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ABSTRACT

Nineteen papers and a keynote address which were prepared for presentation at the Hubert H. Humphrey Institute of Public Affairs at the University of Minnesota are presented. Numerous intergovernmental issues associated with the current economic crisis in rural America are analyzed and a series of innovative policy responses are identified for consideration by Federal, State and local governments. These papers expand on the complement reports prepared by the Subcommittee on Intergovernmental Relations given at other hearings, and are grouped under eight broad topics: infrastructure needs in rural America--Federal, State and local responses; rural America beyond the farm--the problems of undiversified economies; economic development strategies for rural America--local responses; deregulation and rural communities--what the future holds; alternative service delivery--how it can help rural communities; foreign trade, the balance of payments, and rural economics--where the dollars have gone; economic development strategies for rural America--State and Federal responses; and, health care--the problem of access in rural America. Graphs, charts, maps, and statistical data are included in some of the papers.

(JMM)

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RURAL AMERICA IN TRANSITION**

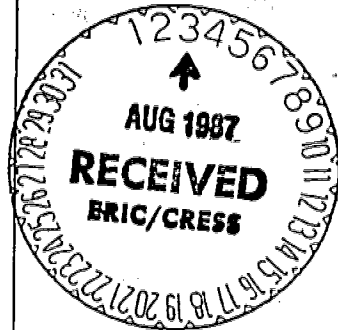
A REPORT

OF THE

SUBCOMMITTEE ON
INTERGOVERNMENTAL RELATIONS

OF THE

COMMITTEE ON GOVERNMENTAL AFFAIRS



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(II)

LETTER OF TRANSMITTAL

U.S. SENATE,
SUBCOMMITTEE ON INTERGOVERNMENTAL RELATIONS,
COMMITTEE ON GOVERNMENTAL AFFAIRS,
Washington, DC, December 11, 1986.

Hon. WILLIAM V. ROTH, Jr.,
Chairman, Committee on Governmental Affairs, Washington, DC.

DEAR MR. CHAIRMAN: I am herewith transmitting for printing as a committee print a series of research papers addressing the theme: "Coping With Change: Rural America in Transition."

These papers were prepared for a conference which was held recently at the Hubert H. Humphrey Institute of Public Affairs at the University of Minnesota. This conference was sponsored by the Foundation for Future Choices, a non-profit organization whose mission is to identify, research and publicize innovative alternatives for the delivery of public goods and services. Conference co-sponsors included the Otto Bremer Foundation, the Public Securities Association, the Independent Bankers of Minnesota, the National Farmers' Union, the Association of Minnesota Counties, the Citizens League, the Council of State Governments, the Minnesota Association of Townships, the National Association of Towns and Townships, the Minnesota Project, and the State and Regional Research Center of the University of Minnesota. Special thanks for organizing this symposium and for granting the Subcommittee permission to reprint papers prepared for the conference go to Marta Goldsmith, Executive Director, and Jim Knobloch, Program Director.

These research papers analyze numerous intergovernmental issues associated with the current economic crisis in rural America, and they identify a series of innovative policy responses for consideration by Federal, State, and local governments. This volume expands upon and complements the issues addressed in other recent hearings and reports prepared by the Subcommittee on Intergovernmental Relations, including "Governing The Heartland: Can Rural Communities Survive the Farm Crisis?" which examined the public revenue implications of the agricultural recession, and "Targeting Federal Aid," which addressed the relationship between federal grant-in-aid formulas and State and local fiscal capacity.

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Because these papers examine the needs of rural communities in every region of the country, and because they identify practical policies for coping with social and economic changes in an era of fiscal constraints, I believe they will comprise a valuable committee print for both Members of Congress and the general public.

Sincerely,

DAVE DURENBERGER,
*Chairman, Subcommittee on
Intergovernmental Relations.*

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MEETING THE CHALLENGES FACING RURAL AMERICA

(Keynote Address by U.S. Senator Dave Durenberger to a Conference on Coping With Change: Rural America in Transition, Sponsored by the Foundation for Future Choices, Humphrey Institute, University of Minnesota, December 2, 1986)

I'm here, like all the rest of you, because I care deeply about what I see going on in the heartland of America and its impact on the people of rural Minnesota. But, I'm also here because I'd be the first to admit that I don't know all the answers.

In fact, I believe most people don't understand clearly the full scope and nature of problems facing rural families and communities. Despite all the debates and issue papers, and despite all the new faces coming to Washington out of the 1986 election, it seems to me that no one has yet found the answers to the "farm crisis" or to the very serious problems facing the Iron Range or other distressed rural communities.

Clearly, all of us will have to adjust our focus to better identify the fundamentals of the changes which are taking place . . . and how we can cope with these changes. That's one reason I helped establish the Foundation for Future Choices which is the principal sponsor of this conference.

This new national foundation has as its primary mission the promotion of new and more innovative ways of financing and delivering public services. At the heart of such innovation is the potential for consumer choice and provider competition to enhance both the quality and cost effectiveness of public services.

It's significant that one of the first tasks undertaken by the foundation we call "Choice" has been organizing this conference on coping with the changes going on in rural America.

Perhaps one way to begin this challenging task is to understand that rural America is in the throes of transition in at least three important areas—transition in the rural economy; transition in the traditional intergovernmental partnership; and transition in the delivery of public and private services.

TRANSITION IN THE RURAL ECONOMY

Over the past few years, we've all become aware that Minnesota is rapidly becoming a state with two economies—a prosperous, growing economy centered in the Twin Cities . . . and a depressed agricultural and mining economy in much of the balance of the state.

Over the past few months, it's become equally clear that this dual economy phenomenon is paralleled in the nation as a whole. It's now generally accepted that the United States is developing a two-track economy: One centered in major cities, especially on its coasts; the other centered in the nation's breadbasket and states . . .

(1)

which are dependent on natural resources and traditional smoke-stack industries.

The two coasts are enjoying economic prosperity and growth, fueled by the high tech revolution, an expanding service economy, and international trade and finance.

In stark contrast, many states and communities across America's heartland are in recession—or even depression. Some communities are suffering from depressed prices and rapidly declining asset values in agriculture. Others are suffering from the oil shock. Still others are feeling the effects of the decline in mining and manufacturing, particularly where foreign-based competition is involved.

The reasons for the economic hardships vary, but the effects on individuals, on families, and on communities are virtually the same—in Southwestern Minnesota, on the Iron Range, or in oil dependent communities in West Texas or textile dependent communities in South Carolina.

We all know the hardships involved for individuals and families suffering from poor economic conditions. It's been a brutal eye-opener for me to hear farmers in machine shed meetings around the state tell how they've been forced to give up land which has been in the same family for generations; or to visit with steelworkers my own age at the Silver Bay union hall and the Foreign Legion Club in Babbitt who know they will never again have a job.

Less well known than these effects on individuals are the effects the rural crisis is having on rural communities.

Research conducted by my Subcommittee on Intergovernmental Relations documents what many of you already know—that the rural crisis is a crisis for governments and for communities . . . as much as it is a crisis for individuals and for families.

In a study entitled "Governing the Heartland: Can Rural Governments Survive the Farm Crisis?" my subcommittee found that rural governments are just beginning to feel the full effects of the recession that has gripped the farm belt since 1982.

Falling land values have eroded the property tax base by up to 25 percent in some states. Property tax delinquency rates are also rising rapidly—up seven-fold in Nebraska since 1981.

As you well know, service demands on many local communities are growing at the same time—as economically troubled farmers and small business owners seek financial and stress counseling, income assistance, job retraining, and other services.

This is not a phenomenon which is affecting only local governments. Many states are feeling the pinch, too. Six of the eight states included in this study saw tax revenues grow more slowly than the national average. Four actually had to cope with declines in revenues. Many have been forced to make drastic, mid-year budget cuts in the past two years.

