

A PROPOSAL  
FOR  
TITLE V FUNDS  
RURAL DEVELOPMENT ACT OF 1972  
FOR PROJECT ENTITLED  
DEVELOPING A SINGLE SYSTEM OF  
COMMUNITY SERVICES FOR  
RURAL COUNTIES IN N. C.

Covering the Period: April 1, 1977 to March 31, 1978  
Requesting Support in the Amount of \$ 5,173 Research  
\$ 9,550 Extension  
\$ 14,723 Total

Submitted by

James O. Shurling, Asst Prof. Sociology / Anthro.  
Name of Principal Investigator, Title, Department

Self  
(Name) Head, Department of (Name)

Robert W. Timmer  
(Name) Dean of (Name)

SCHOOL OF LIBERAL ARTS  
N. C. STATE UNIVERSITY  
119 TOMPKINS HALL  
RALEIGH, N. C. 27607

### Introduction to Research Problem

Rural residents tend to experience problems which are related to specific changes in their counties. Population losses due to outmigration, lack of economic diversification, and escalating costs of vital services are but several of these problematic changes. As the trend among large, populous counties in North Carolina toward a single system of services continues, the question regarding whether such services can be unified in rural counties is an important one. That is, can the unification of fire and police components into a single public safety component be beneficial to a rural area? Can the operation of a single emergency health care system, uniting volunteer rescue squads and county-operated ambulance services, better serve the health needs of rural people? This project, then, is concerned with actual patterns of the delivery of community services and an effort to measure the desirability among the citizenry of a unified system of delivery.

Growing concern with the costs of government, the efficiency of public service agencies, and the well-being of rural residents give rise in part to the need of testing the viability of alternative models for delivering vital community services.

Perceptions of changing social situations, the types of information available to citizens, and the degree of community involvement are important factors in assisting people in rural areas to make those decisions which serve community needs.

Christenson (1975) reported and discussed a number of concerns expressed by citizens of North Carolina. Included in his report are displays of aggregate data for the state wide sample, data by governmental planning regions, and by counties. His findings show that people



in N. C. are not only willing for more monies to be spent but actually want more public funds allocated to the areas of Law and Order and Health and Welfare (p. 5., Vol. II, Through Our Eyes). Seventy-two percent (72%) of the respondents ranked Law and Order as the number one priority for increased public funds; fifty-four percent (54%) ranked Health and Welfare as the number two priority (p. 6).

Granville County as a rural area is characterized as follows: the estimated population of the county is 20,544, with two (2) major population areas -- Oxford (7178) and Butner (3538); there is one small hospital for the county, no fire districts which are listed with the N.C. Fire Rating Bureau; there are nine (9) nonrated volunteer rural fire departments. Oxford and Butner each has a fire department which employs minimum full-time personnel. Each of these two towns has its own police department, two (2) other townships have one or two officer departments. The rural areas are served by the Sheriffs department headquartered in Oxford. At least three (3) volunteer rescue squads operate in the county and there is one (1) commercial ambulance service.

Data from the 1970 census indicate that Granville County, like other rural areas, is losing some population to migration, especially young people. Between 1960 and 1970, there was a net population loss of 1.1%. At the same time the number of households increased +9.3% and the number of people over 65 was 8.7%. These factors suggest that community needs are changing and specific planned changes for delivery of needed services are required.

When the Christenson data for the county of Granville are compared to the state wide data, some interesting comparisons may be drawn. In

two areas, county citizen concern was slightly higher than the state sample, the Law Enforcement dimension labeled Highway Patrol; in the Health category, citizen concern for the county health component was slightly higher than the state wide response. Granville citizens listed rural health care facilities as being an area which needs more state funding by 28% of the people.

The finding of Hassinger (1961) that locus of control in a social system influences citizen participation and that formerly unique rural systems are beset with "problems of adjustment" to urban America are consistent with the findings of Christenson (1975) which show that 67% of the respondents in the N.C. sample report that opportunity of citizen participation in community decisions is either poor or fair. Wilkening (1961) reported that education and contact with government officials influenced farmer participation in community affairs. Rural life is being subjected to forces for which rural residents are not equipped to cope adequately. For instance, a growing expectation of very rapid and adequate emergency health care is not met when the emergency vehicles are located many miles distant and may not be in active service at all. Some areas of the county are between fire fighting units and therefore without dependable and rapid response. The options available to the citizens are to lower expectations to meet the actual situation, to continue in a state of merely wanting improved services, or to act in some constructive way to bring about desired and affordable change.

