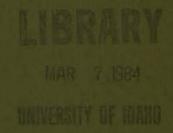
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# THE ECONOMIC EFFECTS OF POPULATION CHANGES IN RURAL SMALL COMMUNITIES

A Short Course for Community Leaders

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### **PREFACE**

This short course was developed for use by Community Resource Development Extension personnel in Idaho and throughout the sparsely populated areas of the Great Plains and Western states. It is designed to help community leaders improve their understanding of the special economic problems of small communities, including explanations of why problems exist and discussions of alternative ways of minimizing or countering such problems.

Extension personnel using this short course should familiarize themselves with two related research publications:

- 1. "Small Towns in a Rural Area: A Study of the Problems of Small Towns in Idaho," by Hamilton, Peterson, and Reid.
- 2. "Economic Growth and Decline of Idaho Towns: An Application of Central Place Theory," by Peterson.

Both of these publications are available through the Agricultural Economics Department of the University of Idaho.

The course should be useful to such local leaders as city and county commissioners, mayors, city managers, planners, Chamber of Commerce officials, industrial development commissioners, and other community decision makers. The course can be conducted in several different ways, from complete self-study to complete classroom-type presentation.

If individual local leaders wish to use the course as a self-study tool, someone familiar with the research work mentioned above should discuss the general nature of this work with them before they begin. In most cases, it is probably more desirable for a person familiar with the research to present at least part of the course to participants in a class-room situation. In such situations an Extension educator can present the entire course in three to five hours.

Regardless of how the course is presented, the Extension educator should familiarize himself with local data and situations relating to the information presented in the course. Participants should be given copies of the full text for the course to facilitate direct local utilization and application of the material.

The research which is summarized in this report was supported by the Federal Extension Service, USDA, through a joint research-extension grant. The research, while technically not a part of Western Regional Project W118, Economic and Social Significance of Human Migration for the Western Region, nevertheless benefited greatly from Idaho's association with that regional research effort.

### SUMMARY

Recent years have been hard on small towns in most parts of the country. The changes which these towns have undergone have been painful--irrespective of whether they have involved growth or decline.

Changing technologies have been central to the problems of many rural small towns. The techniques for provision of goods and services to community residents have changed over the years. This technological change, since it was in response to economic pressures in urban America, often fits poorly in rural small towns. The high volume supermarket, the discount department store, the concept of medical group practice, and the school with diverse curricular offerings fit well into an urban setting but are infeasible in most small towns. So the small-town resident who chooses to hang on does so by enduring some inconvenience, some doing without, and some financial hardship--motivated partly by a lack of other opportunities and partly by a dedication to the small-town lifestyle.

There are other ways that technology has affected small towns. Transportation improvements have allowed residents of a small-town based community to have better access to the goods and services of nearby larger towns. Some would maintain that this breakdown in commercial loyalty to the local community has also led to a breakdown in the local social community--and thus to a community decline in spirit.

Technology has also changed in the hinterland. Agriculture, forestry, and mining have all adopted labor-saving practices. The elimination of jobs in the countryside has reduced the role of some small towns in line with the reduced population to be served.

The factors, however, are not all negative. Selected small rural towns are thriving. Growth may be based on recreation expansion, on agricultural growth in newly opened areas, on potential for mineral exploitation, or simply on proximity to growing urban areas.

Two major points are made in this paper--(1) that costs of providing services can be related to population changes, and (2) that local access to commercial goods and services is also closely related to population. The evidence on public services seems to support the contention that small communities suffer from significant diseconomies of small size, and that population decline imposes an additional burden of increased cost on those people who remain.

For commercial goods and services, this study has examined the hierarchial sequence by which some goods are available even in the smallest towns, while other goods or services require the support of a larger population. There is quite strong evidence that it now requires a larger population to support selected types of businesses than was required a decade ago. The consequences of this shift have been traumatic for the many small towns that have stable or declining populations.

The existence of these problems makes it very important that both the public and private sectors of small towns are operated as efficiently as possible. For the public sector, efficient operation requires awareness of the public services wanted and needed in a community and the provision of these services at least cost (including both economic and social costs). For the private sector, efficient operation requires good information about business opportunities and about existing and potential business problems in a community. Information and methods useful to community leaders in meeting these requirements of efficient community operation are presented in this paper.

### SMALL-TOWN PROBLEMS AND POTENTIALS--AN OVERVIEW

Small towns are a landscape feature in all parts of the United States. In heavily metropolitan states small towns contain only a minor portion of the total populace, and are often quietly ignored as quaint remnants of an earlier era, or as quiet bedroom communities offering an escape from city life. In the less densely settled regions of the Great Plains and Intermountain West, a small town may be the only town in an area, so it assumes more importance. Small towns are important to those who live there and to those who depend on them as sources of community and commercial services.

# Perspectives on Problems of Small Towns

Because of the special importance of small towns in many areas of the United States (particularly the West), research and extension personnel in the Agricultural Economics Department at the University of Idaho conducted an extensive study (Hamilton, Peterson, and Reid) of the problems of small towns and how the people of these towns can react to counter or minimize these problems. In this project, six Idaho small towns were given in-depth, individual study. These towns are fairly typical of many small towns in the western United States. Most were born as regional transportation centers in the days of the stagecoach and early railroad. Because of their transportation linkage. they became shipping and supply centers for area ranching, lumber and mining industries. Then, primarily for technological reasons, the importance of rail centers declined, followed by general declines in employment in the other industries basic to the communities. So the communities are currently in the difficult position of serving as important trade areas to the relatively few people living in and around them, while their economic and population bases wither away. Descriptive information on other Idaho towns and small towns throughout the West was used in this study to evaluate the implications of changing situations which affect small towns in general. This report contains information developed in that study, and it includes discussion of ways that small towns and the residents and businessmen of such towns can react to changes in their communities.

# Population and Population Changes In and Around Small Towns

Of the 335 counties in the 10 western states (California excluded), 206 or 58 percent had no town with a 1970 population greater than 5,000. Only 10 percent of the total population of these western states lived in such rural areas, but for some states the proportion of people in such areas was well over 20 percent. These rural counties made up 54 percent of

The six communities are Priest River, Cottonwood, Riggins, Shoshone, Oakley, and Malad.

the total land area of the states considered, and in half of these states more than 70 percent of the land area was in such rural counties (Table 1). Obviously the people of the West have a stake in what happens to small towns.

So what is happening to small towns? Casual observations taken while driving through the rural countryside in many areas of the United States (including the West) often leave one with the impression that, in general, small towns are withering away. "Empty buildings frequently dot the main streets of such towns, apparently attesting to better days in the past" (Logsdon, Holland, and Baritell). This "windshield opinion" about what is happening to small towns is generally explained by the theory that labor-saving technology or resource depletion has decreased employment opportunities in the basic industries of most rural areas (farming, forestry, and mining) resulting in a reduced clientele for local firms serving these industries and reduced demand for consumer goods and services in the areas (Brinkman).

A troublesome fact confronting proponents of this idea of dying small towns, however, is that small-town populations are not, in general, declining. Several researchers (Fuguitt; Logsdon, Holland, and Baritell) have noted that most small towns in their study areas were actually growing. This is the case throughout the Mountain West. Almost 70 percent of the rural counties (counties with no towns of over 5,000 population) in the western states (excluding California) recorded population growth between 1970 and 1973. For only one of the western states (Nevada) did less than 50 percent of such rural counties experience population growth over this time period, and in most of these states more than 75 percent of the rural counties registered population increases (Table 2).

Why then do so many small rural towns evidence the symptoms of decline mentioned above? Why do so many small-town businessmen report depreciating economic circumstances evidenced by diminishing capital values of business assets and declining numbers of clientele (Barkley and Buteau)? And why, as was evidenced in the study leading to this report, do so many small-town residents feel that the diversity and quality of business services available to them locally are steadily declining? A major part of the answer lies in the fact that while most towns are growing, they are growing at substantially lesser rates than the larger communities in their states or region.

While 69 percent of the rural counties in the 10 western states showed some population growth between 1970 and 1973, only 40 percent of them experienced growth rates greater than their state norms, and only 35 percent experienced growth rates greater than the regional norm (Table 2). These facts can be viewed in terms of absolute population decline and relative population decline. While only about 30 percent of the rural counties considered had actual or absolute population declines, between 60 and 65 percent of them failed to grow as fast as their states or region, so they can be thought of as suffering relative population decline. Such relative population decline can imply absolute economic decline.

This is true primarily because of technological changes affecting the provision of goods and services. Such technology makes larger business

Table 1. Measures of Rurality in the Mountain West

	Percent of Population in Rural Counties a (1970)	Percent of Land Area in Rural Counties <sup>a</sup> (1970)
Washington	4.3	35.9
Oregon	4.8	41.5
Idaho	31.6	78.4
Utah	9.8	70.1
Nevada	13.3	71.3
Arizona	1.8	9.8
New Mexico	11.4	44.8
Wyoming	24.7	42.0
Colorado	11.1	70.2
Montana	34.4	74.8
Aggregate	9.8	54.0

<sup>&</sup>lt;sup>a</sup>Rural counties are herein defined as counties with no town with population greater than 5,000.

Source: U.S. Bureau of Census, Census of Population: 1970, U.S. Government Printing Office, Washington, D.C.

Table 2. 1970-1973 Rural Population Growth in the Mountain West

	Percent of Rural Counties with Popula- tion Increases	Percent of Rural Counties with Popula- tion Growth Greater Than State Norms	(State Norms- Percent)	Percent of Rural Counties with Popula- tion Growth Greater Than Regional Norm	(Regional Norm was 7.4 percent)
Washington	93	93	(0.6)	29	
Oregon	75	1	(6.4)	1	
Idaho	78	41	(7.9)	38	
Utah	74	47	(9.2)	54	
Nevada	46	38	(12.1)	. 38	
Arizona	100	100	(16.1)	100	
New Mexico	93	36	(8.9)	36	
Wyoming	85	31	(6.3)	31	
Colorado	60	31	(10.4)	38	
Montana	56	42	(3.8)	30	
Aggregate	69	40		35	

<sup>&</sup>lt;sup>a</sup>Rural counties are herein defined as counties with no town with population greater than 5,000.

