factors of creativity and evaluation are still present. A perfect development strategy will not generate itself when using this process. Still, many potential alternatives may readily be discarded. For those who prefer an apolitical process, the value survey method will be a disappointment.

One other drawback is the potential for political division over the application of the value survey method since it could challenge the dominance of orthodox techniques and the values that support them. The outcome of any development plan may become less predictable and less controllable.

Recommendations for Further Work

Whatever the positives and negatives, the value survey method and its application to development planning still needs further refinement. Some of the value questions used are still too vague. Other questions need to be redrafted altogether. The Stability question about "boom and
bust" development, for example, did not have the proper positive wording.

The survey tool should also be redesigned and tested in the other communities, whose values could be established in another way, and the results compared. For instance, it might be applied in an urban area where the man-made environment could be expected to rate more highly. If it did not, this would call the validity of the method into question. Or, an entirely different set of value questions should be designed and tested in the same area to see if results are similar. Also, each of the value categories needs better definition. Having a team develop the questions would help greatly in this respect.

How this method will function to stimulate dialogue has yet to be tested. No attempt was made to integrate a dialogue into the study. That should be attempted after the value survey method has been validated by further testing. Even though a dialogue was omitted, the method is not intended to be a substitute for a public dialogue on development issues.

The concept of region needs to be used with more sophistication. In this case the region was defined by the political boundaries of Jefferson County. However, this study has provided the writer with further insight into the nature of a region as used in this study. While political boundaries are distinct and convenient, in the Jefferson County case they did not accurately reflect the boundaries of the relevant socio-economic activity.

In fact, North Jefferson County should be considered part of a socio-economic region with Helena at its center. The peripheral effects of that region reach as far as Boulder. The Whitehall area is trending toward a similar relationship with Butte. Designating Jefferson county as a region is an arbitrary decision and only appropriate when political considerations are the paramount concern. In most cases, people reside, work and play as if those boundaries do not exist.
While fuel and energy are cheap, the concept of a region may expand to cover large areas, cross political boundaries, and incorporate other, previously independent, communities in the path of improved roads and electric power and communication grids. If a region is a place where people reside and work, or where most of the income is earned, then only Whitehall and Boulder-Basin fit that description and both of them have no greater contacts with each other (absent county government) than any other center of economic activity.

Some other possibilities for further development of the survey method are to design a value survey that compares value preferences more directly and to reduce the number of hard data questions. An example of the direct preference comparison would be, "Would you prefer $1000 more annual income or keeping the air as clean as it now is?" , or its converse, "Would you give up $1000 in annual income to keep the air as clean as it now is?" This kind of question technique can provide more accurate information but requires more sophisticated techniques to evaluate.

Some of the hard data questions could be dropped if there is no need for extensive cross-tabulation. Only three or four questions are required to determine whether the sample is representative of the population. In testing for the randomness of the sample only three data questions gave information easily compared to Census records. These were age, years of schooling, and income. The 1983 County and City Data Book listed the median age in the county as 29.5 years while the respondents had a mean age of 46.8 years. In 1983, 72.8% of the adults had high school diplomas and 17.8% had 16 years or more of schooling. Sample respondents were 50% with high school diplomas and 36.9% college degrees.

In 1983, 34.9% of the respondents had household incomes of $10-20,000 and 31.8% had household incomes above $20,000. Whitehall respondents had incomes in the $10-20,000 range 41% of the time and Boulder and
Northern Jefferson County respondents had income in the $10-20,000 and above $20,000 ranges 50% and 60% of the time respectively. It is obvious that the survey was answered primarily by individuals with more education. Whitehall's respondents were allowed less self-selection in the telephone poll and were a closer match to the Census data. Boulder and Northern Jefferson County were done by mail and had a very low response from the low income range.

The mail questionnaire in particular did not achieve a true random sample. The overall sample of the preliminary study was skewed toward higher incomes. The accuracy of the sample should be considered in evaluating any survey data. In this case, the small sample size precludes any reliance on the results of the value survey. The data served as experimental material to explore a methodology. The reader is reminded that the tentative strategy recommendation of the study was guided in part by value preference data of questionable validity.

The last recommendation is to keep professional assistance to a minimum. Ideally, the value survey and decision making should be entirely a local democratic concern. However, professional help may well be used to initiate the study and evaluate factual information about the region or community. Professional help may best be used in the technical stages of implementation when experienced businessmen, bureaucrats, entrepreneurs, politicians and citizens are guiding a program through the initial stages of operation.

