Controversy between two opposing factions have confused rural development policy formulation. Infrastructure advocates believe that the improvement of highways and sewer systems, as well as the provision of industrial park sites and industrial recruitment, are the keys to successful rural economic growth. Human resource development advocates promote structural change in rural areas through increased investment in education and effective leadership in rural communities. It cannot be deduced from research that infrastructure investment leads directly to regional development, yet state and local governments continue to pursue industrial recruitment via physical infrastructure development. Lack of research on the impact of human resource investment on local or regional economic growth causes communities not to value education as a means of creating economic opportunities. If the effects of increased investment in human resources could be assessed adequately, community-devised employment strategies could become a key factor in solving the problem of under-utilized labor supplies. In a survey of the literature on leadership program evaluation, obstacles that are likely to be encountered are presented in this study. This paper contains 63 references. (ALL)
OBSTACLES LIMITING THE RESEARCH ON THE ECONOMIC IMPACT OF RURAL LEADERSHIP DEVELOPMENT PROGRAMS

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I. INTRODUCTION

Many scholars (John and Norris, 1989; Smith, 1988; Drabenstott, et al., 1988; Knutson and Fischer) have surmised that the rural economic decline of the 1980s has been largely a product of ineffective or nonexistent rural development policy. They have suggested that controversy among two factions, in particular, have confused policy formulation.

Traditional policy proponents, or "infrastructure advocates," believe that improvement of highways, sewer systems and provision of industrial park sites and industrial recruitment are the keys to successful rural economic growth. The "newcomers," relatively, to the rural development policy platform are the "human resource development advocates." This faction has organized initiatives to promote structural change in rural areas through increased investments in education and effective leadership in rural communities. Although at this point they are not recognized as organized lobbyists, supporters of human resource investment are perceived by infrastructure advocates as threatening to their traditionally accepted role in rural development efforts.

Recent research stresses that areas must be targeted objectively as appropriate recipients of one approach or the other (Ross and Rosenfeld, 1988; Ryan, 1988; Mulkey and Henry, 1988; Drabenstott and Henry, 1988). Thus, understanding the growth potential of an area empirically is
paramount in gauging more accurately which approach might be most effective. Many scholars note, additionally, the lack of theoretical underpinnings for defining a concrete relationship between economic growth and physical infrastructure development. Attempts to define this issue, in fact, have varied considerably in logical approach, scope of models, and degree of quantification.¹

Regional scientists have concluded recently that a variety of conditions (including when and where) interact with independent variables to determine precisely what, if any, economic impact is derived from the construction of physical infrastructure such as highways (Isserman, 1989; Nijkamp, 1986). It cannot be deduced from research that infrastructure investment will lead a priori to regional development improvement. This implies that infrastructure policy is only a conditional policy dependent upon a number of regional socioeconomic elements. Yet, despite the many unanswered questions and uncertainties regarding this field of research, state and local governments continue to pursue industrial recruitment via physical infrastructure development strategies (and tax abatements) as a major thrust of rural development initiatives.

Equally puzzling is the complexity of measuring the impact of human resource investment on local or regional economic growth. McNamara, Kriesel and Deaton (1988) have commented on the surprising lack of research in this area given the significance of human factors to the

location decision of firms. Smith (1988) has addressed this void in his request for evidence to verify the importance or relevance of increased investment in education. He argues that economic based impact models, used to test assumptions about industrial location in rural areas, are conceptually static or short-run in nature. There is, therefore, no provision for analysis of long-term, intergenerational impacts on social institutional structure or behavioral predispositions of the indigenous population. Smith contends that communities, for lack of contrary information, do not place equal value upon education as a means for creating economic opportunities. Yet Smith concludes that if the effects of increased investment in human resources could be assessed adequately, community-devised employment strategies may become a key factor in solving the problem of under-utilized labor supplies.