THE RURAL CRISIS GOES BEYOND THE FARM CRISIS

So, the farm crisis is clearly a crisis of governments and of communities—as much as it is a crisis of individuals and their families. But, that's just the tip of the iceberg. This symposium will look at what is happening to rural governments in non-farming areas, as well . . . from depressed mining communities in northern Minneso-

ta and the mountain states . . . to distressed shoe and textile manufacturing communities in rural New England and the southeast . . . to long-term pockets of poverty in Appalachia and the Mississippi Delta.

Despite their diversity, rural governments in all these areas face a common problem: Undiversified economies that are subject to wide and sudden shifts in income and prosperity.

Widely differing rural communities also face a common challenge . . . the challenge of "coping with change" as they struggle to provide basic public services and promote economic development in a period of unparalleled economic transition from a basic industrial economy to a "giant bazaar." This transition has been fueled by embargoes, huge deficits, and an overvalued American dollar. It has been worsened by economic problems and debts in many countries which have traditionally been good customers for our products . . . and by tough competition, much of it subsidized, from industrialized and developing countries alike.

All of these factors—and more—have contributed to the current glut in the supply of a variety of products ranging from oil to wheat to iron ore and steel . . . the products that have formed the economic base in rural areas.

THE CHANGING INTERGOVERNMENTAL PARTNERSHIP

For all rural governments—whether they're in Southwestern Minnesota or Northeastern Georgia—coping with economic change is only one of the challenges to be faced in the months and years ahead.

A second, reinforcing challenge is posed by the transition now underway in our intergovernmental partnership—particularly in the role the federal government has traditionally played in helping local governments do their job.

For the last 20 years, the challenge for local governments in our federal system was how to cope with more . . . more federal programs . . . more federal money . . . more federal mandates. All were trends that began in the 1960s and blossomed in the 1970s.

Today, communities are finding new meaning in yet another message from the 1960s: "Less is more." Less federal aid and less access to tax-exempt financing at a time of even more federal regulation.

This trend is shown dramatically in the charts below which trace changes in federal spending priorities from 1980 to 1990.

During those ten years, "nondefense discretionary and budget" expenditures will have dropped from 26 to 12 percent of the federal budget. That category of spending includes most programs which benefit rural America.

At the same time, net interest on the federal debt will have grown from nine to 15 percent of federal spending; defense from 23 to 27 percent; and entitlements and other mandatory and offsetting receipts from 42 to 48 percent.

The bottom line, in other words, is that rural America is put in the position of fighting for a shrinking share of a shrinking piece of the budget pie.

We are now in our fifth year of gradual reductions in federal aid to state and local governments. That's not news to most of us in this room because rural areas have already borne a disproportionate share of those cuts in federal programs.

The "Governing the Heartland" study, done by my subcommittee, found that, between 1982 and 1984, total federal aid to local governments as a whole remained steady in current dollars, although it fell modestly when adjusted by inflation. In the 102 ag-dependent counties examined by the study, however, federal aid declined by 18 percent during the same three-year period.

The loss of General Revenue Sharing will only make the disparity worse. Revenue Sharing makes up about 22 percent of the federal aid received by local governments nationwide. But, in ag-dependent areas, Revenue Sharing accounts for almost 45 percent of federal aid. The loss of Revenue Sharing, in other words, will hit rural local governments more than twice as hard as it will hit local governments in general.

GOOD NEWS AND BAD NEWS IN TAX REFORM

Tax reform also raises new challenges for rural local governments. When local officials ask me how they'll be affected by tax reform, I ask what they want first . . . the good news or the bad news. The good news is that the majority of people in America will come out ahead under the tax reform bill we passed last year. The bad news is that local government officials are not in the majority.

One culprit is how the Senate's version of tax reform—and its treatment of tax-exempt bonds—got taken to the cleaners in Conference Committee with a House bill no one wanted: the House diluted a good Senate bill. That's especially bad news for rural governments . . . many of which have made very creative use of tax-exempt bond financing—in infrastructure replacement, in low and moderate income housing, and in economic development.

The loss of federal aid and the ability to use tax-exempt bond financing would not be nearly so serious if the federal government gave up the business of drafting mandates and regulations and then imposing them on increasingly cash-poor local governments.

Many of these mandates are important and fulfill legitimate national purposes . . . to protect our environment, for example, and guarantee the basic human rights of all Americans. But they all carry a price-tag. And you know who ends up paying the bill.

BOTH LONG AND SHORT TERM SOLUTIONS NEEDED

To combat these disturbing trends in the intergovernmental partnership—and its impact on rural governments—I believe we need both an immediate and a long-term strategy.

In the short-term, I have proposed a successor to General Revenue Sharing called Targeted Fiscal Assistance—or TFA, for short—which seeks to preserve the best features of Revenue Sharing while meeting the tough test of fiscal responsibility required by today's unconscionable federal deficits.

TFA uses half the money now going into General Revenue Sharing and focusses it on communities that need help the most. At a time of \$2.2 trillion national deficits, the federal government does

not have revenue to share with Beverly Hills and Palm Springs. But, by targeting aid to those communities who need it most, TFA can help even out fiscal disparities between communities and provide a safety net for basic public services.

The formula in my TFA proposal makes a lot of sense for rural America since most rural communities end up getting more money than they would under Revenue Sharing. The map below shows how Minnesota towns and counties do under TFA compared to Revenue Sharing. You can see what looks like a where lopsided donut. There's a hole around the Twin Cities, where funding is less needed and would be cut. And, there is a circle of "winners" around the remainder of the state which end up with more aid. Most other states look about the same.

In addition to TFA, I've made two other short-term proposals to deal with the fiscal problems facing rural communities: The first will be an attempt to fix some of the most serious problems we've created for local governments in the tax-exempt bond section of the 1986 Tax Reform Act.

And, the second is what I've called my "Mandates Bill" which forces the federal government to "put up or shut up"—to cough up the money to pay for any new mandates it places on local governments.

But, these short-term proposals won't solve all the problems rural communities are facing. As a longer-term strategy, I believe that the forces of change require a more rational and principled sorting out of responsibilities among different levels of government.

Some of the better minds in both parties—my colleague, Senator Dan Evans, Governors Bruce Babbitt and Chuck Robb, and others—have given this subject a lot of thought over the past couple of years. We've come up with a proposal for redefining the relative roles of the federal, state and local governments that I like to call "Responsible Federalism."

Senator Evans, and Representatives Tom Downey, Bill Frenzel, Martin Sabo and others joined with me in introducing this proposal in the Congress in October. That bill was just a beginning, designed to start a dialogue on fundamental reform. We intend to be back in the 100th Congress with a revised and improved version of our proposal.

CHANGES IN THE DELIVERY OF PUBLIC SERVICES

Finally, beyond the changing economy and changes in what I've called the "intergovernmental partnership," there are a third set of large challenges facing rural areas—changes in the way basic public and private services are delivered.

Historians who look back on the 1980s may end up making frequent references to what I like to call the "Law of Large Numbers." For better or worse, many of the public and private services we've all taken for granted are being exposed to the rigors of the marketplace.

We see it all around us—in the deregulation of airlines and bus service, in the breakup of AT & T, and in the changes going on the way health care is delivered all over America.

Gone are the days when excess revenues generated by larger or more efficient operations in one area might be used to subsidize smaller or less efficient operations elsewhere. "Robbing Peter to Paul," in other words, is out. Paying our own way, is in.

That makes a lot of sense. It's fair. It's efficient. And, generally, it works—for everyone, that is, who's fortunate enough to be favored by the Law of Large Numbers. But, there are fewer customers—or customers with fewer dollars—as there are for many services in sparsely populated rural areas—the "Law of Large Numbers" can have devastating effect, especially on the short-term.

That's hard to explain to someone who is paying less to fly from coast to coast than it now costs to fly from the Twin Cities to International Falls.

But, it's real. Just ask Senior Citizens in the dozens of small towns in Minnesota which have lost their bus service in the last couple of years . . . or farmers and other shippers to communities which have lost their rail service. In many cases, the rails have been pulled up . . . the rights of way turned into bike trails . . . the depots turned into restaurants and museums.