Evaluation

The value survey was used here in a preliminary study and there was no attempt to integrate the value data into a discussion or dialogue to evaluate community response to the strategy recommendation, the factual data on the region and communities, or the value survey method. The direction of research is promising. The value survey is simple to employ and so technically uncomplicated that it may be easily understood by all. Having the value data made choosing the strategies relatively
easy when compared against the factual information about the region. Given the choice, and with some of the suggested refinements, the writer would employ the value survey method again in a development study or project.

APPENDIX A

Survey Script

Hello, I am taking a survey of peoples' opinions on economic issues. Are you age 18 or older? (If NO, ask for someone else in the household who is. If NO on that then close the interview.) Then you could help me by taking 10 minutes to answer some questions. Let me explain what I am going to do. I will ask you to respond to some statements.

Then I will ask some questions about you. After that you will have a chance to ask questions about the survey. Do you understand? (If YES, go on. If NO, repeat above where needed.)

A. How well does your community meet your expectations for a good life? Give it a grade of A, B, C, D, or F.

B. Issue questions. Give your first impression of the issue's importance to you. I will read a statement and you reply by stating whether in your opinion the issue is of little importance, some importance, or great importance to you.

How important is it:

Individual

1. to have more money in your pocket.
2. to be able to do anything you want.
3. to have a more challenging life.

Growth

4. to have more people in (community).
5. to have more job openings in (community).
6. to have more goods and services available in (community).
| Natural Environment          | 7. to have clean, unpolluted air to breath. |
|                            | 8. to have clean, unpolluted water to drink. |
|                            | 9. to have places where you can be alone in natural surroundings. |
| Man-made Environment       | 10. for the man-made part of your surroundings to be pleasing to you. |
|                            | 11. for all access roads to be paved. |
|                            | 12. to be confident that man's activities are good for your health instead of dangerous. |
| Community                  | 13. to have a low violent crime rate. |
|                            | 14. to have community related activities. |
|                            | 15. to feel a part of your community. |
| Stability                  | 16. to live in a community that changes quickly. |
|                            | 17. to avoid a boom and bust cycle in the local economy. |
|                            | 18. to recognise the people you meet in the stores and on the street. |
| Work                       | 19. to have a job that you like. |
|                            | 20. to have others respect you for the job you do. |
|                            | 21. to have a job that pays enough to live on. |
| Equity                     | 22. to have an equal opportunity to make a good living. |
|                            | 23. to have as much in material things as your neighbors. |
|                            | 24. to have equal voice in public affairs. |
C. Personal information.

Now I will ask some questions about you.

What is your age? ______

Are you male or female? M F

Are you married or single? M S

How many years have you lived in (community)? ______

Is your total household income - under $10,000; $10,000-20,000; $20,000-40,000; over $40,000.

How many persons live in your household? ______

What is your occupation? ________________ *

How much schooling did you complete? Grade school; High school; G.E.D.; College Degree.

D. Close Interview.

Thank you for your cooperation. (Answer questions the respondent may have at this point.)
Value statement notes to explain what the statement is trying to measure.

1) Concern for personal prosperity or financial security.
2) Individual freedom from restrictions and limits.
3) Self-explanatory (SE).
4) Reaction to an increase in population.
5) Desire to decrease unemployment in the community.
6) Increase in the number or size of outlets for goods and services.
7) SE
8) SE
9) Value for wild places; natural surroundings.
10) Value aesthetic quality of man-made or altered places.
11) Value first-rate infrastructure.
12) Concern about toxic substances and environmental degradation.
13) Community is benign and non-threatening.
14) Community is active and engages its members in constructive activity.
15) Sense of belonging and connectedness.
16) Value of change.
17) Value economic stability.
18) Value the ability to recognise other members of the community.
19) Personal value of work other than material rewards.
20) Social value of work.
21) Work should provide adequate standard of living.
22) Equal access to resources/employment.
23) Value a rough equality of material prosperity.
24) Political and social equality.
MAIL QUESTIONNAIRE

Dear Jefferson County resident,

The enclosed list of questions is a new type of survey. It asks for your opinions and some personal facts. Your answers are needed to test this survey and improve it.

The source of the survey cannot be revealed beforehand for fear it may bias your answers. Questions about the survey will be answered if you enclose a note and self-addressed envelope with your response.

If you are age 18 or older and would like to help, please answer the questions to the best of your ability, place the survey sheet in the enclosed envelope and mail it before January 30. Your name and address were selected at random from the local telephone book along with fifty others. In order to keep your answers confidential, do not put your name or address on the survey.

TEST SURVEY #1

A. How well does your community meet your expectations for a good life? Give it a grade of: A, B, C, D, or F. (circle one)

B. Below is a list of issue questions. Go through the questions only once and give your first guess on each. State your opinion of the issues' importance to you by circling one letter after the statement. The letters stand for: L = Little importance; S = Some importance; G = Great importance; VG = Very Great importance.