RURAL LEADERSHIP Since the 1950s, leadership development programs have been used to assist communities in creating goals for localized improvements. The focus of these programs has varied from assistance in developing growth strategies specifically to more general education to develop public policy awareness. Family Community Leadership Training, Public Affairs Leadership Program, Kellogg Farmers' Study Program, Kellogg Extension Education Project, and other more recent national, state, and local outreach programs have captured the attention of legislators, media, and the general public as a means of educating rural residents about public policy. Thus far, these programs have been described generally as successful in arousing public awareness of rural economic issues and developing interest in directing community activities to address these issues (House, 1981).
Continuation of statewide leadership programs outside or in addition to privately funded initiatives appears to be related to the development of a strong base of support for these initiatives. This support depends upon whether the program has been considered "economically feasible" (Howell, et al, 1982). But what determines economic feasibility? How can we measure whether benefits exceed costs? In times of razor-edge budget constraints, it would appear that rural development policy choices are greatly contingent upon more quantitative verification of the economic value of this aspect of human resource investment. Yet, there have been no attempts to measure direct or indirect impact on local or regional economic structures. In fact, there has been little said about what exactly are the assumed costs and benefits of such programs. This problem remains not only unsolved but largely untended in academic literature. Is this response a result of earlier pitfalls encountered in attempts to test empirically human resource development models? Considering plausible reasons explicitly as to why this research topic has been "shelved" could provide some clues as to whether the question has an empirical answer. Simply stated: Can rural leadership programs be evaluated empirically in economic terms as are highways?

In a survey of the literature on leadership program evaluation, this paper presents obstacles that are likely to be encountered in attempts to address this question. Section i) introduces the issue, sections ii) reviews previous research efforts, iii) illustrates methodological and definition obstacles, section iv) reconsiders the

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2 Mark Blaug (1976) has provided an extensive survey of literature documenting such attempts.
research problem, and section v) concludes with thoughts regarding future efforts. It is hoped, at least, that the recognition of obstacles preventing the economic assessment of such programs will spawn innovations to surmount such obstacles. Understanding the economic impacts of rural leadership development programs could serve to improve these programs. More importantly, however, such information could assist citizens and policy-makers in planning more effectively the economic survival or revival of rural areas.

II. PREVIOUS RESEARCH

Prior to the mid-1970s, limited evaluations of rural leadership programs specifically had been conducted. Rothert (1969) used a quasi-experimental research design to test for changes in attitudes and knowledge among participants in a leadership development program for Michigan farmers. Both pre- and post-tests results indicated that open-mindedness and critical thinking ability were associated with higher education levels. The post-tests, however, indicated that for persons with lower educational achievement levels the gains were greater. Rothert found also increased abilities in reading comprehension skills and problem-solving skills regarding farm policy.

Miller (1976) also evaluated the Michigan Programs based upon the participants' reports of their experience. Variables examined included changes in participants' lifestyles and self-perception. In addition, he used self-reports primarily to examine the extent to which programs

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3 The type of quasi-experimentation frequently used to evaluate leadership programs is the non-equivalent control group method. See section iii) for further explanation.
influenced an increase in involvement in new community roles, encouraged a greater commitment to agricultural activities, family and education, and improved communication and decision-making skills.

Giebink (1975) headed an evaluation effort in Montana to assess the effects of that program based on self-reports of one group of program participants. Similar to Miller's results participants reported improvements in their "self-confidence, leadership skills, and knowledge of public issues." But several unintended effects, such as familial tension and strain, were identified as well.

Howell and Wilkinson (1977) utilized a non-equivalent control group method to evaluate the Pennsylvania program. Pre- and posttest results were obtained from program participants at the beginning of the program as well as two years after graduation. Their results indicated that participants, when compared with a non-equivalent comparison group, had statistically significant gains in memberships and officerships in economic associations and public-affairs related organizations. "In addition, the researchers identified a trend away from participation in nongovernment-affiliated voluntary public service organizations and toward greater involvement in organizations with legislated authority to act on behalf of the community."