In some services, we haven't yet seen the full effects of the "Law of Large Numbers."

But, there is very real fear that continued deregulation of phone service, for example, will drive monthly local rates out of reach for low income rural families . . . while a lack of competition will mean that many rural families and business won't share in the long distance cost-cutting which is benefitting many of us in urban areas.

I also know from dozens of meetings I've held around the state over the past couple of years that there is very real fear that competition will force dozens of smaller rural hospitals in Minnesota to close . . . denying residents of those communities access to emergency care, long-term care, and other vital health services.

And, I know that there is also very real fear that continued deregulation of banking and other financial services will deny farmers and businesses in rural areas access to reasonably priced capital—capital that's essential to finance the jobs and new facilities and new equipment which will be needed to keep rural America populated in the decades ahead.

NEEDED: NEW WAYS OF DELIVERING SERVICES

To begin to address these problems and fears about what lies ahead, we do need to do a better job of understanding what is happening to important public and private services as a result of the "Law of Large Numbers." And, we need to identify new and most cost-effective ways of delivering many of those services.

This state is already finding, for example, that access to air service does not necessarily mean access to a 140 passenger jet . . . that access to inter-city passenger transportation does not require a \$160,000 deluxe motor coach . . . that shippers associations and "short-line railroads" can be organized to deliver reasonably priced freight service.

Every hospital can't—and shouldn't—be in the business of performing every test and every procedure known to medical science.

But, many rural hospitals are discovering a wealth of new services to deliver—from wellness and nutrition counseling and education programs, to housing and long-term care options for seniors, to emergency and outpatient surgery services which are vital to the communities they serve.

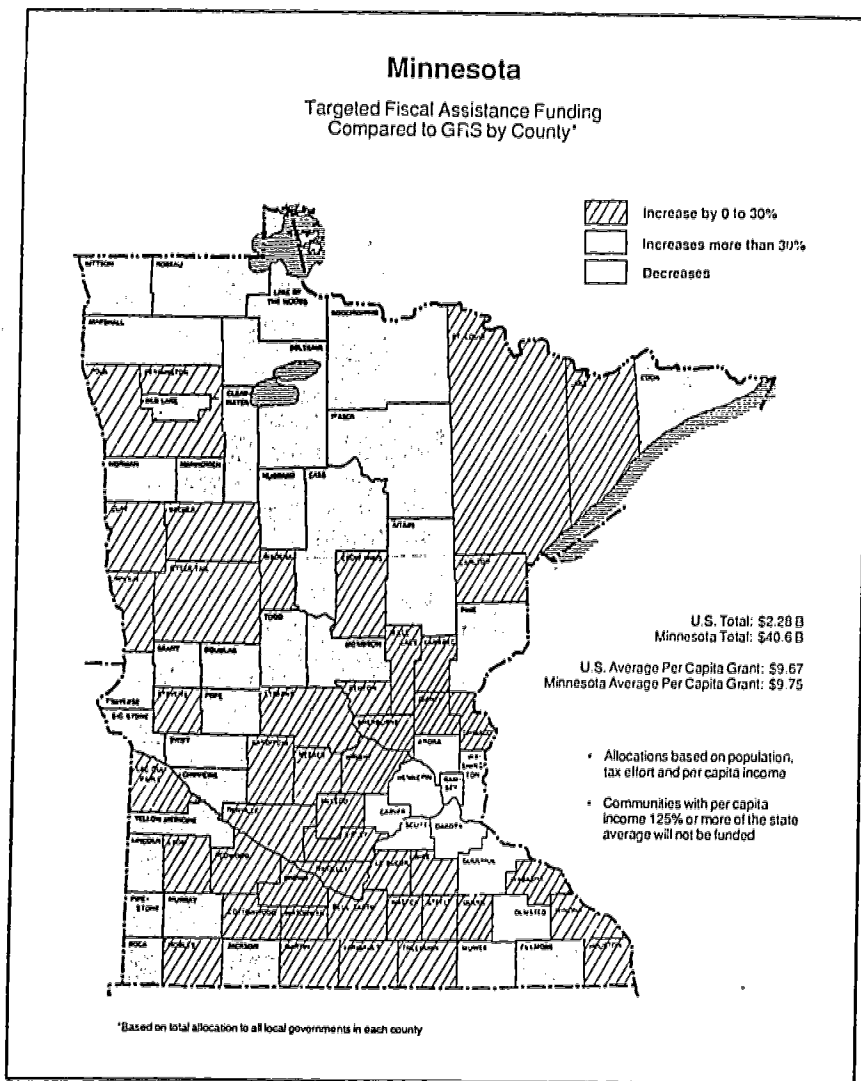
As I mentioned at the outset, it's significant that the Foundation for Future Choices—which has as its primary mission the stimulation of debate nationally on new ways of financing and delivering public service—has chosen this conference—on Coping with Change in Rural Areas—as one of its first orders of business.

But, as has been true so many times in the past, the real answers to how rural communities cope with change will not come from a national foundation . . . or from well-meaning elected officials in Washington.

Those of us in Washington can help . . . and we must do our part, particularly in easing the effects of the economic and inter-governmental changes I've discussed here tonight.

But, the real leadership—and the best of the new ideas—are going to come from the Countryside Councils, and the McKnight Rural Initiative Funds, and the regional development commissions, the mayors and county and town board members, and others who care deeply about the challenge facing Rural America.

Each of us here has an obligation to do our part in meeting that challenge. We owe it to ourselves—and to those who follow—to do nothing less.



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PRESERVING OUR RURAL TRANSPORTATION INFRASTRUCTURE

(By Richard P. Braun)*

INTRODUCTION

Transportation is among many public concerns which face the state and nation on a continuing basis. Just how important is transportation to the state and national economy and what kind of priority does it deserve? I would like to discuss some of these issues with you here today, with special emphasis on the importance of the transportation infrastructure to the rural economy and to rural economic development.

The transportation infrastructure provides basic support for all rural economic activity. It is an essential factor in the economic development and growth of the state and nation. The rural transportation infrastructure links rural America with its cities and towns, links the cities and towns with each other and links rural areas with the rest of the nation.

Transportation costs are an important consideration for businesses planning expansion or relocation. Access to markets is often the most important factor in business location decisions. Minnesota is a case in point. Because Minnesota's location is somewhat remote from world and national markets, transportation costs constitute a larger share of the price of products produced in the State. Improved transportation facilities mean reduced transportation costs. Reduced costs are reflected in faster shipping, higher load capacities, reduced vehicle maintenance costs and improved safety.

Many factors affect the success of rural businesses and industrial ventures—weather, the cost of raw materials, market prices and human resources; but transportation is THE factor singled out most often by rural business leaders who are concerned with the costs and the means by which supplies, products, and people move across the State.

The expense of transportation accounts for a considerable portion of the cost of commodities and manufactured products on the Minnesota market. Businesses are always working to keep those expenses down. When transportation costs increase for whatever reason, businesses lose and workers, communities, and consumers suffer the effects. The State's economy declines. When business does well, all prosper.

THE COST OF POOR ROADS

The cost of poor roads is felt by all sectors of the state and national economy. A book entitled "Bad Roads", authored by Pat Choate in 1983, outlined many of the direct and indirect costs of

* Director, Center for Transportation Studies, University of Minnesota.

poor transportation. The report points out that bad roads create five basic types of direct economic costs:

Increased fuel consumption

The Congressional Budget Office reports a 40% increase in vehicle operating costs in vehicles driven on very poor roads. In addition, a 1979 study by the Transportation Research Board (TRB) and a 1980 study by the American Association of State Highway and Transportation Officials (AASHTO) showed that pavement condition can make a 10-30% difference in vehicle fuel efficiency.

Increased wear and tear on vehicles and premature depreciation

A Swedish study showed that road condition can influence tire life by as much as 50%. Road condition also effects many other vehicle components including springs, shock absorbers, wheel alignment, etc.