Source: U.S. Bureau of Census, Current Population Reports, Series P-26, U.S. Government Printing Office, Washington, D.C.

firms more efficient than smaller business firms which means businesses can typically sell their goods for less and make higher profits if they locate in areas of higher population concentration. This trend is amplified as better roads and better cars make it easier and less expensive for customers to travel to more distant areas to shop.<sup>2</sup> So, even though a town is growing, if it is not growing rapidly enough to offset the competitive expansion pressures felt by business firms, the town can be faced with declining local availability of goods and services. Empty, dilapidating buildings may begin to haunt Main Street. Local businessmen may begin to face declining numbers of clientele and decreasing capital values of business assets. A growing town may look and feel like a dying town. In some ways, a growing town may be a dying town.

# Small-Town Attitudes -- What the Residents Think

Community leaders cannot and should not be expected to make decisions which affect the well-being of community residents without an in-depth understanding of the problems, goals and attitudes of these residents. Certainly in-residence, personal contact with a community is necessary for such understanding. However, the people of small rural towns seem to have some common ideas about the strengths and problems of their communities. Some of these are evidenced in the results of a survey administered to residents of the six small Idaho towns mentioned earlier concerning their perceptions and opinions of their towns. The residents were asked about desirable aspects or advantages of their communities as well as about weaknesses, problems, and disadvantages. They were presented with 35 statements about the strong points and weaknesses of their communities and were asked to indicate their level of agreement with the statements (Fig. 1).

The residents surveyed were, in general, found to be stable (as opposed to mobile) people who had a high regard for the "rural or small town way of life". They felt that local leadership was satisfactory and that public services in their communities were generally adequate, if a bit "too expensive". They were concerned, however, that local job opportunities were poor, especially for young adults, and that consumer services in their communities were becoming less available. They viewed industrial, business, and recreational development activities as reasonable solutions to these problems.

Reactions to statements 12, 22, 26, and 31 (Fig. 1) indicate that respondents are satisfied enough with their communities to continue making their homes there. Responses to statements 8, 27, 28, and 31 indicate a high regard for the "rural or small town way of life". Respondents indicated by their reactions to statements 1, 10, 29, and 34 that they were reasonably satisfied with their local governments, including leadership and public services provided. Reactions to statement 23 do indicate some concern about the costs of public services. However, other studies have shown that public services in small towns are generally more costly, on a per capita basis,

<sup>&</sup>lt;sup>2</sup>It should be noted that the trend is diminished if transportation costs increase. So the energy shortage and resulting increases in fuel prices could, to some degree, counter this trend.

than similar services in larger communities. So, while least-cost public services must be a goal of local government, relatively high costs of such services may be one of the prices of the small-town way of life. Responses to statement 13 relate to the topic of local leadership, but the fact that only a few influential people in the communities were believed to make most of the community decisions cannot be interpreted as disagreement with or support of such leadership situations. Rather, it appears to be a simple statement of fact as perceived by the respondents.

The primary concern of the residents of the communities, as indicated by their responses, is the availability of job opportunities in their towns. General, albeit weak agreement was registered to statement 4 that decent jobs were almost impossible to find in or near the surveyed communities. Definite and substantial disagreement was registered to statement 17 that opportunities in the communities encourage young people to make their homes there. Responses to statements 7, 14, and 21 indicate that the availability of consumer services in general is felt to be limited and declining in the study communities. Aggregated responses to statement 3 and 33 indicate generally adequate availability of medical and banking services in the study communities. In actuality, residents of some communities (those which had banks and/or doctors) responded that medical and/or banking services were very adequate while residents of communities without such services responded that such services were less than adequate. So the aggregated results show only general adequacy of such services.

Respondents expressed definite agreement that their communities should encourage business and industrial development (statement 18). They generally agree, though with somewhat less vehemence, that development of recreation-related businesses would be advantageous to community growth (statement 11).

Respondents to statements such as 16 and 24 expressed doubt about the receptiveness of their fellow citizens to changes in the community. Furthermore, in their responses to statement 19, residents of the study communities expressed individual uncertainty about one of the likely results of economic growth-new faces in the community. Yet, as mentioned earlier, respondents were rather strongly in favor of business and industrial development (statement 18). These apparent contradictions in the face of uncertainty about growth and development suggest a need for citizen leadership and organization within communities, so that surface, and probably minor, disagreements and misunderstandings can be worked out; and so that residents of such communities can control their own development, thus minimizing their uncertainty.

If community residents feel that job and payroll development is important to the future of the community, some kind of development will likely be sought out. Such a community needs leadership which can guide residents in analyzing potential development opportunities according to their likely contributions to the community as a whole. Some form of formal or informal community planning must be carried out to insure that a community maintains control of its own destiny.

Lack of informed, community-oriented citizenry can lead to job development activities which may cost the community more than they contribute.

Figure 1. Attitudes of the Citizens of Six Idaho Communities\*

		Strongly Agree	Agree	Not Sure	Disagree	Strongl Disagre
1.	Local leaders are doing a good job of	of running			1 1 1 1 1 1 1 1 1 1	
	(Interval = 2.52-2.66)	1	2	3	4	5
2.	People in are w	orking hard to imp		3	4	5.
	(Interval = 2.67-2.83)			.11		
3.	Adequate medical care is available i	in or near				
	(Interval = 2.60-2.78)	1	2	3	4	5
,	Decent jobs are almost impossible to	find in or near				
4.		1	2	3	16	5
	(Interval = 2.57-2.75)					
5.	Recreation and entertainment opportu	mities are good in				
	(Interval = 3.06-3.24)	1	2	11	lş	5
6	It is difficult to get people in	312 4	to same on anything			
0.		1	4	3	4:	5
	(Interval - 3.00-3.16)	I				
7.	People in must	get by without ade	quate shopping areas.			
	(Interval = 2.62-2.80)	1	2	3		5
0	Could have and much marrie home a	nattan autlask an 1	160			
0.	Small town and rural people have a b		······································	3	4	5
	(Interval = 1.94-2.08)					
9.	For what one getsit costs too much	n to live in				
	(Interval = 3.29-3.47)	1	2	3	4	5
10	Public education in	is better tha	n sverage			
10.	(Interval = 2.79-2.95)	1	2	3	- 4	5
	(Interval - 2.79-2.93)					
11.	Development of recreation-related by	usiness would make	grow.			
	(Interval = 2.58-2.74)	1	2	11	14	5
12	I am seeking employment in another a	area and plan to m	ove soon			
14.	(Interval = 4.10- 4.24)	1	2	3.	4	5
	(Interval - 4.10- 4.24)					
13.	A few influential people make all the	he community decisi	ons in			
	(Interval = 2.58-2.76)	1	2	11		5
14.	It is difficult to get appliances or	r cars repaired in				
	(Interval = 2.59-2.77)	1		3	4	5
	(201021022 2107 2107)			11		
15.	It is much cheaper to live in small					120
	(Interval = 2.42-2.58)	1		1	4	5
16	Local attitudes tend to delay neede	d changes in	no company			
0.77		1	2	3	4	5
	(Interval = 2.40-2.56)					
17.	Opportunities in	encourage young	people to make homes there			
	(Interval = 3.89-4.03)	1	2	3	4	5

\*The six communities are Priest River, Cottonwood, Riggins, Shoshone, Oakley, and Malad. The intervals shown are 95 percent confidence intervals for response means.

		Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
18.	should encour	age new business an	d industry.			
10.	(Interval = 1.95-2.11)		2	3		5
19.	If a lot of outsiders move in,	W	ill be a worse place to live			
	(Interval = 3.00-3.18)	1	2	11		5
20.	is a healthy,	growing community.			was to the	
	(Interval = 2.93-3.09)	1	2	11		
21.	I now drive elsewhere to buy thing	s which I once woul	d have bought in			5
	(Interval = 2.60-2.78)		1-	!		
22.	I would have to earn a lot more mo			3	h	5
	(Interval = 2.37-2.55)					
23.	is getting ab	1	for its tax dollar.	3	l <sub>s</sub>	5
	(Interval = 3.04-3.16)					
24.	People in dis	like things that th	reaten the status quo.	3	4	5
	(Interval = 2.29-2.43)		2			
25.		1	ts, plays, and art shows.	3	4	5
	(Interval = 2.82-2.98)	1		11		
26.	is too inconv	1		3	4	5
	(Interval = 3.77-3.93)	1			II	
27.	Most people in	are willing to he	lp others in time of need.	3	h	5
	(Interval = 1.67-1.79)		11		<u>-</u>	
28.				3	4	5
	(Interval = 1.86-2.00)		11			
29.	The police and fire protection in	1	_ is adequate.	3	4	5
	(Interval = 2.38-2.54)					
30.	My present job makes adequate use		ing, and education.	3		5
	(Interval = 2.21-2.35)				***************************************	
31.	is a pretty b		2	3	4	5
	(Interval = 3.52-3.70)					
32.	I have plans to move from this com			3	4	5
	(Interval = 3.88-4.04)					
33.	Adequate credit at reasonable inte	rest is available	n	3	h	5
	(Interval = 2.49-2.65)				4	
34.		re children well fo	or jobs they are likely to g	et.	h	5
	(Interval = 2.80-2.96)			11		
35.	I want my children to get jobs and	4	2	34		
	(Interval = 2.88-3.04)			11	4	

Further, such inadequate leadership and resultant costly development may cause wide dispersal of resident opinions about the desirability and directions of future development—a situation which can cripple a community socially as well as economically.

# Community Growth and Its Effects

Population change does affect economic viability and thus the general standard of living in a community. And small-town residents recognize this as a problem. But before the leaders and citizens of a small town can react responsibly to such problems, they must have some idea of what the actual effects are. Without some measurable standards of such impacts, small towns are likely to either overreact or underreact to problems. Underreaction can result in failure to solve a problem, causing an attitude of resignation to undesirable status quo situations. Such resignation is evident in many troubled communities which lack the foresight and determination to work to improve their circumstances. Overreaction can cause overdevelopment which outstrips the resources (natural, human, or financial) of a community. Such overdevelopment is evident in communities which have grown "too fast" and "too far" and are facing "big city" problems (pollution, overextended public services, poor housing).