The scarcity of county fiscal resources, the limited economic capabilities of small rural communities, the concern of citizens for



improved opportunity to participate in community decisions, and the citizens' reported desires for some improvements in services they receive underscore the practicality and need of this research.

Specific Objectives:

This project specifically proposes to:

1. Make a systematic study of Granville County to map the patterns which are operable among citizens in seeking and obtaining regular and emergency health care, police, and fire protection, by geographic location, age, family size, and selected socio-economic factors;
2. Ascertain which rural counties in North Carolina comparable to Granville County have a single system of services delivery and describe the way in which the system was developed (done by correspondence with county managers or county commissioners and selected on-site visits);
3. Measure knowledge of and perceptions of available community services and citizens' perceptions of changes needed in the delivery of community services;
4. Develop alternative models of delivery systems and measure citizen acceptance, with particular emphasis on a county-wide system, as well as mechanisms by which information may be gathered and disseminated in an optimal form for public usage.

It is likely that other objectives may emerge as the project proceeds. Where appropriate and possible such emerging objectives will be taken into account.

### Proposed Research Sites

Each of the rural townships and the voting precincts of the incorporated towns will be sampled. The county map will be used to chart centers of community services, sources of information, geographical distances, population descriptions, and other related factors.

### Organization and Operational Procedures

Upon completion of the research design, development of instruments, mapping of community services centers and other related details, the principal investigator and graduate assistant will work in the field collecting data, utilizing extension capabilities and Vo-Ag resources were applicable and available. The major researcher will be responsible for compilation of the data, the statistical analyses, and utilization of the data in the final report form.

The project will be housed in The Department of Sociology and Anthropology and will be under the direct supervision of the principal investigator, a faculty member. Thus the project will be subject to traditional lines of authority and accountability.

The project staff will include principal investigator, graduate research assistant, field workers, and part-time secretarial help.

### Project Duration

If funded for 1977-78, the project would begin in April 1977 and be concluded on March 31, 1978, operating by the following proposed schedule:

Month One -

Determination of relevant data to be assembled, scheduling on-site visits, designation of specific staff responsibilities, and staff training.



Month Two & Three -	Critique project format, research methodologies, test instruments, refine staff technique, correspond with site personnel and extension personnel.
Months Four, Five, Six, Seven & Eight -	On site visits, interviewing sample families in rural areas, county and community leadership.
Months Nine & Ten -	Complication of data, statistical analyses, and interpretation of data.
Months Eleven & Twelve -	Complete data analyses, write final report, printing of final report.

#### Complementarity of This Project with Ongoing Research & Extension Programs At UCSU

Across the 100 counties of N.C. the Extension Service seeks to serve the people of the state. On-going research in the areas of economic and social well-being in rural areas, as well as quality of life studies, will be complemented by this project.

In another, specific way this research will complement current Extension efforts in seeking to establish patterns of planned change in rural counties. It will, moreover, complement the work on the attitudes of North Carolina previously cited (Christenson).

#### Relationship Between Research and Extension Components

The research and extension components are related both in the process of doing the research and in the implementation of a single system of community services. Extension personnel are a valuable resource in the county and work within a cooperative model which would be a valuable asset to such a system as is being proposed.

The outcome of this project may well bring about still more cooperative linkages between Extension staff in the county and its Citizenry. Moreover, Extension is already a well established source of needed information for the communities. Perhaps one outcome would be a much better system of disseminating vital information regarding the needed services than has existed in the past.

#### Evaluation

This project will be evaluated in terms of fulfillment of the four (4) research objectives listed above.

Specifically, single delivery systems at work in rural counties of North Carolina will be located and described briefly in this report.

A detailed mapping of the people's use of community services will be tabulated and compared.

How rural citizens perceive the current delivery systems of community services and how they perceive needed changes in those systems will be measured and compared.