Increased labor costs

Reduced speeds and delays due to blocked roads, closed bridges and traffic congestion increase labor costs. In one study U.S. Steel incurred over \$1 million in increased labor costs due to re-routing caused by deficient bridges in the Pittsburgh area.

Increased accidents

Highway design and condition have a significant impact on accident rates—the fatality rate on the Interstate system is less than half that on the average U.S. road. The Insurance Information Institute estimates that road accident-related losses rose from about \$10 billion in 1960 to over \$57 billion in 1980. These losses are reflected in increased insurance premiums.

Increased construction and repair costs

A 1979 TRB study showed that deferred capital improvement costs are up to 160 percent higher than improvements made on a timely basis.

Indirect and hidden costs of neglecting transportation needs are also very real. Econometric studies prepared in 1983 by the Transportation Systems Center at MIT defined the devastating impact on the American economy of neglecting transportation. Based on the MIT study, if the deterioration of the nation's highways is permitted to continue, the annual costs to the economy by 1995 would be as follows:

- A 3.2 percent loss of Gross National Product;
- A 8.0 percent increase in the consumer price index;
- A 5.9 percent decline in disposable income;
- A 2.2 percent decline in employment; and
- A decline in labor productivity of 2.7 percent in manufacturing and 3.6 percent in non-manufacturing activities.

In view of Transportation's key importance to the state and national economy, the devastating effect of deteriorating roads on the economic vitality of the state and nation is clear.

TRANSPORTATION INFRASTRUCTURE NEEDS

In order to give you some idea of the magnitude of the transportation infrastructure problem we face, I would like to turn briefly to my own State of Minnesota, with which I am most familiar.

Mn/DOT has direct responsibility for the 12,100 mile state trunk highway system. This system consists of approximately 28,600 lane miles of highways 3,585 bridges over 20 feet in length, 475 interchanges, and 77 rest areas.

In December of last year, Mn/DOT prepared a report on the State's highway infrastructure needs to the year 1995. The study found that approximately 5,700 miles (47%) of the state trunk highway system are over 35 years old. Of these 5,700 miles, about 3,150 miles are 50 years old or older. In addition about 356 state trunk highway bridges over 20 feet in length are deficient in load, width, clearance, condition or a combination of these factors. About 40 percent of the state trunk highway system is rated in poor or fair condition while about 43 percent of the state trunk highway system is restricted to vehicle weights of less than 10 tons per axle during the spring.

The life cycle for the state trunk highways is estimated to average about 50 years. Roughly 3,100 miles of state trunk highways are already over 50 years old and are a backlog of overdue improvements, and about 1,000 miles of state trunk highways will require service or capacity improvements within the next 30 years to accommodate increased traffic or to improve traffic flow.

Based on a 50 year life cycle, 735 miles of road improvements are required in Minnesota annually, including 400 miles of resurfacing, 145 miles of reconditioning, 90 miles of reconstruction, and 100 miles of major construction.

The current highway improvement program falls far short of life cycle needs—averaging only 400 miles annually. These 400 miles include approximately: 200 miles of resurfacing, 100 miles of reconditioning, 75 miles of reconstruction, and 25 miles of major construction.

Overall, the shortfall in state construction funds is estimated to be about \$3.4 billion, or about \$340 million per year, from 1986 through 1995.

I would also like to point out that the impacts which the various modes of transportation have on Minnesota's rural economy are cumulative and interrelated. We all know that efficient commodity movement is essential to rural Minnesota's economic health and vitality. And yet the number of rail miles in the state has decreased from about 9,500 miles in 1929, to 8,000 miles in the mid 1960's, to only 5,300 miles today. In 1985 alone, 225 additional miles were abandoned. We anticipate that another 1,100 miles will be abandoned within the next 10 years, effecting 150 additional communities.

These rail abandonments have in turn added an estimated 170,000 truckloads annually to the state's highways. As a result, road maintenance and preservation costs have risen substantially.

The state's highway infrastructure needs to 1995 include: catching up on past due rehabilitation, the required regular cycle of re-

habilitation and resurfacing, and required service or capacity improvements.

Speaking again from the perspective of my own state, the Minnesota Department of Transportation has identified the following key issues which will impact the state's transportation infrastructure during the 1980's:

Urban congestion

The continued growth of the Twin Cities Metropolitan Area (TCMA) compounds the congestion on the region's major routes. Construction costs, social and environmental impacts, and public acceptance are immense problems. Too often new roads simply are not built and old roads are not enlarged to serve the traffic demands of today and tomorrow.

Recreation and tourism

These increasingly important industries attract millions of visitors to and throughout the state. Transportation to and within the attraction areas compete with the demands to move agricultural commodities.

Heavy truck movement

Minnesota's location is remote from most major markets. Efficient, low cost highway freight transportation is essential to maintain Minnesota's competitive position.

Road strengthening

State and Federal Legislation have created networks of 80,000 pound routes. Approximately 43 percent of state trunk highways must be restricted to less than 80,000 pound gross vehicle weights during the spring thaw. Since most of the state highways were not built to carry 80,000 pound trucks increased rehabilitation and maintenance costs can be expected.

Road life

Most of the State Trunk Highways were built during two primary construction periods, the 1930's (to get farmers out of the mud) and post World War II. About 26 percent of the state trunk highways are over 50 years old and 47 percent are over 35 years old.

Road condition

Roads that are rough or in an advanced state of deterioration tend to increase driver discomfort and vehicle operating costs. Approximately 40 percent of the State Trunk Highways are rated in poor and/or fair condition. The rehabilitation of these roads is necessary. In this respect I believe Minnesota is a typical state.

Bridge deficiencies

As stated earlier, more than 350 bridges are deficient in terms of safety, load capacity, or clearance. The orderly replacement of deficient bridges is needed.

Motor vehicle efficiency

While the amount of travel on the State Trunk Highway System continues to increase, the fleet of motor vehicles is becoming more fuel efficient. Thus, more travel is occurring but less fuel is used. The motor fuel tax is the major source of state revenue for highway construction. A means is needed to continue the current levels of road maintenance, preservation and improvement and to provide funding stability for major projects.

Economic development

The revitalization of rural Minnesota requires the ability to move commodities, serve recreation, and reduce transportation costs. A major investment in highway improvements is necessary to help insure growth and development in all sectors of Minnesota's economy.

STRATEGIES FOR MEETING THE NEEDS

Any overall strategy for meeting the needs of the rural transportation infrastructure must be based on several key considerations or action steps. Such action steps should include the following:

Identify future infrastructure needs

The report recently issued by the National Council On Public Works Improvement entitled "The Nation's Public Works: Defining The Context" emphasizes that in recent years numerous studies of public works needs at all levels of government generally have concluded that a significant gap exists between needs and available funding.

Based upon last year's biennial report to Congress entitled "Status of the Nation's Highways", travel between now and the year 2000 is expected to grow at an annual rate of from 2.0 to 2.74 percent, slightly less than in the decade of the 1970's.

By the end of the century however, America's highways will need to accommodate 40 to 60 percent more travel than in 1984. With our knowledge of present conditions and this estimate of travel demand, we can estimate the likely wear and tear on the system and identify what types of improvements and the costs of those improvements which will be needed to achieve desirable levels of future highway performance.

Between 1983 and the year 2000, approximately 41,000 miles of Interstate, 334,000 miles of arterials, and 636,000 miles of collectors will require capital improvement to maintain serviceability. In addition, a number of new facilities will be needed, especially in areas experiencing rapid growth, to facilitate and permit economic growth and development.