HOW IMPORTANT IS IT:

1. To have more money in your pocket. Little Some Great Very great

2. To have more people in your community. L S G VG

3. To have clean, unpolluted air to breath. L S G VG

4. For the man-made part of your surroundings to be pleasing to you. L S G VG

5. To have a low crime rate. L S G VG

6. To live in a community that changes quickly. L S G VG

7. To have a job that you like. L S G VG

8. To have an equal opportunity to make a living. L S G VG

9. To be able to do anything you want. L S G VG

10. To have more job openings in the community. L S G VG

11. To have clean, unpolluted water to drink. L S G VG

12. For all access roads to be paved. L S G VG
HOW IMPORTANT IS IT:

13. To have community related activities. L S G VG

14. To avoid a boom and bust in the local economy. L S G VG

15. To have others respect you for the job you do. L S G VG

16. To have as much in material things as your neighbors. L S G VG

17. To have a challenging life. L S G VG

18. To have more goods and services available in the community. L S G VG

19. To have places where you can be alone in natural surroundings. L S G VG

20. To be confident that man's activities are good for your health instead of bad for your health. L S G VG

21. To feel a part of your community. L S G VG

22. To recognise the people you meet in the stores and on the streets of your community. Little Some Great Very Great

23. To have a job that pays enough to live on. L S G VG

24. To have equal voice in public affairs. L S G VG

C. The following questions will show whether the people answering the survey were chosen randomly. Please answer to the best of your ability.

25. What is your age? _____

26. Are you male or female? __ M ___ F

27. Are you married or single? __________

28. How many years have you lived in this community? _______

29. Is your total household income - under $10,000; $10,000-20,000; $20,000-40,000; over $40,000?

30. How many persons live in your household? _____

31. What is your occupation? ______________

32. How much schooling did you complete? Grade school; High school; G.E.D.; College Degree.

This is the end. Please put the survey in the envelope and mail it. Thank you.
In Table B-1, Group Mean for Survey Values by Community, the values measured in the survey are listed as they appear in the Telephone Survey Script in Appendix A. The numbers that appear under the column heading, Mean for Each Question, are an average of the individual responses for each question. In the right-hand column is the average of the responses to the three questions in each battery. This represents the final score for that community on that value.

Table B-2, Survey Results by Community, presents the final score on each value. The right-hand column, labeled Mean, is an average of the community scores on that value, and represents the score for the county. The Quality of Life grade is listed at the top of the table.

Table B-3, Description of those surveyed in Each Community, is a summary of the vital data responses. A mode or modes were stated instead of an average where that figure was more informative. This is a description of respondents, not of the residents of any community.

The data presented is based on 13 mail responses from Northern Jefferson County, 9 mail responses from Boulder-Basin, and 25 telephone responses from Whitehall. The reliability of the data computed from a sample of 47 out of a population of 8,100 is extremely low and should not be represented as factual.
Table B - 1

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** Northern Jefferson County

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Table B - 1 cont.

GROUP MEAN FOR SURVEY VALUES BY COMMUNITY

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### Table B - 2

**SURVEY RESULTS**  
**BY COMMUNITY**  
(Scale of 0 - 4.0)

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<th>Values</th>
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<th>Boulder</th>
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### Table B - 3

**DESCRIPTION**  
**OF THOSE SURVEYED**  
**IN EACH COMMUNITY**

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<tr>
<th>Community</th>
<th>Average Age</th>
<th>% Male (Mode)</th>
<th>% Married (Mode)</th>
<th>Income Range</th>
<th>Ave. No. of People in Home (Mode)</th>
<th>Education</th>
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<td>Northern Jefferson County</td>
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<td>76%</td>
<td>76%</td>
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<td>2.61</td>
<td>69% High School</td>
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<td></td>
<td>$10-20 K</td>
<td>41%</td>
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<td>$20-40 K</td>
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<td>$10-20 K</td>
<td>44%</td>
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</tbody>
</table>

| Boulder                    | 43.3        | 50%           | 100%             |              | 3.75                             | 62% College Degree            |
|                            | $20-40 K    | 50%           |                   |              |                                  |                              |
|                            | $10-20 K    | 30%           |                   |              |                                  |                              |
|                            | $20-40 K    | 44%           |                   |              |                                  |                              |
|                            | $10-20 K    | 44%           |                   |              |                                  |                              |

| Whitehall                  | 55.1        | 44%           | 30%              |              | 2.36                             | 36% High School, 36% College  |
|                            | $20-40 K    | 44%           |                   |              |                                  |                              |
|                            | $10-20 K    | 30%           |                   |              |                                  |                              |
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