# Growth Affects Business Services

This discussion suggests that there should be a hierarchy of goods and services. Some hierarchies have been suggested and explained by geographers and economists (Christaller, Losch, Nourse). Some of the most basic goods and services would be provided by small towns. Larger towns would provide some higher order goods and services, along with all lower ones. Also, over time, the level of goods and services found in a town of given size should gradually decrease. The results of the Idaho community questionnaire indicate that these circumstances do exist in small towns. Much of the research upon which this report is based was directed toward estimating this hierarchy relationship between population and goods and services available in small towns and toward examining changes of the hierarchy function over time.

The hierarchy of business services for 1974 estimated in the research is shown in Table 3. This hierarchy is a reasonably precise representation of the relationship between business services and population for typical Idaho towns, and probably for typical small towns throughout the Great Plains and Mountain West. But it should not be used to predict changes over time for particular towns. The relationship indicated is too imprecise to be used as the basis for statements such as "if a town gains 300 people, then it will be able to support a dentist". There are many factors other than population which determine whether a given town will support a given business. Some of these factors include proximity to other towns, types of industry on which a town is based and established purchasing patterns of a town.

The hierarchy function of business and population does, however, contain information which can be quite useful to specific communities. The ordering of services in the hierarchy is a fairly good representation of the order in which a changing town is likely to gain or lose business firms. Thus, given

Table 3. 1974 Population Hierarchy of 23 Major Business Services for Idaho Towns

23	Wholesale Groceries	11,407
22	Wholesale Professional and Service Equipment	9,558
21	Wholesale Beverage	9,558
20	Music Store	6,710
19	Recreational Services	5,622
18	Office Supply & Stationery	5,622
17	Radio & T.V. Store	3,947
16	Variety Store	3,307
15	Florist	2,771
14	Sporting Goods	2,321
13	Hospital	1,945
12	Farm & Garden Store	1,630
11	Wholesale Auto Parts	1,365
10	Appare1	1,144
9	Doctor	959
8	Hotel & Motel	803
7	Dentist	673
6	Appliances & Furniture	564
5	Garage, Auto, & Implement Repair	472
4	Bank	396
3	Drug Store	332
2	Service Station	278
1	Grocery Store	233
0	None	195

the service offerings of a particular town, the hierarchy indicates which additional services are the most likely to disappear if the town declines. The hierarchy also draws attention to unusual business situations in communities, identifying businesses which are present in a community even though the hierarchy relationship says they "should be" absent and similarly identifying those which are absent when they "should be" present. Many such "errors" are easily explained. A mining town may never have a feed store, no matter how large it grows. Still, these are businesses worth looking at. The business that is present when it "should not be" should be examined to see what special circumstances or business practices have allowed it to survive, and to see if it is in danger of folding. Potential businesses that are absent may represent business opportunities. But special circumstances should be searched out and investigated before investments in such businesses are encouraged.

Depreciating business districts in many small towns with stable populations suggest that the complete hierarchy relationship of business services and population may be changing over time. This idea is supported by the information shown in Fig. 2. The two curves depicted here represent the estimated relationships between business services and Idaho town populations in 1964 and 1974. The fact that the 1974 curve is to the right of the 1964 curve indicates that a given general level of services required a larger population base of support in 1974 than it did in 1964.

# Growth Affects Public Services

Public services, as discussed in this report, are those services supplied by governments as opposed to those supplied by private businesses. The primary purpose of governments is to provide public services to their citizenry. These public services range from the broad perquisites of defined orderly government to the specific physical outputs of city water systems.

Changes in populations of small towns impact on local governments, and thus on public services. These forces are similar to those exerted on business services, but they seem to be less complicated. The effects of community population change on public services, unlike the effects of business services, are not intricately intertwined with marketing technology and purchasing patterns. Rather they are fairly straightforward and explainable by the existence of economies of size in government service provision.

As population of a small community increases, the per capita cost of local government services tends to decrease. This is true because a larger community can spread costs of necessary items (courthouse, sewer system, school building) over more public service recipients.

This relationship between public service costs and population causes a major problem for small communities. Maintenance of the same level of community services as are available in larger communities may be so costly that the tax burden contributes to outmigration and community decline. Such outmigration causes community services to be even more costly. Further

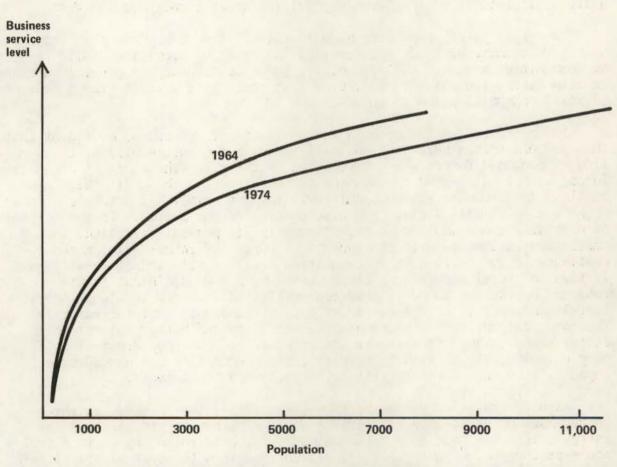


Fig. 2. Comparative 1964 and 1974 relationships between population and similar levels of business services for Idaho small towns.

research is needed to define efficient methods of public service provision, but results of the research associated with this project indicate that population growth for very small communities tends to decrease per capita public service costs greatly. For larger communities, growth decreases such costs very little.

# Implications For Action

Most of the statistical information included in this report has related particularly to the State of Idaho, since that is where the backup research was conducted. But Idaho conditions pertaining to small communities are quite similar to those in sparsely populated areas throughout the West.

Two major points have been made in this report. They are that local access to commercial goods and services and costs of providing public services to communities are both closely related to population and to population changes. In both cases, the evidence indicates that small size works to the disadvantage of small communities and residents.

So what does the future hold for small towns? We can be confident that the economic forces which act on small towns in the future will be the same kind of economic forces which have acted in the past--the kinds of economic forces we have attempted to document in this report. Thus, if small towns continue to have outmigration, this will involve costs. If a town continues to be small, it will suffer from diseconomies of small size. If the technology of providing goods and services continues in its present direction, then small-town businesses will continue to be hurt. If labor-saving technology continues in rural areas, then population declines will impact rural towns. If town and rural populations being served by a town diminish, then the range of businesses found in that town will tend to decrease also. And if travel continues to become easier, the local residents will increasingly forsake local businesses in favor of lower costs and better selections in larger towns. These factors are not encouraging, but they are real. If people in small towns wish to support their communities against adverse impacts, they must first realistically recognize the impacts.

Ease of travel is an interesting case. Until the last two or three years, most of us assumed that travel would continue to get easier. The energy crisis has sown some seeds of doubt. The skyrocketing cost of fuel and even the cost of autos has significantly raised the cost of travel. The degree to which this is permanent and the effect this will have on people's willingness to travel are open to question. It is, however, an intriguing thought that this feared energy shortage might be a positive stimulus for small town viability.

Almost any small town can be considered a special case--the product of a unique set of current circumstances. There are, however, two emerging kinds of special forces impacting on many western towns that merit close attention--recreation and mineral exploitation. Both of these factors are related to the chance presence of unique resource endowments. Many western towns have become highly dependent on recreation economies. Outdoor recreation is certainly on an uptrend as Americans become more affluent and more

mobile. How far this uptrend in recreation use can be projected is far from certain in these days of a weak national economy and energy supply fears. Probably the safest guess is that recreation will, for some time, continue to be an expanding base on which small-town economies can be built.

Mineral exploitation is causing considerable excitement in some parts of the West. Of course, historically, minerals have been intimately tied to the development of many areas of the West. Oil shale, coal, and phosphate deposits are the bases of much current excitement. Small towns in affected areas will share the impacts of extractive developments. The exact nature of these impacts is uncertain, but they will extend beyond the primary resource impacts to affect such diverse elements as water supplies and labor markets. So the impacts will certainly be far reaching.

Some of the population estimates emerging from the Census Bureau over the past several years provide food for thought. These document a turnaround in historic migration flow patterns. While the flow has in the past moved from rural to urban areas, the last few years have witnessed a reversal. Although much of this movement appears to be directed into the larger rural towns, there is also evidence of a slowdown in the exodus from smaller towns. It is not clear whether this reverse-flow migration is a permanent phenomenon or if it is just a temporary departure from a persistent underlying pattern. To the extent that the flow is tied to affluence and mobility, its future may be related to the national economy and to fuel availability problems.

These are just a few of the factors that will determine the futures of small towns and their residents. Each has a unique group of residents and potential residents who have a great deal to say about the direction of their communities. Some of the points raised in this report can help these people to better understand and plan for their future.

The results of the local survey can help identify attitudes and special strengths or problem areas of a community.

The community business service-population hierarchy information can give communities some idea of services likely to be lost with population decline or those likely to be added with population growth. Businesses which do not exist in a community when the hierarchy indicates that they should represent opportunities for local businessmen. Similarly, businesses which do exist in a community when the hierarchy indicates that they should not may be more likely to face economic strain. The estimated movement over time of the service-population hierarchy indicates how much towns must grow physically just to stand still economically.

These business service-population relationships are important both to small-town businesses and small-town citizenry in general. They suggest economic opportunities and trouble spots to businessmen trying to make a living in a small town. Research in the State of Washington (Barkley and Buteau) indicates that a legitimate strategy for adjusting small-town businessmen is to become bigger and more diversified by picking up lines of goods and services dropped by other businessmen who retire or leave the community.

The relationship between public service costs and population presented herein can help a community evaluate the desirability of growth or decline in terms of how such population changes effect the public services of the community. Small-town population growth may lead to lower per capita costs of specific public services. But the degree of such growth impacts varies by community size.