Increase the productivity of our transportation investment

This will involve a variety of approaches including:

- More efficient office management and data processing;
- Improved personnel management and training;
- The use of automated pavement management systems;
- Use of flexible standards for road design and pavement restoration;

Maximizing the use of computer-aided design, word processing and automated drafting;

The widespread application of value engineering principles to highway and bridge projects;

The evaluation and use of alternate designs for bridges;

The application of pavement recycling technology for highway reconstruction and maintenance;

Application of a funding mechanism that will base vehicle charges on the distance they travel, what travels that distance and perhaps even when—to improve road user tax equity and more efficiently tie costs to benefits;

Increase the stability in federal and state funding. Highway projects often require long lead times of from 6-8 years from the concept and planning stages, through environmental impact analysis, evaluation of alternatives, preliminary and final design and finally contract letting. Significant variations or actual disruption in funding availability destroys the continuity of the project development process, results in an inefficient use of resources and causes project delays, all resulting in higher costs and reduced productivity;

Continue to explore private sector contracting to produce transportation services. In 1982 a report entitled "Many Providers, Many Producers" was published by the Hubert Humphrey Institute at the University of Minnesota. I believe the report offered some very innovative proposals for restructuring public expenditures. The report points out that there is a difference between providing public services and producing those services. While the decision to provide a public service may be a political one, that service often does not have to be produced by the public sector. The competitive private sector can often produce the mandated service at lower cost and with greater efficiency than the public sector.

A key strategy for meeting transportation infrastructure needs through increased productivity will be the application of highway demand management and modification, rather than capacity expansion. Ridesharing, whether carpooling, vanpooling or the use of mass transit, is likely to see increasing use as total trip making continues to increase on the nation's existing, mature highway system. Other in-place demand management techniques such as remote freeway traffic surveillance and control are also likely to see increasing use.

In addition, new and innovative demand management tools are visible on the horizon. Electronic road pricing is one such concept, made possible by recent advances in electronic vehicle identification technology. It involves electronic vehicle identification techniques, known variously as Electronic Number-Plate (ENP) in Hong Kong and as Heavy Vehicle Electronic License Plate (HELP) in the "Crescent Study", currently underway in the United States.

The primary aim of the Hong Kong pilot project was to test Electronic Road Pricing as a traffic management and transportation planning tool. All vehicles were equipped with an ENP, made possible by recent advances in micro-electronic and telecommunications technology. The ENP is detected at various points in the road network and data relating to vehicle identification, vehicle location,

and time of day was transmitted to data processing centers. Vehicle charges were based upon location and time of day, as these factors relate to system congestion. The pricing system was very similar to that used for long distance telephone calls, where charges also relate to location, time of day and system congestion. The experiment showed the technology for such a system to be simple and reliable.

The Heavy Vehicle Electronic License Plate (HELP) System currently under investigation in the "Crescent Study" is an integrated truck traffic monitoring system. It combines automatic vehicle identification, weigh-in-motion, and automatic vehicle classification technologies with a computerized data communications network.

The HELP system gives the trucking industry information needed for fleet management and control and for business planning. It gives government information needed for facility planning and management, vehicle taxation, size, weight and speed enforcement, crime detection, and monitoring and managing hazardous materials movement.

Enhance transportation research efforts

Substantial benefits will result from increased study in both "hard" (engineering, materials, grading and drainages, etc.) and "soft" (system management, value engineering, planning, etc.) areas of highway research. For many years the ongoing research of the National Cooperative Highway Research Program (NCHRP), within the framework of the National Academies of Sciences and Engineering, the National Research Council, and the Transportation Research Board, has done yeoman work in research efforts aimed at advancing the state of the art in transportation technology and services.

The federal-state partnership in highway research has proven highly productive in improving highway technology. The current research programs need to be continued. In addition, the focused Strategic Highway Research Program flowing from the Strategic Transportation Research Study needs to be supported.

The pending House and Senate highway-transit program reauthorization bill would both provide federal funding for the Strategic Highway Research Program in the amount of $\frac{1}{4}$ of 1% of federal highway program funding. This program offers great promise in terms of improving long term highway investment productivity and in terms of preserving the nation's transportation infrastructure.

I believe that the new Center For Transportation Studies at the University of Minnesota, along with other such institutions throughout the country, have a key role to play in this important aspect of preserving our material infrastructure.

Explore alternative methods to increase available funding

A variety of potential sources for increased highway revenues were discussed at the National Conference On State Highway Finance which I chaired, held last August in Smuggler's Notch, Vermont. Among the sources discussed were the following:

- Local option motor fuel taxes;
- Toll financing;
- Leasing airspace;

Tax increment financing;

Financing highways with general revenue sources, including property taxes, income taxes and sales taxes. These sources may be especially appropriate for financing specific projects at the local and metropolitan level;

Special benefit fees, perhaps best used in major growth areas for capital expenditures, to supplement primary revenue sources;

Private participation in financing highway and transit projects may be especially useful in accelerating vital projects in states and areas experiencing rapid development. In Minnesota, one approach we have used to bring the public and private sectors together is the North Star Workshop. The objective of the most recent such workshop held last May, was to alter the perception that government alone is responsible for providing the infrastructure necessary for economic development;

Debt financing, requiring increased efficiency in financial management and most appropriately used as part of a long range strategy rather than as a tool to react to funding crises;

User fees, with special efforts to reflect changes in fuel efficiency and vehicle size and weight, while maintaining tax equity among various users and vehicle types.

Strategies to provide the funding needed to preserve and maintain the transportation infrastructure must be developed in an environment which includes state and local elected officials, developers, road user groups and the general public.

FINANCING INFRASTRUCTURE RENEWAL—THE STATE AND LOCAL ROLE

In discussing how infrastructure renewal should be financed, I would like to first of all discuss the appropriate role of the various levels of government, with special emphasis on highways. In April 1985 the American Association of State Highway and Transportation Officials (AASHTO) released a report entitled; "A New Focus for America's Highways: Recommendations on the Federal-Aid Highway Program." This report outlines the great need for highway infrastructure renewal and also discusses what AASHTO, representing transportation officials from all 50 states, believes are appropriate roles for federal, state and local government. Report findings and recommendations include the following:

AASHTO member states estimated that total highway investment requirements from all sources, federal, states and local on the present Federal Aid System would be between \$26 billion and \$30 billion per year from 1987 through 1995. Those figures are conservative and represent only a minimum of identifiable requirements.

Rather than the current practice of spreading limited federal funding inadequately among more and often conflicting demands, a program to concentrate federal resources toward those highway systems and project requirements which are of truly national importance was recommended.

A System of Highways of National Significance should be established to be comprised of the Interstate and Primary sys-

tems, plus bridges on all current federal aid highway systems, to be permanently funded from existing Federal Highway Trust Fund revenues.

Continued federal funding is also required to assist in meeting the substantial needs of state and local highways. A voluntary block grant to states was recommended for a Program of Highways of State and Local Interest, to be comprised of the Secondary and Urban systems, off-system bridges, and highway safety other than construction.

In order to provide permanent federal support and to enable a stable and predictable highway program, the Federal Highway Trust Fund should be extended indefinitely and obligation limitations eliminated.

With respect to the transportation infrastructure, AASHTO recommended that federal legislation similar to that now in place provides the best model for infrastructure renewal and improvement. New federal transportation infrastructure legislation must preserve intact the federal-state-local partnership concept embodied in existing legislation. It has been demonstrated that user-oriented, dedicated funding sources at the federal and state levels are essential to long-range transportation improvement planning and implementation. Any attempts to divert funding support from the existing user-supported transportation trust funds would be destructive to the nation's transportation infrastructure.

State and local governments must monitor highway investment requirements not met by federal aid and set state and local user tax rates to meet funding requirements. In so doing, state and local governments have sought solutions to the imbalance between requirements and revenues in two major ways: cutting costs through management efficiencies and raising user fees and other revenues.

Under a federal program for Highways of State and Local Interest, federal requirements and standards should be greatly reduced or eliminated for project development procedures, design standards, environmental assessment, and other federal mandates. In such areas, state and local requirements should govern. Local and regional variations in the age, design and use of the various parts of the transportation infrastructure indicate that the determination of needs and priorities should also be made at the state or local level. Significant transportation infrastructure improvements can be made at the state and local levels by (1) increased flexibility in design standards, (2) expanded transfer flexibility among federal funding categories, permitting a percentage of funds to be used without restriction as to apportionment category and (3) further involvement of the private sector in funding transportation improvements.