Martin (1977), administering post-tests immediately after the program, compared gain scores of the Pennsylvania program participants with those of a comparison group. Also, Martin studied the impact of sex, age, and socio-economic status to determine whether different effects were experienced by the control groups than for the comparison group. Two program groups showed a positive relationship between socio-economic status and the political participation variable while one group
showed a negative relationship. Age and sex were not found to be significantly related to either political participation or memberships in instrumental organizations.  

A research team at Washington State University used four separate statewide case studies to comparatively evaluate and thus identify similarities of program effects (Howell, et al., 1982). Each state was analyzed separately using non-equivalent control methods likewise. Leadership indicators derived from the program goals measured changes in behavior and self-perception. Results were prefaced with cautions regarding exogenous factors that threatened validity, however, i.e. uncontrolled influences such as variations from state to state in type of participants, program objectives, population density and size, election processes, and urbanization. As research measurements were based on changes regarding involvement in public affairs and expansion of extension programs, similarities and/or differences in outcomes were used as a basis for overall program effectiveness. Pre-existing influential factors such as age, sex, and socioeconomic status, family income and pre-test participation on measures of change in organizational structure were accounted for. Although family size and motivation was recognized as influential variables, they were excluded.

4 Martin combined different types of public affairs related organizations and economic associations into one measure of participation in instrumental organizations, and investigated how the program affected persons with different personal characteristics.

5 The W.K. Kellogg Foundation awarded the contract to evaluate the programs and an advisory committee was formed to provide guidelines for the research, i.e., define common program goals, research questions and evaluation procedures. The four case studies evaluated state-wide programs in Pennsylvania, Michigan, California, and Montana.
from the pre-test indices and researchers advised caution in interpreting test results.

Substantial gains in participation in economic associations were noted and were second to government and public service organizations in size of average gains from pre- to post-test. Increases were observed in involvement in expressive organizations, i.e., social and fraternity groups, as well. Limited data analysis indicated that females increased their involvement in public service organizations more so than males who participated in programs. Participation priorities and careers were affected in terms of competence and advancement toward goals. Some strain and tension was noted among families with one spouse in the program and among program graduates and peers and older leaders of the community. Self-assessment indices noted, in particular, an enhanced confidence as a public affair participant, as well as increased feelings of growth, independence and self-worth. Also, respondents reported perceiving themselves as more knowledgeable about resources and appreciative of the importance of information, interrelationships among problems, and gains in abilities to use group skills within the setting of the community.

Goal-related program effects overall included new memberships in government and public service organizations, increases in appointments on regional planning commissions and health councils, and expansion via alumni groups to continue education of statewide program participants and graduates. Associations were developed during the program and spinoff educational programs at involved institutions were created.

The Montana and Pennsylvania programs received further scrutiny in the context of increasing involvement of men and women in public
affairs. Cook, et al., (1985) used the non-equivalent comparison group technique to find that both female and male participants in programs lasting for more than two years increased their participation in instrumental organizations while men showed small increases in participation in expressive organizations. Additionally, there were differences by sex in changes in particular types of instrumental organizations. Men continued to participate more in economic organizations than women while women had greater gains than men in participation in government organizations. Variations between men and women in post-test gains were ascribed to a number of possible explanations including program differences, initial minority participation by women in the programs, and prior participation differences.

Williams (1981) evaluated the Montana programs, in particular, based on its four variations in duration. Utilizing the "recurrent institutional cycle design," self-reports in all groups included positive changes in self-image, more effectiveness in leadership activities and involvement in roles requiring leadership skills. Those participants in more intensive and lengthier programs experienced even greater gains in leadership indicators. A "self-consciousness scale," which measured the extent to which people felt self-conscious when in new social situations resulted in gains.