Possibly the most important use of the small-town information presented in this report is as a set of norms to which communities can compare themselves. Recognizing that every town faces special circumstances, the information reported here is a starting point applicable to most small communities.

How do your community's business services stack up? Are you unnecessarily losing important trade to that "big town" down the highway?

How do your community's public services stack up? Are new residents discouraged by low returns to their tax dollars?

What will your town lose if you sit back and watch the population decline? What will it gain?

What will your town gain if that potential industry locates in the community and brings increased population? What will it lose?

The remainder of this report is designed to help you, as community leaders from small towns and rural counties, to evaluate these questions as they pertain to your communities. Each of the following sections can be used as a guide or lesson to assist you in understanding and evaluating particular problems, potentials, and alternatives for your community. The sections are:

1. Economic Forces Affecting Small Towns

2. A Guide for Determining and Evaluating Community Wants and Needs

3. A Guide for Evaluating Circumstances and Opportunities in the Business Sector of Your Community

4. A Look at the Cost of Your Community's Public Services

### LESSON 1

### ECONOMIC FORCES AFFECTING SMALL TOWNS

Both small community businesses and governments often find themselves competitively disadvantaged relative to larger cities in their areas. Small-town businessmen must be selective in deciding what goods and services to handle. Many special items cannot be profitably stocked and sold by small-town firms with limited clientele.

Small-town consumers often must travel to larger communities to purchase goods and services which they need or want. Many such goods and services are simply not available in their home towns. Many other items are available in small towns, but at higher prices than in larger communities. So small-town consumers frequently take advantage of low city prices, especially when they must shop the city for some items which are simply not available at home.

Public services tend to be more expensive in small communities than in larger ones. Maintenance of the same level of community services as are available in larger communities may be so costly that the tax burden contributes to outmigration and community decline. So outmigration causes community services to be even more costly. These small-town problems can all be related either to cost of travel or economies of size, or both.

### Cost of Travel

The cost of travel tends to increase as distances traveled increase (Fig. 3). Part of the cost of travel is purely economic--the cost of fuel, the cost of wear and depreciation on a vehicle, and even the cost of travel time expressed as lost wages if the traveler might have been working instead.

Another part of travel cost is more difficult to define--the psychic cost. Psychic cost of travel includes the disagreeability of sitting in a car for long periods and of "wasting" time traveling which could be spent in more desirable pursuits (fishing, sleeping, etc.). The conceptual problem arises that travel may be viewed positively by certain people in certain situations. It may be fun to go to town to buy things and it may be fun to get there. Shopping may be a valued social affair. Still, in most cases, the rule of less distance, less cost, is reasonable.

### Economies of Size

The cost of making goods and services (including public services) available for consumption tends to decrease as quantities supplied increase (Fig. 4). It costs something to see that groceries are on the shelf in a given grocery store. There is a cost for the items themselves, obtained from a distant wholesaler center. To this must be added the cost of transporting the groceries from the wholesale center to the store. There is also a cost for maintaining the store building and furnishings, a cost for labor,

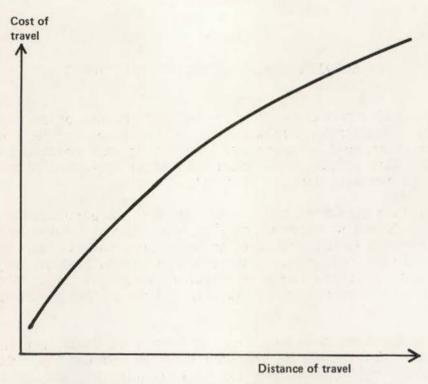


Fig. 3. Relationship between cost of travel and distance traveled.

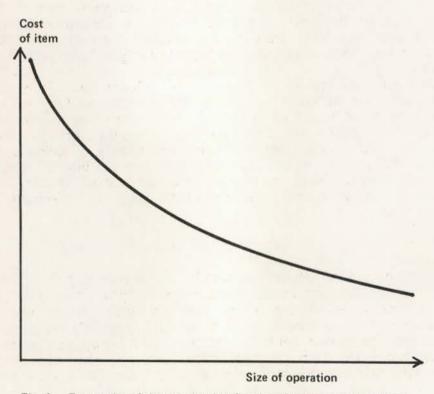


Fig. 4. Economies of size relationship for providing goods and services.

a cost for advertising, and sufficient profit to induce the grocer to stay in business. The wholesaler may well give the grocer discounts on large orders. The trucker can deliver a full truck load of groceries for less cost per unit than a partial load. The manager can manage a large store almost as inexpensively as he can manage a smaller store. A full page newspaper ad costs the same for a large store as for a smaller one.

So generally, the cost per unit of an item declines as the number of units provided increases, i.e., economies of size exist. The cost of items may be different, but the principal is essentially the same for a service station, a medical doctor, a city water system,or any other type of good or service. A service station selling 1,000 gallons of gasoline per day can spread its overhead costs over more gallons than a station that sells only 500 gallons per day—and the larger station may even get a quantity discount from his supplier and a break on transportation costs. A doctor set up to handle only a few patients will have higher costs per patient if he tries to maintain an income level anywhere near that of a doctor with a higher patient load. If a city water system can spread management and maintenance costs over many users, and if it can operate several wells at capacity instead of underutilizing a few, it can likely provide lower cost water to its residents.

# A Consumer Choice Example

So, as general rules, greater distance means higher cost of travel; larger size of operation for a firm means lower cost per item sold. If we add the assumption that people will shop where their total costs are lowest, we can explain why people shop where they do.

Suppose we have two businesses, A and b. Let's assume they are grocery stores. Firm A is a large grocer located in a large town. Firm b is a smaller grocer located in a smaller town. Fig. 5 is a map of the trade area served by the smaller grocer given a particular set of circumstances pertaining to economies of size for grocery stores and cost of travel. If cost of travel or economies of size change, this trade area will change. Either a decrease in cost of travel (Fig. 6) or an increase in economies of size (Fig. 7) can cause the trade area of the smaller grocer to shrink (Fig. 8). If grocer b's trade area gets so small that he cannot make adequate profit, he will go out of business, so even those customers who were still trading with him will have to go elsewhere (grocer A) for groceries.

The economic location theory presented here is greatly simplified from the "real world". But it does demonstrate why small-town businesses with high costs lose business to larger firms in larger, distant towns. It also explains how advancing technology, causing easier travel or more economies of size in provision of goods and services, works to the advantage of large firms in large towns and to the disadvantage of small firms in small towns.

### More About Economies of Size

We have said that bigger firms (typically in bigger towns) have lower costs than smaller firms, due to economies of size. It is also true that different types of firms have different economies of size. Thus a type of firm with only moderate economies of size (Firm X in Fig. 9), can compete more effectively on a smaller scale than a type of firm with more severe economies of size (Firm Y in Fig. 9).

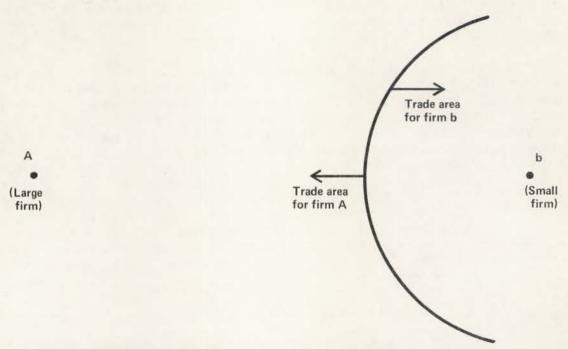


Fig. 5. An example trade area map for two firms of different sizes located in nearby towns.

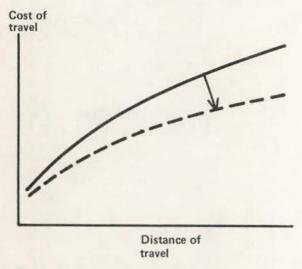


Fig. 6. A decrease in the cost of travel.

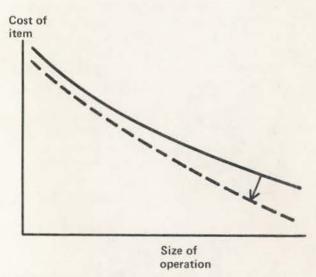


Fig. 7. An increase in economies of size.

This explains why such firms as grocery stores and service stations are generally found in smaller towns than are furniture stores and whole-salers. The steeper or more severe the economies of size in providing a good or service, the more a small number of firms operating out of larger towns will tend to dominate the market for that item. The variety of items available within a town increases with the size of the town. Very basic items are found in even the smallest towns, while the higher order items are found only in larger cities.

### In Summary

Technological changes which make travel easier and less expensive, and which make larger firms more efficient than small firms, tend to work to the disadvantage of small businesses in small towns. Some types of firms, however, are more susceptible to such pressures than others. Generally, firms providing more basic goods and services (grocery stores, service stations) are less affected by these pressures than more specialized firms (furniture stores, wholesalers).

While these pressures have very real impacts over time, keep in mind that changes occur slowly. Local businesses rarely fold up overnight. This is assured by the economic principle of fixed investment. ("The store is there; the stock is there; although I wouldn't want to start out in business now, I think I can hang on for some time.") And local people often give strong support to local business.

As changes do occur, however, these theoretical considerations suggest how and why they will occur. Other lessons explain how the likely changes for a particular town can be determined and what can be done to counter or adjust to them.

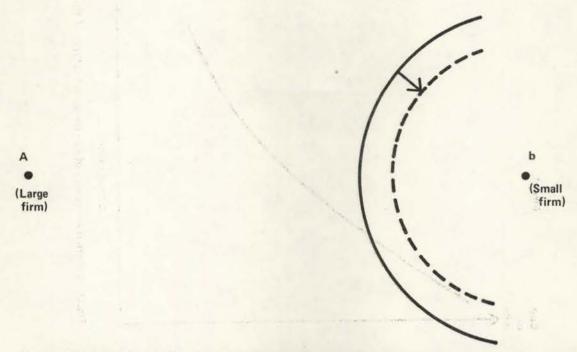


Fig. 8. Shrinkage of a small firm's trade area caused by declining travel cost or increased economies of scale.