Although the federal-state partnership approach outlined above currently is supported by a majority of transportation officials, in recent years several actions by the federal government have seriously undermined this federal-state relationship. Congressional inaction on program reauthorization, increased funding for "special" projects, unnecessary nationwide construction standards, sanctions, Gramm-Rudman-Hollings, and a large undistributed balance in the Highway Trust Fund have all worked to erode the ability of the

states to best use the funds that have been dedicated specifically for highway programs.

Consequently, a task force of the National Association of State Budgeting Officers (NASBO) has recently approved a policy proposal urging that seven cents of the nine-cent motor fuel federal excise tax be relinquished to the states. Of the remaining two cents, one cent would continue to be allocated to mass transit assistance, and the revenues from the other cent gasoline tax would be distributed to the states as an unrestricted block grant on the basis of per capita mileage.

While less than ideal in some respects, circumstances may make such a "turnback" of federal programs to the states the preferred solution to insure that the transportation needs of the nation are met in an efficient and timely manner.

THE KEY: EFFECTIVE COMMUNICATION

Perhaps the single factor of greatest importance in meeting the transportation infrastructure needs of rural America is effective communication. Effective communication is the key underlying factor in achieving transportation excellence. This is true because transportation professionals don't live in a vacuum. Others need to become involved before action can take place. I believe that transportation professionals have a responsibility to communicate their knowledge and expertise to decision makers and to the public. They also have a responsibility to listen—and to translate public concerns and priorities into planning and engineering decisions.

There are several messages that transportation professionals, such as myself, need to communicate. The first message should be that we are here to serve. This includes serving the public, business, interest groups, and others. Secondly, we must emphasize that in order to serve, we must address those transportation related concerns and issues which our constituents may have. We must also make it clear that, as transportation professionals, our primary mission is to provide excellence in transportation. And finally, we must emphasize that we need the resources to carry out our mission.

RURAL INFRASTRUCTURE: ASSESSING NEEDS AND DEVELOPING APPROPRIATE POLICY RESPONSES

(By Patrick J. Sullivan) *

INTRODUCTION

Public infrastructure—roads and bridges, water and sewer lines, schools, hospitals, jails, recreational parks, and other structures—is an essential component of a community's standard of living and its economic growth potential. An adequate level and mix of public facilities helps alleviate some of a community's basic needs and serves as an input to the production processes of private sector employers. Several years ago, alarms were raised about the deteriorating condition of the Nation's public infrastructure, with dire consequences predicted if steps were not taken to reverse infrastructure investment trends. While the consequences were not dramatic enough to keep public works on the front page of our newspapers for long, infrastructure remains a serious concern among public officials, developers, and the taxpaying public.

In recent years, concerns have shifted away from determining the overall size of our "infrastructure investment shortfall" toward developing ways to insure that our limited public resources are used to further economic growth and wellbeing. What can government do to encourage private sector growth while maintaining safety and environmental standards? Who should be responsible for building and maintaining "public" infrastructure? How best can infrastructure investment be financed in an era of Federal retrenchment and modest economic growth? These types of questions address the infrastructure problems on a somewhat more practical level than was common at the beginning of the decade. This paper will address some of these issues with a particular focus on rural infrastructure investment decisionmaking.

We begin with a brief consideration of infrastructure needs in rural America—what does "need" mean, how should it be measured, and what is currently known about the existence and condition of rural public facilities? We then present a framework for developing appropriate policy responses to rural infrastructure problems within an intergovernmental system. Based on this framework, it is argued that Federal, State, and local government policies which address the causes of public facility shortfalls should replace policies which merely treat the symptoms. In general terms, some options for addressing problems with planning, build-

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ing, maintaining, and financing public works are described for each level of government.

INFRASTRUCTURE NEEDS IN RURAL AMERICA

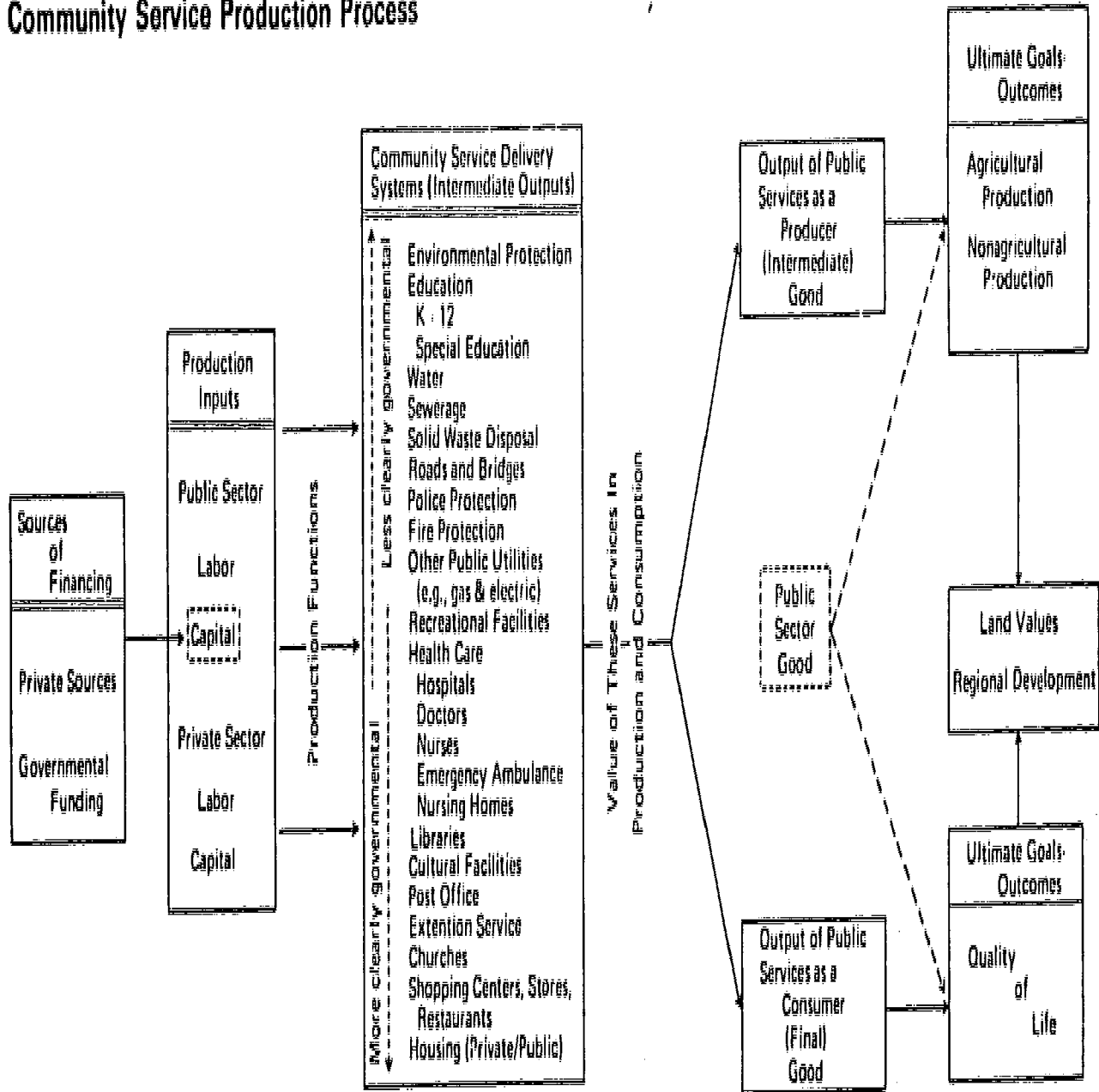
The term "infrastructure needs" is not well defined in either the literature or the public debate over public works investment levels. To some, need is synonymous with desire, so infrastructure needs assessments are viewed as government wish-lists, completely removed from budget constraints and devoid of benefit and cost considerations. To others, need is synonymous with demand, so infrastructure needs are restricted to only those projects able to acquire funding. Depending on how they are measured, estimates of unmet needs can be very high or can approach zero [7].¹ To be helpful, the concept of "infrastructure needs" should be examined within the context of infrastructure's role in meeting society's demands in an economically efficient manner.