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6 This type of quasi-experimental research design provides for treatment, i.e., leadership program, to be administered on a cyclical schedule to a group of new participants allowing effects of each variation on the treatment to be analyzed comparatively.
III. MEASUREMENT OBSTACLES

Examination of previous research highlights several apparent pieces to the measurement puzzle. First, there is minimal theoretical construct on which to base consistent quantitative analysis of leadership development programs. Exactly what defines impact of rural leadership development? In fact, no widely accepted or formally established definition for leadership exists. Therefore, what definition exists for the "impact" in general of rural leadership development? The issue is further complicated in that goals in the development of leaders are often generally stated and vary considerably among programs. It is difficult to determine what are the specific program objectives and whether or to what degree they are met. It is difficult to discern further what implicit assumption defends any economic impact in rural areas as a result of leadership development. It appears, however, that programs described as successful are those whose participants display increased activity in economic organizations and/or other more "instrumental" groups. Additionally, it appears desirable for participants to switch from involvement in expressive associations to activity in such groups, and preferably at higher power levels. Yet there has been little effort to measure any changes initiated by these organizations as a result of absorbing newly developed leaders.

Methodological obstacles in evaluating any effects of leadership development are inherent due to the nature of the development process. Rural leadership development programs have been designed around an adult
education curriculum: a curriculum designed to provide adult citizens with information with the intent that such information will result in desired modified behavior producing and/or nurturing better leaders. Research designed to evaluate the impact of such programs has derived from the genre of research conducted in education experimentation, i.e., reiterative multivariate experimentation with lack of complete control of interactive variables manipulated during the procedures. In fact, in most of the research, it is explained at the outset that threats to internal and external validity exist and should be considered in interpreting test results. But, it is unclear as to how carefully or consistently controls are exercised to ensure greater study validity. Part of this problem lies in the fact that the majority of the data generated is subjective, i.e., to the extent that it is based on self-reports of "perceived" program impacts.

DEFINING LEADERSHIP AS AN INDEPENDENT VARIABLE. A considerable body of literature, reaching as far back as the 1800s, encompass research efforts to define leadership. Most of these earlier attempts focused on genetic explanations or the "great man" theory for explaining leader qualities. Even as late as the 1900s, energy was spent identifying "traits" that comprise desirable characteristics of leaders. Using military samples, research then turned to describing leader behavior in various roles of authority. The "situational approach" and "contingency models," which emphasize identifying leadership characteristics demanded by groups and specific conditions or situations, grew out of this earlier work. Finally, the "transactional approach" developed, which examined leadership based on the quality of interaction between leaders.
and followers.

Research activities in community development, increasing in the 1950s, illustrate these later trends in understanding leadership. Confusion in arriving at a consensus for a definition appears to be nested in uncertainty as to the kind of person to be a leader and the kinds of followers produced. Such connotations included the expert, the father-substitute, the natural leader, the manipulator, the community organizer, the community educator, and the participant-leader (Biddle, 1953).

Rosener (1978) comments additionally on the debate surrounding the definition of citizen participation since implementation of The Equal Opportunity Act of 1964 that, in turn, spawned an increase in participation and leadership programs. In outlining some standard evaluation criteria for which to measure "effective" citizen participation, she observes that the problem lies in the fact that effective public participation "assumes that there is agreement to its meaning, which is not the case." In fact, she explains, "there is no widely acceptable scheme for conceptualizing and measuring its effectiveness; and it is, in part, this lack of agreement which prevents us from making effective citizen participation the bottom line for government."

Wengert (1976) observes that the measurement problem is based in part on the assumption that effectiveness is a linear function of citizen participation when, in fact, it is curvilinear. Thus measurement, he argues, should not assume that more is better and instead should seek to measure not the maximum but the optimal. To complicate matters further, goals of more recent programs have
included a diverse collection of ideas regarding what constitutes the
development of rural leaders. These include:

- Increase participation in public affairs activities on the
  part of young men and women from rural areas who show potential
  for leadership. -
- Improve problem-solving and leadership skills of farmers
  and persons residing in rural areas. -
- Expand extension programming at land grant universities
  in the areas of public affairs education and rural

Leadership development programs with such goals could be graded as
successful if, in addition, they provide participants with opportunities
to learn new roles, sharpen problem-solving skills, motivate
participants to develop new and different roles, broaden their
comprehension of public issues, provide positive working associations
with other leaders, and establish new role expectations of peers
involved in organizations with program graduates. Program objectives
have broadened thus in spectrum of desired impact, expanding from
behavioral changes to include implicit area impacts.