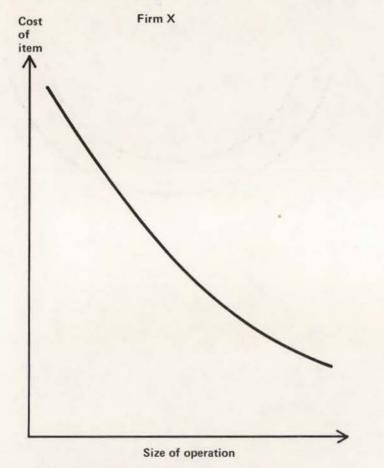
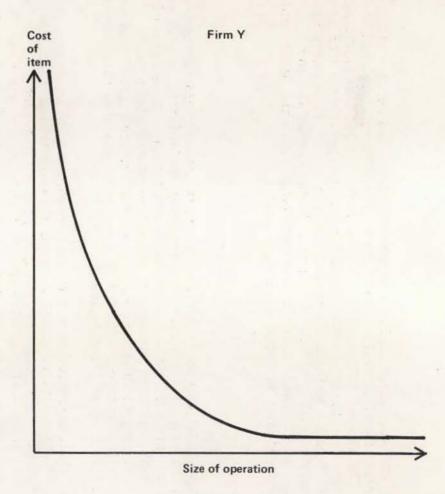


Fig. 9. Different economies of size for different types of firms.



#### LESSON 2

# A GUIDE FOR DETERMINING AND EVALUATING COMMUNITY WANTS AND NEEDS

You, as community leaders, must have in-depth understanding about the wants and needs of the citizens of your communities before you can make informed decisions about alternative courses of action for community governments and other community groups to follow. Experience and personal contact with your communities are two very important sources of understanding. To complement this knowledge from experience and to help you put the wants and needs of your community in perspective, you may want to conduct a formal community survey.

In the research upon which this report is based, surveys were conducted in six rural Idaho communities (under 2,000 population) facing the common small-town problems of population decline and accompanying social and economic strains. The questions asked in these surveys can serve as guidelines in constructing a survey for your community. Also, the aggregate results of these surveys provide a good source of comparison for the results from other similar surveys.

# An Example Questionnaire

An example of the questionnaire used in the six Idaho towns is included as an appendix to this report. You may wish to add other questions which pertain to particular situations in your town. But, if you wish to compare the attitudinal results of your questionnaire to the aggregate results of the Idaho surveys, you should include the 35 statements from questions 1 and 5 of the example questionnaire.

If your community is in the same size range as the ones surveyed for this study (1000 to 2000 people), you will need to send out 200 to 250 questionnaires randomly to residents of your community. You should send questionnaires to people throughout the area served by your town, not just within the city limits. Random selection of names and addresses from a phone book is a good way to establish a mailing list. Possibly your county's Cooperative Extension Service staff can help you with such a survey.

### Comparing Statement Responses

Fig. 10 shows the interval of average aggregate responses to each questionnaire statement by citizens of the six Idaho communities. Also shown in Fig. 10 are the averages of the responses to each statement for an example community. If the average responses of citizens in a community to a statement lies outside the interval for that statement, this indicates that the residents in the particular community may feel differently about the statement than the citizens in the comparison group. Such differences of opinion can be evidence of strengths of problems in a community. Community

Figure 10.	Comparison of	Aggregate	Attitudes of	the	Citizens	of	Six	Idaho	Communities*	with	the	Attitudes	of	the	Citizens	of One	e Example	Communit
------------	---------------	-----------	--------------	-----	----------	----	-----	-------	--------------	------	-----	-----------	----	-----	----------	--------	-----------	----------

		rongly gree	Agree	Not Sure	Disagree	Strongly Disagree
1.	Local leaders are doing a good job of ru	nning				
		1	2	3	lş .	5
	(Example Community 2.48) (Comparison Interval 2.52-2.66)			-11		
2.	People in are worki	and the same of th	ove the town.			
	(Example Community 2.86) (Comparison Interval 2.67-2.83)	1	2	11	h 	
3.	Adequate medical care is available in or	near				
	(Example Community 2.13) (Comparison Interval 2.60-2.78)	1	2 X		·	5
4.	Decent jobs are almost impossible to fin (Example Community 2.70)	d in or near _				
	(Example Community 2.70)	1	2	3	/1	5
	(Comparison Interval 2.57-2.75)			11		
5.	Recreation and entertainment opportuniti	es are good in	· · ·	1	h	5
	(Example Community 3.36) (Comparison Interval 3.06-3.24)			3		
٥.	It is difficult to get people in		o agree on anything.			
	(Example Community 3.03) (Comparison Interval 3.00-3.16)					
7.	People in must get	by without adeq	quate shopping areas.			
	(Example Community 2.63) (Comparison Interval 2.62-2.80)	1	2	X	* 4	5
8.	Small town and rural people have a bette	r outlook on li	fe.			
	(Example Community 2.12) (Comparison Interval 1.94-2.08)	1		3	4	5
9.	For what one getsit costs too much to	live in				
	(Example Community 3.50) (Comparison Interval 3.29-3.47)	1	2	3 1-	X	5
10.	Public education in	is better than	average.			
	(Example Community 3.09) (Comparison Interval 2.79-2.95)	1	2	X	h	
11.	Development of recreation related busine	ess would make	g	row.		
	(Example Community 2.80) (Comparison Interval 2.58-2.74)	1	2	3	4	5

<sup>\*</sup>The six communities are Priest River, Cottonwood, Riggins, Shoshone, Oakley, and Malad. The intervals shown are 95 percent confidence intervals for response means.

	Ag	rongly	Agree	Not Sure	Disagree	Strongl Disagre
12.	I am seeking employment in another area,	and plan to	move soon.			
	(Example Community 4.12) (Comparison Interval 4.10-4.24)	1	2	3		5
13.	A few influential people make all the co	mmmnity deci	sions in	, 1000		
	A few influential people make all the co (Example Community 2.72) (Comparison Interval 2.58-2.76)	1	2	3 1	. 4	5
14.	It is difficult to get appliances or car	s repaired in	n			
	It is difficult to get appliances or car (Example Community 2.67) (Comparison Interval 2.59-2.77)	1	2		. h	5
15.	It is much cheaper to live in small town	s than in la	rge cities.			
	(Example Community 2.42) (Comparison Interval 2.42-2.58)	1	2 X	3	4	5
16	Local attitudes tend to delay needed cha	inges in	Record	- Sept 1		
10.	Local attitudes tend to delay needed cha (Example Community 2.43) (Comparison Interval 2.40-2.56)	1		3	4	5
	(Comparison Interval 2.40-2.56)					
17.			g people to make homes there			
	(Example Community 4.18) (Comparison Interval 3.89-4.03)	1	2	3		5
18.	should encourage ne (Example Community 1.82)	w business a	nd industry.			
	(Example Community 1.82) (Comparison Interval 1.95-2.11)	1	× <sup>2</sup> 	3	4	5
19.	If a lot of outsiders move in,	1	will be a worse place to liv	e.		
	(Example Community 3.47) (Comparison Interval 3.00-3.18)		2	: :		
20.	is a healthy, growi	ng community				
	(Example Community 3.59) (Comparison Interval 2.93-3.09)	1	2	3 II	X	5
21.	I now drive elsewhere to buy things which	h I once wou	ld have bought in			
	(Example Community 2.36) (Comparison Interval 2.60-2.78)	1	2 1	3	ls	5
22.	I would have to earn a lot more money be					
	(Example Community 2.49) (Comparison Interval 2.37-2.55)	1	2 X	3	4	5
23.	is getting above av		s for its tax dollar.			
	(Example Community 2.80) (Comparison Interval 3.04-3.16)	1	2	3 X	4	5