Infrastructure is an integral part of the public service production process. Stocker developed a simple diagram portraying public infrastructure as one of the inputs needed to produce goods and services demanded by rural consumers and producers [14]. Figure 1 depicts Stocker's view of the community service production process. On the right hand side of the diagram are listed the presumed economic goals of government activity—improving the quality of life and furthering economic productivity. Society attempts to meet these goals through a combination of publicly and privately produced goods and services. Implied in the diagram are two facts often overlooked in infrastructure needs assessments. First, while governments tend to have primary responsibility for providing certain goods and services, society also uses private sector alternatives to most of these "governmental" services.² Thus, a service that is provided by a governmental body in one community may be a private sector responsibility in other communities. Second, infrastructure is but one input into the public service product process; labor, managerial talent, and other inputs also determine the quantity and quality of public services.

¹ Italicized numbers in brackets refer to items listed in the references section.

² Governmental involvement in the provision of goods and services is often viewed as desirable when externalities are involved in the production or consumption of the product, when the product is considered a "merit" good, when it has "public" good properties (i.e. provision benefits all in a nonexcludable and nonrival way), or when it can be most efficiently produced by a monopoly.

Figure 1
Community Service Production Process



Source: Stocker, Frederick D. Research Needs for Rural Public Services, ERS Staff Report No. AGES840822. Washington, D.C.: U.S. Department of Agriculture, Economic Research Service, 1985, p. 6.

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The adequacy of rural infrastructure is best judged by the quantity and quality of public services they help produce relative to societal demand for these services, rather than by the capacity or physical condition of the facility per se. Shortfalls in the capital stock are determined by the least costly combination of additional capital, labor, and other inputs needed to produce the desired amount and quality of public services. This perspective recognizes the fact that different communities not only demand different types of services from government, but may use different amounts and types of capital facilities to produce their public services. The need to account for demand considerations, variable input production processes, and the costs and benefits of infrastructure projects places a considerable data collection and analysis burden on those wishing to measure the adequacy of the stock of public capital. For this reason, virtually all of the studies purporting to measure national infrastructure investment shortfalls have been faulted on methodological grounds.

Absent reliable estimates on the extent of infrastructure needs across communities, what can be surmised about public facilities needs in rural America? Several years ago the U.S. Department of Agriculture attempted to inventory and assess the condition of select types of public facilities serving a sample of rural communities. The National Rural Community Facilities Assessment Study (NRCFAS) collected and analyzed data on the fire protection facilities, public water systems, hospitals, and other public structures serving a representative sample of rural communities.³ The general conclusion drawn from the NRCFAS is that most rural Americans have access to at least some of the services produced by these types of public facilities. Virtually all rural cities with populations of 2,500 or more, and a majority of smaller cities as well, had access to each type of public facility studied. Nonetheless, the range and quality of service tended to be directly related with population size—larger rural cities were “better” served than were smaller rural communities. Many more gaps in the availability of public facilities were found for open country areas and for unincorporated communities [12].

By themselves the NRCFAS results neither prove nor disprove the existence of a rural infrastructure problem. As we have already alluded to, there is not always sufficient economic justification to build new facilities where none currently exist. Nonetheless, the NRCFAS results, when coupled with rural demographic trends, suggest at least the potential for unmet infrastructure needs for some rural communities. During the 1970's population expansion was especially rapid in small rural cities and in unincorporated areas—precisely those the NRCFAS found most lacking in public facilities. Since those communities often lack the organizational structure to deal with major capital projects, it seems likely that the pressures of growth may have resulted in overburdened facilities in many communities [17].

Of course, the presence or absence of a facility is not the only measure of the adequacy of rural infrastructure. The condition of

³ For a description of the approach adopted for the NRCFAS, see [11]. Study results are reported in [12 and 13].

existing facilities, and their deterioration, are major concerns as well. The NRCFAS collected a limited amount of information regarding the physical condition and investment plans of the rural facilities inventoried. In 1980, some 18,500 rural communities had insufficient fire protection coverage (lacked complete hydrant coverage and 3,000 gallon tank truck capacity), indicating a potential need for additional capital investments. The majority of these were unincorporated communities [13]. The NRCFAS also found that 56 percent of rural public water systems lacked an emergency water supply, that 26 percent were operating above their safe withdrawal rate, and that 47 percent were planning major capital improvements. Responses indicated that these facility needs were experienced by water systems throughout the community size spectrum.⁴ Thus, there appear to be infrastructure needs among rural service providers; whether they pose serious problems for rural communities cannot be ascertained from the information currently available.

Being a one-time survey, the NRCFAS did not provide information on the extent to which the condition of existing facilities has worsened. Evidence from an Urban Institute study of infrastructure systems suggests that municipal expenditures for maintenance and repair were not sufficient to prevent deterioration in most types of infrastructure during the 1970's [9]. Although widespread, the problem was judged to have reached serious proportions in only a limited number of fiscally distressed cities [6]. While the Urban Institute's study did not include rural communities, fiscal stress is not limited to large cities. Reeder found that small, isolated, rural communities may have experienced fiscal pressures equal to those afflicting the largest urban centers during the 1970's [10]. More recently, the farm financial crisis and problems in the oil and gas industry have had a significant impact on State and local government budgets [4]. It seems likely that rural public officials facing tightening budgets, like their urban counterparts of the seventies, may pursue a strategy of deferring maintenance on their capital stock to free-up funds for more immediate problems. Such a strategy, if followed for too long, invariably leads to a marked deterioration in the physical condition and productivity of public facilities. This scenario suggests that the public capital stock may be undergoing serious deterioration in some rural communities. Nonetheless, it should be emphasized that there is no statistically reliable evidence indicating that this condition is widespread.

In summary, determining infrastructure needs, even within rural communities with their less complicated infrastructure systems, is not a straightforward task. Reliable evidence on the extent and seriousness of rural infrastructure problems simply does not exist. However, there is convincing circumstantial evidence which suggests that serious problems may plague some rural communities, and given the number of rural governments facing financial problems these days, infrastructure problems may be widespread in rural America.

⁴ Based on unpublished tables produced by the Economic Research Service, U.S. Department of Agriculture.

POLICY RESPONSE WITHIN AN INTERGOVERNMENTAL FRAMEWORK

If the circumstantial evidence is correct in suggesting that rural infrastructure problems are widespread, who has responsibility for alleviating these problems? Unfortunately, there is no quick and easy answer to this question. Supporting an infrastructure system is a multifaceted task. The process of creating and using any capital facility involves the following steps, at a minimum:

- Evaluating capital facility needs;
- Planning the type and location of the facility;
- Designing the facility;
- Budgeting for facility lifecycle expenses;
- Constructing the facility;
- Operating it for the provision of services; and,
- Maintaining and repairing it to extend its useful life.

The precision with which each step is carried out determines the overall success of a locality's infrastructure program. Poor performance at any step can reduce overall facility productivity and cause perceived or actual facility shortfalls. Attempts to solve rural infrastructure problems should concentrate on their underlying causes.