Another program cited the following goals for leadership
development:

- Improve leadership skills of rural leaders,
- Enhance rural revitalization,
- Address critical issues in counties,
- Develop models and materials for others to use,
- Access educational institute knowledge base,
- Demonstrate extension's delivery mechanism, and
- Cooperate with other agencies and organizations (Palmetto
  Leadership, 1989).

Such aspirations for developing leaders contrast with numerous
community development studies that postulate hypotheses for determinants
of effective leaders as well. "Hierarchical positioning" in the
community power structure, for example, has been suggested as the
primary determinant of effective leadership. And, in this sense,
information and access to resources is positively related to position in an action network (Beaulieu and Ryan, 1984). According to other findings (generally of supporters of "mobilization" theory) age, education, occupation and other personal characteristics are unimportant in determining leadership. Instead, it is organizational involvement that breeds later political activity irrespective of socio-economic status. As voluntary associations provide opportunities for development of new relationships it attracts people into public affairs organizations—which can nurture leadership skills and develop other personal resources as well (Bokemeir and Tait, 1980). Some would argue, however, that sex, in particular tends to follow a predictive pattern of leadership behavior with women belonging to expressive organizations and men belonging to instrumental. And additionally, they contend that leadership research should address this pattern to comprehend more fully the implications that exist for developing effective leaders.

Perhaps the key to defining leadership lies in understanding explicitly what skills are necessary to make leaders "effective?" And defining effectiveness depends on the conceptual approach the researcher takes towards leadership. From a transactional perspective, effective leadership may be considered as possessing "the ability to induce followers to act on goals that represent the values, wants, and needs of both leaders and followers" (Burns, 1978). Or, leadership may be thought of more as a relationship than as an individual ability: a relationship one develops with a potential followership. To be effective, in this case "a leader must tailor his or her behavior to fit the specific leadership situation." (Vroom, 1973)

The evaluation literature on rural leadership development, in
particular, suggests that development of effective leaders is based on improvement of self-image. Implicit in this assumption is that leaders who are more self-confident are necessarily more efficient in directing a group process to achieve certain ends for the community. This rationale appears to regress to earlier assumptions about great men being great leaders. Apparently, there is an assumption that rural residents possess such low self-esteem that program goals should focus on development of self-confidence as a vehicle for bringing about organized changes to improve rural areas. Pointing to self-confidence as an important factor in "gaining influence," i.e., becoming a leader, is no: equivalent necessarily to developing efficient rural organizations with objectives for inducing change--specifically of economic variables.

In contrast, those who support a motivation approach to leadership development maintain that people, urban or rural, are more likely to accomplish something if they believe they can be effective. The naive think they would have to get fifty-one percent to agree first; the knowledgeable know that a handful of visible people can sway boards and commissions.

Following the more recently considered transactional view of leadership effectiveness, the leader-follower relationship is considered in two respects.

- First, it deals with the responsiveness of the group in gaining specified goals. Second, it means securing those goals with the greatest possible consideration for the individuals comprising the group. - (Hollander, 1978)

Leaders are a resource for followers in the transactional view of leadership (as opposed to reputation or positional concept of
leadership, whereby the leader influences others). In other words the transactional leader can allow himself to be influenced by others (Hollander, 1978). Research focusing on the follower might be equally necessary as it is the follower who accepts or rejects leadership in responding to both the leader and the situation. If followers maintain expectations of leaders based on contributions and a social exchange exists between leaders and followers, does this imply that evaluation of leadership performance should concentrate on observational changes in followers? If so, what behavior would be desirable from an economic perspective? In other words what economic structural changes could be measured to trace the effectiveness of developing leaders via the followers?