The final report will contain findings in a useful form and will make specific recommendations regarding implementation of alternative systems for delivery of community services.



**BUDGET STATEMENT RESEARCH AND EXTENSION SERVICE**  
**TITLE V RURAL DEVELOPMENT ACT OF 1972 (P.L. 92-419)**

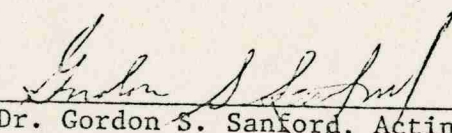
STATE OR REGION  
 North Carolina

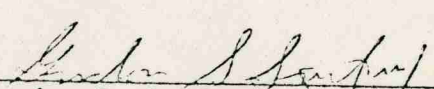
PROGRAM TITLE  
 Developing a Single System for Community Services for Rural  
 Counties in North Carolina

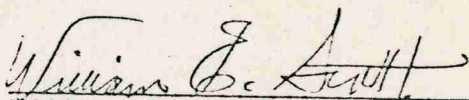
1. PERSONNEL:		RESEARCH COMPONENT		EXTENSION COMPONENT	
		(MYE)	AMOUNT	(MYE)	AMOUNT
(A) PROFESSIONAL-SCIENTIST RESEARCH (NAME AND TITLES)			\$		\$
James O. Shurling				.25	5,000
(B) PROFESSIONAL SUPPORT					
Graduate Research Assistant					
(C) TECHNICAL SUPPORT (TECHNICIANS--PARA-PROFESSIONAL)			4,400		
(D) CLERICAL LABOR AND OTHER (Temporary Labor)			700		2,300
2. PERSONNEL SUBTOTAL			\$ 5,100		\$ 7,300
3. TRAVEL			33		400
4. EQUIPMENT					
5. OTHER OPERATING EXPENSES (IDENTIFY LARGE ITEMS)					
Employee Benefits			40		785
Computer, Communication, Supplies, Printing					1,065
6. SUBTOTAL			\$ 73		\$ 2,250
7. COOPERATIVE AGREEMENTS, CONTRACTS OR GRANTS WITH OTHER INSTITUTIONS:					
INSTITUTION	SALARY MYE TRAVEL EQUIP. OTHER				
EXT					
RES					
EXT					
RES					
EXT					
RES					
8. GRAND TOTAL			\$ 5,173		\$ 9,550

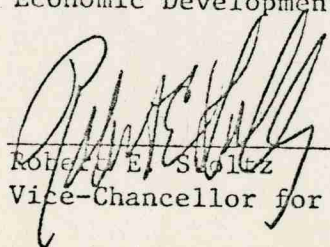
A PROPOSAL  
FOR  
TITLE V FUNDS  
RURAL DEVELOPMENT ACT OF 1972  
FOR PROJECT ENTITLED  
A MODEL FOR COMPARING ALTERNATIVE DEVELOPMENT  
STRATEGIES IN A SMALL RURAL AREA  
Covering the Period July 1, 1977 to July 1, 1978  
Requesting Support in the Amount of \$3,470 Research  
4,080 Extension  
\$7,550 Total

Submitted by

  
Principal Investigator: Dr. Gordon S. Sanford, Acting Director  
Economic Development Center

  
Gordon S. Sanford, Acting Director  
Economic Development Center

  
William Scott, Interim Dean  
School of Business

  
Robert E. Stoltz  
Vice-Chancellor for Academic Affairs



## A Model for Comparing Alternative Development Strategies in a Small Rural Area

### Introduction

Under a three-year pilot study which is currently in its third year the Economic Development Center has endeavored to identify possible developable alternatives to guide community leaders in planning for community development. The geographic area delineated in that study consisted of Cherokee, Clay, Graham, Jackson, Macon, and Swain counties. All of these are counties which have suffered from a relatively low level of family income, few good employment opportunities, and generally an unemployment rate at least twice as great as the state average.

In the on-going study, the best development alternatives were identified. For that study "best" was defined as the most viable among several acceptable strategies. The method used to determine these alternatives was first to collect and evaluate data about the resource base for each county. Then the employment information collected for each county was used as data for an Input-Output Study for the six-county area. This method of analysis provided estimates of the interdependence between each economic sector and generated measures of economic impact on the region in the form of export sales multipliers and employment multipliers by sector. The results of this analysis can also be used to calculate some of the direct and indirect costs and benefits from pursuing selected development alternatives.