A	gree	Agree	Not Sure	Disagree	Strongly Disagre
People in dislike	things that	threaten the status quo.			
(Example Community 2.31)	1	2	3	- h	5
would be better i	f it had conc	erts, plays, and art shows.			
(Example Community 2.90) (Comparison Interval 2.82-2.98)	1	2	X		
is too inconvenie	nt to make it	my permanent home.			
(Example Community 3.84) (Comparison Interval 3.77-3.93)	1				
Most people in ar	e willing to	help others in time of need.			
(Example Community 1.84) (Comparison Interval 1.67-1.79)	1	2 x	3	4	5
is a very good pl					
(Example Community 2.00) (Comparison Interval 1.86-2.00)	1		3	4	
The police and fire protection in	نسالين	is adequate.	1 -1/ -27		The state of the s
(Example Community 2.14) (Comparison Interval 2.38-2.54)					
My present job makes adequate use of m	y skills, tra	ining, and education.			
(Example Community 2.17) (Comparison Interval 2.21-2.35)	1	2 	3	4	-0-5
is a pretty borin	g place to li	ve.			
(Example Community 3.51)	1	2	3	(I	5
I have plans to move from this communi					
(Example Community 3.82) (Comparison Interval 3.88-4.04)	1			X	5
Adequate credit at reasonable interest	is available	in			
(Example Community 2.38) (Comparison Interval 2.49-2.65)	1	2 	3	4	5
schools prepare o	hildren well	for jobs they are likely to	get.		
(Example Community 3.02) (Comparison Interval 2.80-2.96)	1	2	X		5
I want my children to get jobs and set	tle in this o	community.			
(Example Community 3.15)	1		X		5
	(Example Community 2.31) (Comparison Interval 2.29-2.43)  would be better i  (Example Community 2.90) (Comparison Interval 2.82-2.98)  is too inconvenie (Example Community 3.84) (Comparison Interval 3.77-3.93)  Most people in ar  (Example Community 1.84) (Comparison Interval 1.67-1.79)  is a very good pl  (Example Community 2.00) (Comparison Interval 1.86-2.00)  The police and fire protection in (Example Community 2.14) (Comparison Interval 2.38-2.54)  My present job makes adequate use of m  (Example Community 2.17) (Comparison Interval 2.21-2.35)  is a pretty borin  (Example Community 3.51) (Comparison Interval 3.52-3.70)  I have plans to move from this communi (Example Community 3.82) (Comparison Interval 3.88-4.04)  Adequate credit at reasonable interest (Example Community 2.38) (Comparison Interval 2.49-2.65)  schools prepare comparison Interval 2.80-2.96)  I want my children to get jobs and set (Example Community 3.02) (Comparison Interval 2.80-2.96)	Comparison Interval 2.29-2.43    Comparison Interval 2.29-2.43    Comparison Interval 2.29-2.43    Comparison Interval 2.82-2.98    Comparison Interval 2.82-2.98    Comparison Interval 2.82-2.98    Comparison Interval 3.77-3.93    Comparison Interval 3.77-3.93    Comparison Interval 3.77-3.93    Comparison Interval 1.67-1.79    Comparison Interval 1.67-1.79    Comparison Interval 1.86-2.00    Comparison Interval 1.86-2.00    Comparison Interval 2.38-2.54    Comparison Interval 2.38-2.54    Comparison Interval 2.38-2.54    Comparison Interval 2.38-2.54    Comparison Interval 2.21-2.35    Comparison Interval 3.52-3.70    Comparison Interval 3.52-3.70    Comparison Interval 3.88-4.04    Comparison Interval 3.88-4.04    Comparison Interval 2.49-2.65    Comparison Interval 2.49-2.65    Comparison Interval 2.49-2.65    Comparison Interval 2.80-2.96    Comparison Interval 3.15    Comparison Interval 3.15    Comparison Interval 3.88-4.04    Comparison Interval 3.80-2.96    Comparis	would be better if it had concerts, plays, and art shows.  [Example Community 2.90) [Comparison Interval 2.82-2.98]  is too inconvenient to make it my permanent home.  [Example Community 3.84) [Comparison Interval 3.77-3.93]  Most people in are willing to help others in time of need.  [Example Community 1.84) [Comparison Interval 1.67-1.79]  is a very good place for raising children.  [Example Community 2.00) [Comparison Interval 1.86-2.00]  The police and fire protection in is adequate.  [Example Community 2.14) [Comparison Interval 2.38-2.54]  My present job makes adequate use of my skills, training, and education.  [Example Community 2.17] [Comparison Interval 2.21-2.35]  is a pretty boring place to live.  [Example Community 3.51] [Example Community 3.52] [Example Community 3.82] [Comparison Interval 3.88-4.04]  Adequate credit at reasonable interest is available in  [Example Community 2.38] [Comparison Interval 2.49-2.65]	Comparison Interval 2.29-2.433	Example Community 2.31

average responses to a statement which fall outside the interval of aggregate responses for that statement are much more likely to indicate a special situation if other related responses point to the same situation.

The people of our example community apparently are satisfied enough with their community to continue making their homes there (statements 12, 22, and 26). Since the average community responses to these statements fell within the comparison intervals, we can assume that such minimum satisfaction with one's community is typical.

The residents do believe in the desirability of the small-town way of life (statements 8, 27, 31, and 32). But the responses suggest that the example community residents are perhaps not as satisfied with their small-town lifestyle as residents of other similar towns.

Residents are especially concerned with economic and educational situations in their town. Responses to statements 10 and 34 indicate uncertainty about the quality of local education. Comparison of these responses to the aggregate response intervals suggest more discontent with the educational system in the example town than in the comparison group in general.

Resident reactions to statements 7, 17, 20, and 21 suggest that the example community is facing problems of economic decline. Comparisons of example community and aggregate group responses to these statements indicate that the example community's problems may be, relatively, rather severe. Such response comparisons for statements 2, 5, and 35 further indicate that local society's general satisfaction and confidence in the example community is less than typical. This depreciation of social well-being may relate closely to the perceived economic decline of the community.

The residents of the example community seem to see business and industrial development as an avenue to the alleviation of these problems (statement 18), and they seem willing to accept the social strains likely to accompany such development (statement 19). Such desires for business and industrial development are not uncommon, but comparison of the example community and the comparison group responses for statements 18 and 19 suggest that the residents of the example community are especially interested in development.

A strong point for the example community, particularly if it is interested in development, is that many of the types of services ordinarily desired by new business firms seem to be adequately available in the area. Local leadership and returns on tax dollars (public services) seem to be above average in the community (statements 1, 9, 23, and 29). Also, two services very important to new businesses and new families—banking and medical services—seem to be better than average in the example community (statements 3 and 33).

In short, the example community discussed here (and it is a real Idaho community) seems to be ripe for economic development. Knowing this, leaders of the community must make decisions about the most promising development alternatives.

The residents of your community may desire development, may be indifferent or may be very hostile to it. In any case, before you as a leader can help them attain their goals, you must know what these goals are. An attitude survey such as the one discussed here can be an effective tool for determining such goals in a systematic manner.

# Determining Shopping Patterns

One way for the well-being of the residents of a community to be increased is by increasing the desired consumer goods and services provided locally. As more goods and services are provided in a community, the residents are made better off because their travel expenses for shopping are decreased. And the community's economy is benefited by keeping local dollars at home.

Of course, if a community cannot provide a firm enough business to yield a reasonable profit, then the business cannot be expected to locate in the community. Consequently, some goods and services are sold only in large towns. Further consideration is given in Lesson 3 to the types of businesses that can exist in small towns.

But there may be business potentials in a small town which are not fulfilled because businessmen are not aware of the potentials. One sort of information which points out such potentials is data on community shopping patterns. Questions 2 and 7 of the example questionnaire shown in the appendix were designed to collect such information on shopping patterns. This information, coupled with the information from the next lesson on the viability of different types of businesses in different communities, could be very useful to existing businessmen looking toward expansion or diversification, or to prospective businessmen wishing to locate in a community.

# Summary

The leadership of a community must know where a community wants to go before they can lead. As community residents, leaders generally have some feel for such community wants and needs. But an effective tool for solidifying such feelings and putting community problems, desires, and potentials into perspective is a community survey such as the one discussed in this lesson. The questionnaire demonstrated here is meant to be the basis of individual community questionnaires. An individual community would undoubtedly want to add to the questionnaire (possibly by expanding question 8) to better consider particular issues with special relevance to a community.

#### LESSON 3

### A GUIDE FOR EVALUATING CIRCUMSTANCES AND OPPORTUNITIES IN THE BUSINESS SECTOR OF YOUR COMMUNITY

More firms and more diversification of goods and services are found in large towns than in small towns. As a town grows, new business opportunities develop in the town and a wider range of locally provided goods and services become available to residents. A hierarchy of major business services based on town size was shown earlier (Table 3). The same hierarchy is presented without population figures in Table 4. The higher-numbered business services (wholesalers, music stores, recreation services) are those which are typically found only in large towns. The lower-numbered services (grocery stores, service stations, drug stores) are generally found in towns of all sizes, even very small towns.

# Business Opportunities in Your Community

This hierarchy can be useful in evaluating business opportunities in your community. If a list of the business services in your town skip over some of the services in the hierarchy, the services in the gaps may represent local opportunities.

For example, if your town, regardless of its population, has firms providing business services 1 through 13, service 15, and services 17 and 18 but does not have a sporting goods store or a variety store (services 14 and 16), then these services may represent business opportunities for existing or potential local businessmen. Certainly there is no guarantee that a sporting goods store or a variety store would be able to operate profitably in such a situation. But the circumstances do suggest that consideration of potential markets for such goods is warranted. A shopping pattern survey similar to the one discussed in the previous lesson would be very useful in evaluating such circumstances.

# Growth and Business Services in Your Community

The information contained in the hierarchy in Table 4 can also be very useful to a community which is evaluating the good and bad aspects of community growth. One of the good aspects of growth can be the increased availability of consumer services. The sort of new goods and services which might be made available in a growing town can be estimated from the population-business services hierarchy. As a community grows, it is likely to move up the hierarchy of goods and services.

If a community declines or fails to grow, it is likely, over time, to lose business services. And those services likely to be lost first can be read from the hierarchy.

It is easy to see how community decline can put downward pressure on the profits of local businesses. As the population served declines, a firm

Table 4. 1974 Hierarchy of 23 Major Business Services for Idaho Towns

		LARGE TOWNS
23	Wholesale Groceries	1
22	Wholesale Professional and Service Equipment	
21	Wholesale Beverage	-
20	Music Store	
19	Recreational Services	1
18	Office Supply & Stationery	1
17	Radio & T.V. Store	
16	Variety Store	
15	Florist	- 1
14	Sporting Goods	
13	Hospital	1
12	Farm & Garden Store	
11	Wholesale Auto Parts	
10	Apparel	I
9	Doctor	
8	Hotel & Motel	
7	Dentist	
6	Appliances & Furniture	1
5	Garage, Auto, & Implement Repair	1
4	Bank	1
3	Drug Store	1
2	Service Station	1
1	Grocery Store	CMALL
0	None	SMALL TOWNS

has less business volume from which to support itself. There is further evidence that a community which is holding its own in terms of population (neither growing nor declining) is likely to be declining economically. This is explainable by changes in the technology of supplying goods and services which favor larger firms over smaller firms and by changes in transportation technology which make travel to larger firms in larger towns easier and less expensive. So a town which has a stable population may, over time, lose some business services.

To avoid this--just to stand still economically--a town must have some growth in population. The estimated necessary growth for economic stability for towns of different sizes is shown in Fig. 11. For example, the figure indicates that a town with a current population of 2,000 must grow by 2.4 percent per year to maintain the same level of locally available goods and services over time.

If your town's population is estimated annually, you can easily calculate its annual growth rate. Use an average annual growth rate based on the last several years to avoid confusion caused by unusual rates from any one year. If the best estimates of your town's population are from the official U.S. Census taken every 10 years, you can estimate the annual growth rate.

Suppose your town had a 2,000 population in 1960. In 1970, suppose it had grown to 2,450. Thus, over the 10-year period it has grown by 22.5 percent:

$$\frac{2450 - 2000}{2000} = \frac{450}{2000} = .225$$

This amount of 10-year growth is a compounded annual growth rate of about 2.1 percent. This is less than the 2.4 percent per year estimated "necessary growth rate" shown in Fig. 11 for a town of 2,000.