METHODOLOGICAL OBSTACLES Numerous methodological obstacles exist in the evaluation of leadership programs, i.e., whether program objectives have been met and or leaders developed. Given that a conformal definition of effective leadership existed, the fact remains that attempting to measure program effects based upon self-reports and observed behavioral changes induces empirical nightmares.

In evaluation research, "tories are usually based upon nonspecific recollections of what was meant to have taken place, experiments are often after-the-fact reconstructions of a series of events that were supposed to have happened, and the measurements are often indirect measures which may be totally unrelated to program activities." (Howell, et al., 1979)

In social science research the traditional approach to experimental methodology requires random selection of groups, one or more of which are subject to a "treatment" or the event under analysis (Campbell and Stanley, 1963). Groups not receiving the treatment are analyzed to account for changes that occur and are "controlled" for exogenous
factors that might influence the outcome of the experiment. The basic concept is that "without a control group there is no way to tell how much of the overall effect in the experimental group was true cause and how much was extraneous effect." (Bailey 1978)

Quasi-experimentation, non-equivalent group analysis specifically, allows for the absence of this random selection of subjects. For an evaluation of behavioral and perceptual changes as a result of leadership education, the quasi-experimental techniques are necessary as participants are carefully selected based on such criteria as previous performance in voluntary organizations, age and educational achievement, or socio-economic characteristics.

Use of this modified experimental methodology, however, is wrought with risks to internal and external validity of the experiment. Risks to internal validity are those factors that consider "plausible rival hypothesis" or those occurrences during the duration of the experiment which could make the treatment appear to have had an effect, when in fact the effect noted was created by unrelated events. External validity concerns itself with interaction effects or those involving the treatment and some other variable. Lack of external validity in the experimental design prevents generalizations to be made based on experimental outcomes.

In evaluating observed and perceived behavioral changes as a result of leadership education there exist several pitfalls. In fact, for every caution regarding validity in quasi-experimentation there exists a threat in evaluation of leadership development. A common problem concerns history or those events that occur prior to or between treatments or maturation, the "natural process operating within the
individual" may induce the observed changes in the treatment group. Additionally, "pre-test" experiences might bias "post-test" scores. Instrumentation may pose a validity threat if test instruments are altered between tests, i.e., type of questionnaire, for example, whether the questions change from explicit to generalized. Statistical regression is a problem in particular as participants are selected for high pre-test scores generally in voluntary behavior: non-equivalent selection of control groups may bias post-test results. And, finally, mortality or lost cases (i.e., people drop out of programs, move away, or die) or those individuals for which only partial data exist can introduce sample biases (Campbell and Stanley, 1963).

Common risks to external validity of the experiment are: reactive testing, whereby pre-test questions affect later behavior; interaction effects of selection biases and treatment variations, or when another sample produces very different results; the Hawthorne effect, wherein participants are aware they are being watched and this in turn affects data collected via self-report; the "halo" effect, where respondents having invested time in a program see only its merits and want to realize its intended affects, thus biasing post-tests; multiple treatment interference, or when several treatments administered overlap so that differentiation in treatment effects are not possible (Campbell and Stanley, 1963; Howell, et al., 1979). External validity problems would of course be lessened if control and treatment groups were selected randomly yet quasi-experimentation precludes this random selection. Especially in the case of leadership evaluation, the non-equivalent group design does not require pre-experimental sampling equivalence between the treatment group and control or comparison group.
The longitudinal analysis necessary to assess program effects (for any type of human resource investment) emphasizes the weakness of the non-equivalent comparative design. In the course of years that comprise a given leadership development program, for example, other similar treatments may be initiated that try to build upon or imitate experimental programs. Complimentary spin-off programs or, in some cases, competing programs that may have been administered prior to the treatment program if not considered in the group selection process may threaten validity with effects of history and multiple treatment interference.