Of the six counties included in the present study area, the largest county which appears to have the best potential for increasing its economic base in the agricultural sector is Cherokee county. This conclusion rests in part on the fact that in the spring of 1976 a half-million dollar facility was opened for improving the marketing of agricultural products.

This facility will serve to encourage the production of livestock, truck crops, and nursery crops.

The population of Cherokee county was 16,330 persons in 1970 and has increased to an estimated 16,550 persons in 1974. This is an increase of 1.35 percent over four years. The growth rate is projected to be at least twice that over the second half of the decade. This would give a population of at least 17,000 persons by 1980, and there is every reason to believe that the growth in population will likely exceed this number. Table 1 shows the number of establishments by type of business for Cherokee county in 1968 and 1973, as well as the number of employees reported by those establishments in those years. It will be noted that there was a considerable increase in both the total number of businesses and the total number of manufacturing firms. Table 2 shows that there has been some growth in almost all areas of employment except agriculture.

Due to the diversification of industry which presently exists in Cherokee county and the potential which exists for increasing agricultural production, it appears that this county would serve as a good case to study further in an effort to develop a model for comparing the benefits which could accrue to the community from various alternative strategies for development. A methodology could be developed for evaluating alternative development strategies, using the data for Cherokee county developed in the on-going study. This would serve as the basis for a model having wider application for development planning in small rural areas. Subsequent phases of the project would involve testing the model on other counties in the six-county area.



Table 1. Number of Employees and Number of Reporting Units by Type of Business in Cherokee County, North Carolina, 1968 and 1973

	No. Employees		No. Reporting Units	
	1968	1973	1968	1973
Total	4,624	5,387	261	281
Agriculture, Forestry, Fisheries	20	4	4	3
Mining	a	a	2	3
Contract Construction	290	339	26	25
Manufacturing	3,037	3,483	28	37
Textile Mill Products	1,168	1,031	5	8
Apparel & Other Textile Prod.	361	a	3	3
Lumber & Wood Products	223	193	10	13
Furniture & Fixtures	a	a	1	1
Stone, Clay & Glass Products	b	121	b	4
Electrical Equip. & Supplies	a	a	1	1
Instruments & Related Products	a	a	1	1
Transportation & Public Utilities	34	63	8	14
Wholesale Trade	80	86	20	20
Retail Trade	533	491	104	106
General Merchandise	41	64	11	11
Food Stores	80	69	14	11
Automotive Dealers & Serv. Sta.	a	86	12	28
Apparel & Accessory Stores	52	50	12	11
Furniture & Home Furnishings	b	35	b	10
Eating & Drinking	122	67	9	11
Miscellaneous Retail	57	75	16	16
Finance, Insurance, & Real Estate	106	154	9	13
Services	401	649	53	519
Medical & Health Services	160	312	13	14
Non-profit Organizations	a	a	6	8
Unclassified establishments	a	a	7	6

a Information is deleted to preserve confidentiality.

b No information available for this year.

Source: County Business Patterns 1973: North Carolina. Social and Economic Statistics Administration, Bureau of the Census, U. S. Department of Commerce, Washington, D. C., October, 1974.

Table 2. Labor Force and Employment by Type of Employer in Cherokee County, North Carolina for 1970 to 1973

	1973	1972	1971	1970
Civilian Labor Force <sup>a</sup>	6,500	6,740	6,420	6,490
Unemployment, Total	300	500	550	510
Unemployment, Rate	4.6	7.4	8.6	7.9
Employment, Total	6,200	6,240	5,870	5,980
Agricultural Emp.	210	210	200	230
Non Agri. Wage & Salary	5,200	5,200	4,870	4,950
All Other	790	830	800	800
Industry Employment <sup>b</sup>				
Manufacturing	3,120	3,200	2,960	2,900
Construction	220	230	170	190
Trans., Comm, & P.				
Utilities	90	70	40	40
Trade	640	560	570	610
Finance, Ins., & Real				
Estate	90	70	40	40
Service	470	450	480	570
Government	730	690	700	680
Other Nonmanufacturing	120	130	130	140

a. By place of residence.

b. By place of work.