By comparing your town's growth rate with the "necessary rate" for a typical town the size of yours, you can see if your town is likely to gain or lose business services over time. This information may be very important as your town evaluates the desirability of induced growth through industrial development. If residents of your community are satisfied with the consumer services available locally (as determined from a questionnaire such as discussed in Lesson 2), and if your community is already growing fast enough to maintain these services, then there may not be much reason for industrial development. On the other hand, if residents of your community are now driving elsewhere to buy things they once bought at home, and if the growth rate of your town is less than the necessary rate shown in Fig. 11, then the new industry may be very important to your community.

### Summary

Small-town businesses, for the most part, depend on the residents of their communities for their economic livelihood. Similarly, small-town residents depend on local firms to provide many of the goods and services necessary for their way of life. The information in this lesson can assist businessmen in evaluating opportunities in small towns. It can assist community residents and their leaders in determining the importance (or lack of it) of growth in their community.

This information does not provide all the answers to either businessmen or community leaders. Rather, it supplements their knowledge of local markets (in the case of businessmen) or local social and environmental realities relating to growth (in the case of community leaders) to assist them in making informed decisions affecting the future of their communities.

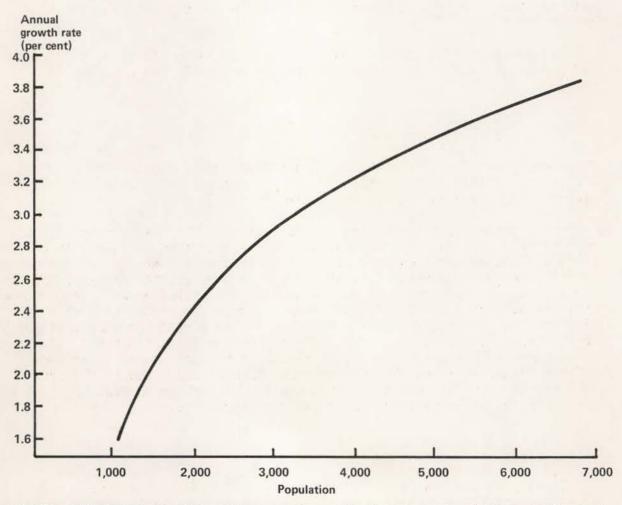


Fig. 11. Estimated annual Idaho small town population growth rates necessary to maintain constant levels of business services.

### LESSON 4

# A LOOK AT THE COST OF YOUR COMMUNITY'S PUBLIC SERVICES

Local public services, as considered here, are assumed to include all functions of local governments. Because of efficiencies or economies of size, the per capita costs of local public services tend to decrease as the number of people served increases.

This relationship between community size and public service cost is very important to small communities. For a small community to maintain the same level of community services as are available in larger communities may be so costly that the tax burden contributes to outmigration and community decline. Such outmigration causes community services to be even more costly.

If your community faces these problems, they can be countered in two ways. Your community government can make every effort to operate as efficiently as possible. And it can support, and even sponsor, community growth. Such growth would make it possible for local government to take advantage of efficiencies inherent in larger operations.

Fig. 12 shows the per capita cost-size relationship for county and subcounty level government expenditures (all governments in county) in Idaho in 1967. This information, as opposed to specific town information, was used because for small-town residents many local public services are provided by units of government other than towns. However, a similar relationship does exist for just the activities of town governments. The relationship depicted in Fig. 12 indicates that public services can be provided at less cost per capita in larger communities than in smaller ones.

It is dangerous to compare costs of government in your county to the costs shown here. There are reasons why government activities in a particular county can be efficient and still have costs greater than indicated here. For example, a county of a particular population with a large land area will likely have higher per capita costs of government than a geographically smaller county with the same population.

The graph in Fig. 12 describes the economic impact of growth on the public service sector of a local economy. Once a critical community (county) size has been attained, per capita government costs are reduced very little by further growth. This critical size seems to be at about 5,000 to 6,000. Growth up to this size decreases per capita public service cost drastically. But growth beyond this size decreases such costs very little. This government cost-population relationship can be very useful in evaluating community growth.

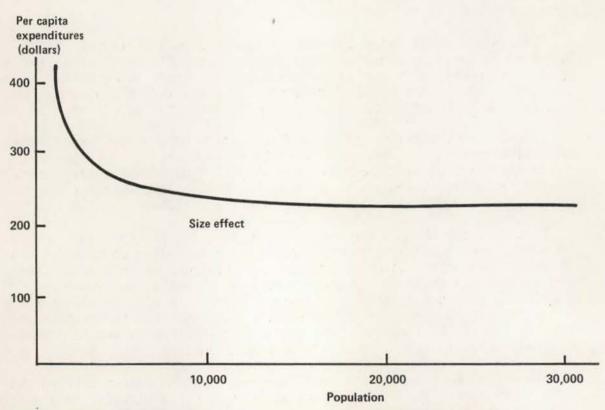


Fig. 12. Effect of population on per capita expenditures of county government in Idaho.

# COOPERATIVE EXTENSION SERVICE



U.S. Department of Agriculture Moscow, Idaho 83843

Dear Resident:

The enclosed material is a questionnaire for the Small Towns Assistance Project being conducted by the Idaho Cooperative Extension Service. I urge you to complete the questionnaire carefully regardless of your place of residence or contact with the community in question and return it in the self-addressed envelope.

Sincerely

Richard W. Schermerhorn Extension Economist and Principal Investigator

Small Towns Assistance Project

RWS/1jp

Enclosure



# AGRICULTURAL EXTENSION SERVICE COLLEGE OF AGRICULTURE UNIVERSITY OF IDAHO

Phone 983-0140 Room 3, Courthouse Grangeville, Idaho 83530

Dear Idaho County Resident:

The University of Idaho Department of Agricultural Economics and the Idaho County Agent's Office (University of Idaho Cooperative Extension Service) are cooperating on a study of two (2) Idaho County Communities. Other villages, towns and/or communities in Idaho will also be involved.

The enclosed material which is self explanatory needs your immediate attention. I hope you will find time from your busy schedule to complete and mail the requested information.

You need not sign or identify yourself unless you desire to do so.

Thanking you in advance for your excellent cooperation, I remain

Very truly yours,

Edward F. Mink

Extension Agricultural Agent

Edward 7. Mink

EFM:sv

Enclosures



Department of
Agricultural Economics
Richard W. Schermerhorn, Head
Moscow, Idaho/83843
Phone (208) 885-6262

Dear Resident:

The University of Idaho's Department of Agricultural Economics and Cooperative Extension Service have undertaken a study of small Idaho towns. Six communities have been selected as sample communities for the purpose of attempting to identify characteristics unique to small towns and determine why these characteristics are unique. We intend to conduct an extensive survey of local businessmen in these six communities and in addition we need your help.

Your address was randomly selected to receive the enclosed questionnaire. This questionnaire, a vitally important part of the entire project, is designed to give us some indication of the local consumers' attitudes concerning a nearby small town. We ask you to conscientiously complete this questionnaire at your earliest convenience and return it in the enclosed self-addressed envelope (no postage required).

As for instructions, the majority of the answers can be indicated by circling an appropriate number. We ask that you indicate your first impressions and that responses to the few questions requiring a written statement be as short and to the point as possible. Do not place your signature on any portion of the questionnaire. The number on the return envelope is not there to divulge your identity but rather it exists for the purposes of knowing which addresses have returned the questionnaire. If the number still prevents you from completing the questionnaire, we suggest you block it out by any means you choose, but do expect to receive additional letters concerning the status of the questionnaire in your possession.

We thank you for your cooperation in assisting us with this project. The results of this study will be only as complete and reliable as are the questionnaires conscientiously completed and returned.

Sincerely,

Joel R. Hamilton Assistant Professor

Project Economist

Small Towns Assistance Project

Sel R. Hamilton

JRH/jde Enclosure

### Small Towns Assistance Project - Consumer Questionnaire U of I Cooperative Extension Service

- Please answer the following questions by placing a circle around the number which most closely expresses your feelings about the following statements. Some of the statements are designed to show your attitudes about Riggins even though you may or may not live at that town.
- Strongly Not Dis- Strongly Agree Agree Agree Disagree a. Local leaders are doing a good job of running Riggins 5 b. People in Riggins are working 5 hard to improve the town c. Adequate medical care is available in or near Riggins d. Decent jobs are almost impossible to 3 5 find in or near Riggins e. Recreation and entertainment 5 opportunities are good in Riggins f. It is difficult to get people in Riggins to agree on anything g. People in Riggins must get by without adequate shopping areas h. Small-town and rural people have a better outlook on life For what one gets - it costs too much to live in Riggins Public education in Riggins is better than average k. Development of recreation related businesses would make Riggins grow I. I am seeking employment in another 5 area and plan to move soon 3 m. A few influential people make all the community decisions in Riggins n. It is difficult to get appliances or 5 cars repaired in Riggins 2 o. It is much cheaper to live in small 2 towns than in large cities p. Local attitudes tend to delay needed 2 5 changes in Riggins g. Opportunities in Riggins encourage young people to make homes there r. Riggins should encourage 5 new business and industry 2 3 s. If a lot of outsiders move in, Riggins will be a worse place to live t. Riggins is a healthy, growing 5 community u. I now drive elsewhere to buy things which I once would have bought in Riggins v. I would have to earn a lot more money before I would move to another town
- Compared with five years ago, are a larger or smaller proportion of your purchases of the following items made in Riggins? (If you moved into the community within the last five years, skip this question.)

	Greater % of purchases now made in Riggins	No Change	Smaller % of purchases now made in Riggins	If you marked greater or smaller please indicate what caused the change
Groceries	1	2	3	
Clothing, Shoes	1	2	3 .	
urniture	1	2	3 .	
Household appliances	1	2	3	
Hardware, Lumber	1	2	3 .	
Dental work	1	2	3	
Hospital or clinic	1	2	3 .	
Doctor	1	2	3	
Drugs	1	2	3	
arm Equipment	1	2	3 .	
Automobiles	1	2	3	
Auto repair	1	2	3	
Gas and oil	1	2	3	
Banking services	1	2	3 .	
nsurance	1	2	3 .	
_oan services	1	2	3 .	
Recreational equipment	1	2	3	
Restaurant meals	1	2	3	

- 3. What is your relationship to the rest of the household?
  - 1. Husband
  - 2. Wife
  - 3. Other (Please Describe: \_\_\_\_\_\_)
- 4. What were the occupations of household members who earned income last year. In addition, please describe in one short sentence what types of work were involved for each and the location of the employment by giving the nearest town or community name.