Regional analytic applications of quasi-experimentation to measure economic impact of regional policy have attempted to improve validity by modifying parametric quasi-experimental techniques utilizing a "separate-sample pre-test/post-test control group design." Basically, this requires the careful selection of control groups based upon a set of determined criteria. Pre-tests are conducted to determine similarity between control and treatment groups to ensure that groups selected are as similar as possible. The idea being that impact is a measurement of change in growth rates assessed over periods of time.

As regional economic development programs, like leadership programs, disallow random selection of study regions, this alternative has great potential for assessing more accurately economic impact of regional policy. And such assessment may include physical infrastructure and/or human resource development. Since regional policy is designed as treatment for specific regions targeted on the basis of need or economic development potential, marriage between quasi-experimental techniques and economic impact assessment appears logical.
IV. RECONSIDERING THE RESEARCH QUESTION

Regional development efforts appear to have juxtaposed conceptually an emphasis upon education to reduce unemployment and increase socio-economic activity (Hansen, 1970) and the development of physical infrastructure to provide jobs via industrial development (Fox, 1987). Both development policies imply economic impacts would be felt. Endorsement of one over the other however is tenable in light of contradictory findings of research on highways and inconclusive research on human resource development.

Alternatively, research on a Community Resource Development (CRD) input measurement model have proven to be disappointing and somewhat confusing to the original motives of CRD of which leadership development is an important part. In examining CRD programs in Arkansas in the late 1950s and 1960s, Miller, et al. (1984), using this method, found that programs had no positive effect on employment or economic activity that could be measured. In other words job-training increased unemployment via increasing the size of labor force and was thought to have increased out-migration of young persons as well to other job opportunities. Significant "social multipliers," (a commonly assumed basis for CRD programs, in that community improvement can occur as a result of local activity and interest stimulation which could impact simultaneously service and economic development sectors) was not found to have occurred in this study. Economic sectors of study counties did not respond positively to inputs but those counties with specific targeted problems did show positive economic development effects in years following the CRD inputs.

A question arising from this analysis is whether the effective
alternative is to focus on examination of goal specific measurement. As Miller points out, trying to estimate statistically overall effects (quality of life improvements) is inappropriate. Instead, he suggests that impact assessment models be constructed that identify carefully detailed objectives for area specific analysis and to measure if they had been achieved. Furthermore, he questions the use of "community development" as an output in terms of evaluation.

The Heartland Center study (1987) has approached the economic impact issue by synthesizing what positional and reputational leaders of rural communities deemed as attributes that could stimulate growth. From among these 20 clues pinpointed as survival necessaries, the following allude to intent to concentrate on economic issues. These included: emphasis on quality in business and community life, willingness to invest in the future, networking and resource linking to state agencies and programs as apart of an economic development approach, knowledge regarding competitive positioning (physical infrastructure), a county-wide economic development approach, improving quality of life, realistic appraisal of future opportunities, sound and well-maintained infrastructure, careful use of fiscal resources, sophisticated use of information resources, and a willingness to seek help from the outside, yet conviction that, in the long run, you have to do "it" yourself.

If leader perception is supposed to be a measurable indicator of success of leadership development, more attention needs to be paid to demographic differences or similarities among leader-participants. According to Bachtel and Molnar (1980), some community elements receive direct benefits from the attraction of new industry and expansion of
business while others do not. Thus, there is an equity and redistribution question unanswered and unaddressed. Additionally, research has indicated that black and white perspectives differ on industrial growth issues and reflect different concerns and interests. In the future, leadership programs should account for these differences in program goal setting, objective targeting, and evaluation procedures.