Source: North Carolina Labor Force Estimates, Bureau of Employment Security Research, Employment Security Commission of North Carolina, Raleigh, N. C., November, 1974.



### Statement of Objective

The primary objective of the proposed study will be to construct a model for comparing alternative development strategies for small rural areas. In order to achieve this objective, several sub-objectives may be identified.

1. To summarize a set of viable alternative development strategies from the on-going rural development project.
2. To survey county officials, planners, and private citizens to determine future goals of rural development.
3. To develop a ranking of these goals.
4. To analyze alternative development strategies using the techniques of goal programming.
5. To generate a set of coefficients which will serve as a basis for comparing alternative development strategies which can be used by community planners.
6. To test these coefficients under different conditions in order to develop a model with application to a wider range of conditions.

### Method of Analysis

As stated above, the proposed study will utilize information generated by the on-going study, but also will require the generation of new data. From the present study, information can be obtained as to those industries which appear to have the highest potential for services in Cherokee County and some information on their potential impact on the county's economy. The agricultural sector, however, will need to be refined further.

A survey of agricultural producers will be made to determine the intra-sector flows of goods and services and to estimate the potential for increased growth in each sector. The growth in each agricultural sector will be influenced

by the current agricultural mix in the county, and there also may be other sectors, not currently active in the county, which have growth potential. This information will be provided by the on-going study and an analysis of the resources of Cherokee County. When this information has been obtained, sub-objective one will have been attained.

A major focus of the study will be the quantification of the goals of the community leaders. Goals such as a reduction of unemployment, an increase in family income, or a reduction in environmental deterioration are goals which may be important as well as many others. The survey will develop a concise listing of goals for Cherokee County and develop a ranking of these goals.

Since it is assumed that the community leaders will desire to have several of these goals attained by rural development, then the relatively new technique of goal programming<sup>1</sup> would be a useful means of measuring alternative development strategies. Goal programming analyzes each alternative in terms of the deviations from these goals and is a viable means of minimizing the deviations from these goals. The solutions to the goal programming problems will allow planners to select development strategies with the knowledge of their effects upon the future well-being of the county and its citizens.

From these goal programming solutions, a set of coefficients will be developed for use by Cherokee County officials. Upon completion of these coefficients, all of the first five objectives will be attained.

In order to determine if the coefficients have applicability for county planning over a wider range of conditions, the model should be tested in counties throughout western North Carolina. It is proposed that this testing be accomplished

<sup>1</sup> A concise explanation of goal programming can be found in R. V. Hartley, Operations Research: A Managerial Emphasis. Goodyear Publishing Co., Inc. Pacific Palisades, California. A more complete treatment of the technique can be found in S. M. Lee, Goal Programming for Decision Analysis. Philadelphia: Auerback, 1972.



in the second year of the project. Upon completion of this testing, a more general model will have been developed and it should be applicable in rural areas throughout the United States.

#### Duration of Project

The present proposal is for a research extension project which will begin in July, 1977, and continue for one year for the completion of objectives one through five. A total .84 man-year equivalents of professional staff time will be expended on the project of which .51 man-year equivalents will be in research and .27 man-year equivalents in extension. This will be augmented by 1.08 man-year equivalents of para-professional and clerical assistance of which .71 will be in research and .37 man-year equivalents in extension.

#### Professional Personnel

Gordon S. Sanford, Principal Investigator, currently serves as Acting Director of the Economic Development Center at Western Carolina University. Prior to his present appointment, he served from July, 1970, to July, 1972, as Research Economist in the Center. Then, as well as now, he has been actively engaged in a broad research and extension effort in the Appalachian region of North Carolina. He currently directs three research or technical assistance grants, all of which are aimed at investigating and proposing solutions for problems of development in rural areas. From July, 1967, to May, 1969, he served as an economic development consultant to the government of Peru, South America, advising on problems of rural resource development. He holds the Master of Science degree with a major in agricultural economics from the University of Connecticut and the Doctor of Philosophy degree from North Carolina State University with a major in regional economic development.