	Occupation	Type of Work	Location
Husband .			
Wife -	-		
Other a.) -			
b.) -			

Answer the following by placing a circle around the number which most closely corresponds to your feelings about the statements.

		Strongly Agree	Agree	Not Sure	Dis- Agree	Strongly Disagree
a.	Riggins is getting above average returns for its tax dollar	1	2	3	4	5
b.	People in Riggins dislike things that threaten the status quo	1	2	3	4	5
c.	Riggins would be better if it had concerts, plays and art shows	1	2	3	4	5
d.	Riggins is too inconvenient to make it my permanant home	1	2	3	4	5
e.	Most people in Riggins are willing to help others in time of need	1	2	3	4	5
f.	Riggins is a very good place for raising children	1	2	3	4	5
g.	The police and fire protection in Riggins is adequate	1	2	3	4	5
h.	My present job makes adequate use my skills, training, and education	of 1	2	3	4	5
i.	Riggins is a pretty boring place to live	1	2	3	4	5
j.	I have plans to move from this com- munity in the foreseeable future	1	2	3	4	5
k.	Adequate credit at reasonable in- terest is available in Riggins	1	2	3	4	5
1.	Riggins schools prepare children well for jobs they are likely to get	1	2	3	4	5
m.	I want my children to get jobs and settle in this community	1	2	3	4	5

6. Please indicate last years household income by circling the appropriate categories.

	Husband's Earnings	Wife's Earnings	Other Income	
None	1	1	1	
1 - 999	2	2	2	
1,000 - 1,999	3	3	3	
2,000 - 2,999	4	4	4	
3,000 - 3,999	5	5	5	
4,000 - 4,999	6	6	6	
5,000 - 5,999	7	7	7	
6,000 - 7,999	8	8	8	
8,000 - 9,999	9	9	9	
10,000 - 11,999	10	10	10	
12,000 - 14,999	11	11	11	
15,000 - 19,999	12	12	12	
20,000 - 29,999	13	13	13	
30,000 or more	14	14	14	

7. For the goods and services listed below, please indicate about what portion of your household purchases over the past several years were made in Riggins. For things you often buy in another town, list the most important town, and the portion of your purchases made in that town.

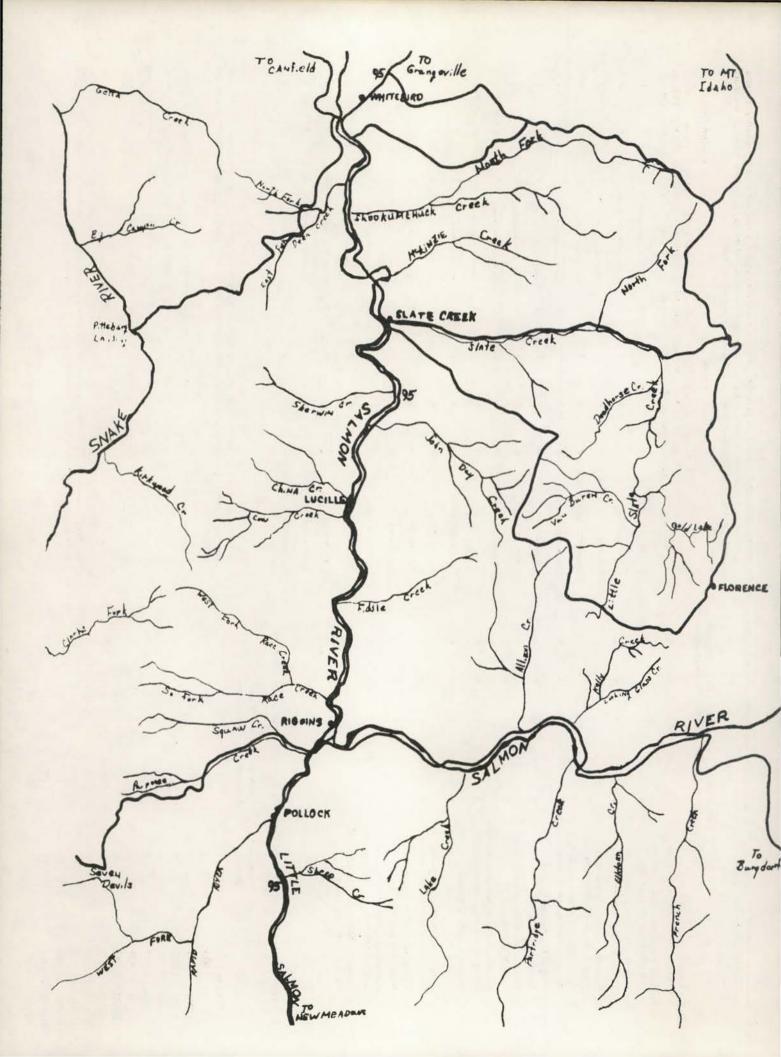
	In Riggins				In Another Town			
	Little or None (under 10%	Some (10 to) 6) (50%)	Most (50 to) (90%)	All (90% or) (more)	Name of town where you get this	Some (10 to) (50%)	Most (50 to) (90%)	All (90% or) (more)
Groceries	0	1	2	3		1	2	3
Clothing, Shoes	0	1	2	3		1	2	3
Furniture	0	1	2	3		1	2	3
Household appliances	0	1	2	3		1	2	3
Hardware, Lumber	0	1	2	3		1	2	3
Dental work	0	1	2	3		1	2	3
Doctor	0	1	2	3		1	2	3
Hospital or clinic	0	1	2	3		1	2	3
Drugs	0	1	2	3		1	2	3
Farm Equipment	0	1	2	3		1 .	2	3
Automobiles	0	1	2	3		1	2	3
Auto repair	0	1	2	3		1	2	3
Gas and oil	0	1	2	3		. 1	2	3
Banking services	0	1	2	3		1	2	3
Insurance	0	1	2	3	33	1	2	3
Loan service	0	1	2	3		. 1	2	3
Recreational equipme	ent 0	1	2	3		1	2	3
Restaurant meals	0	1	2	3		. 1	2	3

- List some changes that would make Riggins a better place to live. Include any new stores or businesses which you think the town should have. Also mention any community services which should be changed or improved.

   a. \_\_\_\_\_

   b. \_\_\_\_\_

   c. \_\_\_\_\_
- On the following a map of Idaho County and the surrounding country has been reproduced. On this map place a visible mark indicating the general location of your residence.



#### REFERENCES

- Barkley, Paul W. and Joanne Buteau, "The Economics of Rural Businessmen: A Case Study in Lincoln County, Washington," Western Rural Development Center, Oregon State University, Corvallis, November 1974.
- Brinkman, George, "The Condition and Problems of Nonmetropolitan America,"
  The Development of Rural America, Edited by George Brinkman, The
  University Press of Kansas, 1974.
- Christaller, Walter, Central Places in Southern Germany, (Carlisle W. Baskin, trans.), Prentice Hall, Englewood Cliffs, New Jersey, 1966.
- Fuguitt, Glen V., "The Growth and Decline of Small Towns as a Probability Process," American Sociological Review, 30: 403-411, June 1965.
- Hamilton, J.R., D.V. Peterson, and R. Reid, "Small Towns in a Rural Area: A Study of the Problems of Small Towns in Idaho," Research Report Mimeo, Department of Agricultural Economics, University of Idaho, Moscow, 1975.
- Logsdon, Charles R., David W. Holland, and Jacqueline M. Baritell, "The Importance of Small Towns as a Population Aggregate: The Experience of Washington State," Scientific Paper 4309, College of Agriculture Research Center, Washington State University, Pullman, 1975.
- Losch, August, The Economics of Location, (William H. Woglom and Wolfgang F. Stapler, trans.) New Haven Press, New Haven, Conn., 1954.
- Nourse, Hugh O., Regional Economics: A Study of the Economic Structure, Stability and Growth of Regions, McGraw-Hill, New York, 1968.
- Peterson, Doyle V., "Economic Growth and Decline of Idaho Towns: An Application of Central Place Theory," Master's Thesis, Department of Agricultural Economics, University of Idaho, Moscow, 1975.
- U.S. Bureau of Census, Census of Population: 1970, U.S. Government Printing Office, Washington, D.C.

The State is truly our campus. We desire to work for all citizens of the State striving to provide the best possible educational and research information and its application through Cooperative Extension in order to provide a high quality food supply, a strong economy for the State and a quality of life desired by all.

Auttis M. Mullins
Dean, College of Agriculture



# SERVING THE STATE

This is the three-fold charge of the College of Agriculture at your state Land-Grant institution, the University of Idaho. To fulfill this charge, the College extends its faculty and resources to all parts of the state.

Service ... The Cooperative Extension Service has active programs in 42 of Idaho's 44 counties. Current organization places major emphasis on county office contact and multi-county specialists to better serve all the people. These College of Agriculture faculty members are supported cooperatively by federal, state and county funding to work with agriculture, home economics, youth and community development.

Research ... Agricultural Research scientists are located at the campus in Moscow, at Research and Extension Centers near Aberdeen, Caldwell, Parma, Sandpoint Tetonia, Twin Falls and at the U.S. Sheep Experiment Station, Dubois and the USDA/ARS Soil and Water Laboratory at Kimberly. Their work includes research on every major agricultural program in Idaho and on economic and community development activities that apply to the state as a whole.

Teaching ... Centers of College of Agriculture teaching are the University classrooms and laboratories where agriculture students can earn bachelor of science
degrees in any of 20 major fields, or work for master's and Ph.D. degrees in
their specialties. And beyond these are the variety of workshops and training
sessions developed throughout the state for adults and youth by College of Agriculture faculty.