IN THE CONTEXT OF INTERVENTION Napier, et al. (1980) has tested a human resource development model to attempt to understand unemployment status and duration and investigate attitudes in rural counties toward community development priorities. The rationale is that intervention programs to reduce unemployment are development approaches based on adaptation of human resource development models. Napier has argued that the improvement of community resident role playing skills will increase opportunities to participate in the economic system. This assumes, however, that useful roles are available for persons with completed educational experiences. This assumption likewise implies that human resource development resource models as development strategy will be more effective in an already diversified economy or geographic regions with developed economic infrastructure. There is an obvious need for future evaluation of human resource development models in rural areas based on the developmental stage of economic structure. Consideration for theory regarding the level of physical and social infrastructure in an area will have to be incorporated into empirical regional studies as a necessary criteria for estimating potential impacts of leadership programs.
WESTERN RURAL DEVELOPMENT CENTER An evaluation approach at WRDC (1987) is attempting to determine whether economic development can be justified as an objective for local leadership groups, especially if initiated from the outside.\(^7\) The researchers have outlined five steps to examine the problem. First, participants who attended a workshop on economic development were evaluated using self-reports noting behavioral, perceptual and attitude changes as a result of the workshop. Second, a follow-up evaluation sheet was administered one year after the workshop to observe participants views of changes in their community to validate effects of the leadership project, i.e., whether participants perceived any changes related to economic development as a result of the program.\(^8\)

An academic literature search was conducted in hopes of explaining income, employment, or any other related changes to explain or offer as information to educate citizens about economic potential.\(^9\) One hundred and thirty citations were identified that demonstrated methods most often used to initiate growth. These included: leadership training, manpower training, tax incentives, and allocation via

\(^7\) The following information was volunteered by Russ Youmans via telephone interview in July, 1989.

\(^8\) Contact with participants was maintained but the follow-up evaluation was unexpected.

\(^9\) Any relationships between transportation systems and economic growth were included.
government funding.

It was hoped that, as a product of the search, a guide to "what works" in other places and situations to stimulate economic growth could be derived and presented to agencies and decision makers. Future plans are to examine these approaches by sorting through the compilation to determine those that intervene in economic development of communities. Such examples are expected to include: needs assessments, assessments to incite activity, and field representatives to assist citizens in accomplishing goals. Three or four of these approaches will be analyzed for effectiveness in increasing abilities in communities to deal with economic development issues. With these methods in mind a large sample of communities will be analyzed in terms of changes in economic variables via a cross-sectional analysis.

V. CONCLUSIONS

If economic analysts perceive leadership from a positive stance so that the basic interest is in how choices and decisions "would" be made extending this perception to impact analysis warrants identifying what economic impacts "would" occur as a result of leadership development. Examining obstacles in defining leadership in this context, however, will require innovative methodological considerations to stretch this line of thought. Attempts to outline such assumptions in the design of the program will reduce the ambiguity surrounding the concept of leadership development that might prevent public officials and citizens alike from being held accountable. A clear consensus of assumptions regarding participation, leadership, and associated effects in a
regional perspective will prove useful to those directly and indirectly involved in leadership programs. It will require those mandating such programs to clarify their expectations and implicit goals. Additionally, it will necessitate that citizens be informed and knowledgeable about such assumptions in order to make reasonable demands.

In moving toward a method for measuring the economic impact of effective leadership, consideration must be given to how well organizations absorbing these leaders achieve given available information, resources, or limitations. Specific criteria to define standards of program evaluation will have to be identified in the design phase of programs. Such criteria might include: evidence of formalized courses of action and funding. Examples of transactional leadership development, to the extent that citizens have input in policy and planning decisions, will have to be observed, as well as that citizens were involved in problem definition, alternative evaluation, and priority setting. As Rosener (1978) observes, the value question is do activities to meet the criteria serve as end to themselves or as a means to an end? And even with an outline of more objective criteria the final decision as to "whether the program is effective is subjective but at least less so."

We may assert with reasonable confidence that economic development is unlikely without leaders. But we cannot say confidently that increasing leadership development efforts will lead to economic development. The question that has evaded scientific inquiry remains unanswered.
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