Raymond S. Ferrell currently is the Research Economist in the Economic Development Center, a position he has held since August, 1974. From September, 1969, to June, 1974, he taught forest economics at Southern Illinois University and engaged in research related to problems of forest management and problems of the development of resources in rural areas related to forestry, particularly recreation development. He holds the Doctor of Philosophy degree from Iowa State University with a major in Economics. Prior to obtaining his Master of Science and Ph.D. degrees, he was resource manager with the Forest Service in Eastern Kentucky for four years. In this position he was responsible for working with local industry and determining the resource requirements of industry.

Jackie Sellers is the Head of the Department of Administrative Science at Western Carolina University. He holds the Doctor of Philosophy degree in Economics from the University of Georgia. His research activity is in the areas of quantitative analysis with special emphasis on the economic evaluation of large government expenditures for water resources in rural areas. He teaches graduate courses in quantitative methods.

E. Lawrence Morton is a Professor of Information Systems at Western Carolina University. He holds the Doctor of Philosophy degree from Louisiana State University in Chemical Engineering. Since being at Western Carolina, he has served as Acting Head of the Department of Information Services and Acting Director of the University Computer Center. His research activity is in the area of applied computer science techniques to management information problems. He teaches graduate and undergraduate courses in computer science.

#### Institutions Involved

The only institution involved in the study will be Western Carolina University. The Economic Development Center within the School of Business will be



the coordinating agency for the University.

#### Relationship Between Research and Extension Components

As was mentioned earlier in the statement of objectives, two of the dominant factors which have hindered economic development in the region under study have been a lack of knowledge of the interrelationship of the forces affecting growth and development and the lack of an effective organized effort to develop the potential of the region's resources. It is the intent of the Research Team to conduct an extension education program as part of the proposed project which will convey to the community leaders in the region knowledge gained through the research effort.

This extension component will incorporate a series of workshops at the community level. The subject matter of these meetings as they will relate to the research component of this project will include the determination of development goals to be used as data for the research phase. The workshops conducted after the research phase will place emphasis on the usefulness of the measures derived for selecting among alternative strategies.

#### Relation of Proposal to Ongoing Programs

This proposed project would be extremely complementary to the ongoing program of research and technical assistance of the Economic Development Center of Western Carolina University. The Center has been involved in a program of rural development for seven and one-half years oriented toward assisting in the improvement of employment opportunities for the citizens of western North Carolina. The program has three components, research, extension education, and information dissemination. They are combined in an effort to offer technical assistance for economic development of business, small industry and local governments in a 28-

county area of western North Carolina. Twenty-three of the twenty-eight counties are designated as part of Appalachia North Carolina and are predominantly rural. Training and course work are offered in many phases of management and community development. Training of individuals in business and local government is considered part of the extension education program.

In 1976 the Center received its third grant under Title I of the Higher Education Act and administered by the General Administrator of the University of North Carolina. The objective of this project was to conduct an extension education program for local units of government on long-range financial management planning.

Since May of this year the Center has been working under a contract with the Southwestern North Carolina Planning and Economic Development Commission financed with funds from HUD. Under the terms of the contract, the Center will develop a Land Development Guide and a Housing Element for the North Carolina counties of Cherokee, Clay, Graham, Haywood, Jackson, Macon, and Swain. The information provided by this research will be of great benefit to the proposed study. The project will extend well into Fiscal Year 1978.

#### Specification of Evaluation Criteria

Clearly the best criteria for evaluating impact or success of the project would be a long-term observation of the implementation of recommended development strategies. However, other measures that would be useful for an immediate evaluation would include the acceptance of the recommended strategies as the actual goals for the local planning effort. This acceptance would necessarily include a commitment to implement the best development strategies. This commitment would be obtained in the form of a resolution by the county planning board.

Another criterion for evaluation in the earlier stage of the project will be the success of the Research Team in obtaining the cooperation of local community



leaders in identifying their development goals. This can be measured by the number of participants in the survey and by the number of realistic goals specified.

Finally, a very important test of the success of this project will be the usefulness of the research methodology in application to other areas. This can only be tested by applying it. This is planned as a subsequent phase of the proposed project.

BUDGET STATEMENT RESEARCH AND EXTENSION SERVICE  
TITLE V RURAL DEVELOPMENT ACT OF 1972 (P.L. 92-419)

STATE OR REGION North Carolina	PROGRAM TITLE A Model for Comparing Alternative Strategies for a Small Rural Area - In Agreement with the Economic Development Center, Western Carolina University.
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1. PERSONNEL:	RESEARCH COMPONENT		EXTENSION COMPONENT	
	(MYE)	AMOUNT	(MYE)	AMOUNT
(A) PROFESSIONAL-SCIENTIST RESEARCH (NAME AND TITLES)		\$		\$
Gordon S. Sanford	.1	650	.25	1,700
Raymond S. Ferrell	.12	820	.18	1,200
(B) PROFESSIONAL SUPPORT				
(C) TECHNICAL SUPPORT (TECHNICIANS--PARA-PROFESSIONAL)	.25	870	.70	480
(D) CLERICAL LABOR AND OTHER	.1	360	.15	120
2. PERSONNEL SUBTOTAL		(2,686) \$ 2,700		(9,810) \$ 3,500
3. TRAVEL		100		(800) 150
4. EQUIPMENT				
5. OTHER OPERATING EXPENSES (IDENTIFY LARGE ITEMS)				
Personnel Benefits		(244) 270		(790) 330
Computer, Communications, Supplies, Printing		(70) 400		(600)- 100
6. SUBTOTAL		(314) \$ 770		(2,190) \$ 580
7. COOPERATIVE AGREEMENTS, CONTRACTS OR GRANTS WITH OTHER INSTITUTIONS:				
INSTITUTION	SALARY	MYE	TRAVEL	EQUIP. OTHER
Western Carolina Univ.				
Economic Dev. EXT				16,080
Center RES		6,470		
EXT				
RES				
EXT				
RES				
8. GRAND TOTAL **		(3,000) \$ 6,470		\$ 16,080 (12,000)

\* Because this project is a logical extension of a previous project funded under Title V and a large amount of monies was carried over to FY 77, the budget appears disproportionately small for this project. Carryover funds from FY 76 are shown in parentheses ( ).

\*\* Totals include \$3,000 for Research and \$12,000 for Extension being carried over from FY 76 to be expended in FY 77. FORM AD 458 (8-73)



BUDGET STATEMENT RESEARCH AND EXTENSION SERVICE  
TITLE V RURAL DEVELOPMENT ACT OF 1972 (P.L. 92-419)

STATE OR REGION		PROGRAM TITLE			
North Carolina		A Model for Comparing Alternative Strategies for a Small Rural Area			
1. PERSONNEL:		RESEARCH COMPONENT		EXTENSION COMPONENT	
		(MYE)	AMOUNT	(MYE)	AMOUNT
(A) PROFESSIONAL-SCIENTIST RESEARCH (NAME AND TITLES)			\$		\$
Raymond S. Ferrell		.2	4,100	.1	2,050
James Manring				.5	6,500
Gordon Sanford				.2	4,322
Roy Thompson, Jr.				.5	5,500
(B) PROFESSIONAL SUPPORT					
(C) TECHNICAL SUPPORT (TECHNICIANS--PARA-PROFESSIONAL)		.1	900	.1	900
(D) CLERICAL LABOR AND OTHER		.05	360	.1	720
2. PERSONNEL SUBTOTAL			\$ 5,360		\$ 19,992
3. TRAVEL			200		400
4. EQUIPMENT					
5. OTHER OPERATING EXPENSES (IDENTIFY LARGE ITEMS)					
Supplies			100		500
Balance of Retirement Benefits from Title V Budget			492		234
Personnel Benefits			857		3,198
Institutional Overhead			2,546		9,496
6. SUBTOTAL			\$ 9,555		\$ 24,324
7. COOPERATIVE AGREEMENTS, CONTRACTS OR GRANTS WITH OTHER INSTITUTIONS:					
INSTITUTION	SALARY	MYE	TRAVEL	EQUIP.	OTHER
EXT					
RES					
EXT					
RES					
EXT					
RES					
8. GRAND TOTAL			\$ 9,555		\$ 24,324