While unmet infrastructure needs are often blamed on a lack of financial resources, the real problem may be a lack of appropriate technology or managerial and decisionmaking skills and practices. For rural communities in particular, the lack of small-scale technological solutions to infrastructure problems can needlessly add to construction, operation and maintenance costs [23]. But even when appropriate technologies exist, local government officials may find them difficult to tap. Intergovernmental grant requirements and even engineering rules of thumb tend to restrict decisions to a small number of technologies—all too often, those wholly inappropriate for smaller communities.⁵

In addition, the small size and relative isolation of many rural governments affects their ability to effectively manage complex infrastructure systems. Many rural governments have few, if any, full-time employees; they find it difficult to attract and hold skilled personnel; and, they seldom have procedures for systematically evaluating their capital facility needs, scheduling repairs and replacement, or budgeting for facility costs over their useful lives [3]. As a result, many rural governments (and urban governments as well) fail to devote the sustained attention infrastructure systems require if they are to be efficiently operated and adequately maintained. Resulting shortfalls in service and facility deterioration may be due less to tight local government budgets than to the lack of good managerial practices.

Depending upon the cause of the problem and the type of facility, an intergovernmental response may be called for, with Federal and/or State governments assisting or preempting local governments' actions. The Federal and State governments have a legitimate role to play in assisting local governments with their infrastructure needs. Federal and/or State assistance may be warranted

⁵ Even when rural officials are not legally prohibited from adopting certain technologies, the fear of litigation discourages local officials, consultants, and engineers from adopting technologies which do not meet Federal, State or even professional standards.

when activities undertaken by one jurisdiction substantially benefit (or harm) the citizens of other jurisdictions (i.e. when externalities exist) or when widespread market failures affect the ability of local governments to provide a minimally acceptable level of public services. For example, economic justification can be made for some level of intergovernmental assistance in the treatment of wastewater because of the benefits enjoyed by downstream communities. Likewise, the presumed failure of private capital markets to adequately meet the capital needs of rural communities has been used to justify Federal and State credit programs.

Nationwide or statewide standards for locally provided services (e.g., for merit goods) also require some degree of Federal or State government involvement in local decisionmaking, although for these cases involvement is more likely to be in the form of mandates than assistance. In addition, other rationales for Federal or State government involvement in local government finance exist. A desire to reduce interjurisdictional disparities in public services and economic growth may warrant Federal or State involvement to counteract the efficient operation of private sector markets. An argument can also be made for intergovernmental assistance to cover some portion of the cost various Federal and State mandates, regulations, and restrictions impose on local jurisdictions.

Whether intergovernmental assistance should be in the form of financial assistance, technical assistance, research and development programs, information clearinghouse tasks, or through some other form depends, to a great extent, on the causes of rural infrastructure problems. If public facilities are allowed to deteriorate because of poorly designed maintenance schedules, then intergovernmental construction grant programs would not be an efficient policy response. Technical assistance and information dissemination could more directly address planning and management-related infrastructure problems. Research and development programs could be useful in addressing design-related problems with rural public facilities. While general financial assistance and categorical construction grants remain viable policy options for alleviating certain types of infrastructure problems, they are not the only vehicles Federal and State governments should use.

Federal response to rural infrastructure problems

The Federal Government has been reducing its role in local infrastructure financing for several years [16]. However, recent Congressional activity suggests that the Federal Government may be increasing its influence over certain types of local government infrastructure. Federal policies mandating the State and local government sector to monitor and correct environmental hazards through clean water, groundwater, solid waste disposal, and asbestos legislation have the potential for greatly affecting local public works investment requirements. While these trends are cause for alarm among local government officials, they are not necessarily inconsistent with each other.

Economically efficient decisions tend to result when decision-makers compare project costs with project benefits. Looked at in this light, the Federal contribution (direct and indirect) to local infrastructure investment should be in proportion to the national

benefits of local infrastructure projects. For most types of infrastructure, such a rule implies a fairly high percentage of State and local government funding. Nonetheless, there are clearly circumstances when suboptimal decisions will be made in the absence of Federal involvement. Either because local financial resources are inadequate, or because externalities prevent local jurisdictions from charging appropriate fees to those benefiting from infrastructure, the nationally desired level of public facilities may not be provided. Thus, Federal aid should be allocated toward meeting nationally desired investment needs unlikely to be filled by State and local governments on their own. Since spillover effects are difficult to quantify, and since a considerable amount of game playing could be expected if the Federal Government attempted to fund differences between local demand and national demand for public services, a pure economic approach to meet national infrastructure goals would be difficult to administer. One practical approach to Federal intervention would be for Federal financial assistance to be targetted to those communities most in need of financial assistance, and for Federal mandates to force more financially sound communities to provide the minimum amount of governmental services deemed desirable.⁶ In response to record high Federal deficits, this appears to be the approach currently being adopted by the Federal Government.

While we tend to think of intergovernmental assistance in terms of grant and loan programs, the Federal Government has other important infrastructure-related roles to play. Federal efforts aiding in the collection and dissemination of information, research and development, and the improvement of rural government management capacity may, dollar-for-dollar, benefit rural America more in the long run than intergovernmental grant programs. Because of the externalities involved, the Federal Government should logically support efforts to improve the information base available for rural decisionmakers, and support efforts to develop, test, and apply new technological solutions to infrastructure problems.

Sound decisions about capital investments require good information about both needs and alternatives. Not only is accurate and timely data needed on the condition of infrastructure and on factors which affect the demand for public services (demographic and socioeconomic data), but improved knowledge about the processes for producing public services is also important. Frequently, available information is neither reliable nor appropriate for public decisionmaking. Specific information needs differ considerably from one level of government to another. The Federal Government, through its data collection activities, cannot and should not attempt to meet all of the Nation's infrastructure-related information needs. However, based on its data collection program, the Federal Government can assist State and local information gathering efforts by defining concepts and developing methods for measuring

⁶ In a mobile society. National goals may dictate that local decisions be overridden when the result in public services below some national standard. It can be argued that nonlocal citizens have the right to expect reasonably safe highways, clean air and water, and adequate health facilities anywhere they choose to go in the United States.

them, and by providing small-area demographic and socioeconomic data on a regular basis.

In addition to accurate and timely information, policymakers need knowledge about the important components of public facilities, the factors that affect them, and their interrelationships with other variables. Through its research and information clearing-house activities, the Federal Government has an important role to play in promoting a better understanding of the infrastructure problem, the causes of growth and decline in demand for capital facilities, and the ability of public authorities at all levels to respond to these changes.⁷ By developing improved methods of measuring important concepts, such as the external costs and benefits of public services, Federally-funded research can improve the ability of State and local governments to gather data and apply it effectively to public decisionmaking [14].

A second, somewhat related area where the Federal Government can make a much-needed impact is on the development and adoption of new infrastructure-related technologies, particularly those best suited for small governments. Here again, the significant spillover benefits associated with the development, testing, and adoption of new technologies calls for some level of Federal involvement. The private sector is likely to be particularly reluctant to develop technologies appropriate for smaller producers or undertake speculative long-range research and development projects because of the limited profit potential associated with such activities. Governmental support may be needed to encourage a concerted public/private research and development effort aimed at producing short-term and longer-term technological advances which could reduce the cost of providing infrastructure-intensive services [7].

Even when technological solutions exist, they provide little relief if legal, regulatory, or other barriers exist which discourage their adoption. The National Council on Public Works Improvement claims that safety concerns are a major impediment to the introduction of new technologies because of the potential risk of failure and the ensuing liability [7]. Federal efforts to reduce the risk of adopting new technologies could further innovation by local government officials. Some combination of Federal testing and evaluation of new technologies, tort reform, or liability insurance reform may be needed to spread the risk of technological advances more evenly. Federal efforts to develop meaningful safety standards for rural public services could also reduce the incentive for local officials and engineers to "play it safe" by adopting stringent facility requirements inappropriate for the demands placed on rural infrastructure systems.

State response to rural infrastructure problems

Since local government is a creation of the State, subject to revenue raising restrictions and a host of mandated procedures and services, a direct financial role in rural infrastructure development may be desirable. The varied relationships between the 50 State governments and their local governments has lead to a host of

⁷ Recognizing this Federal role, Congress created the National Council on Public Works Improvement in 1984 to examine a wide range of public infrastructure issues.

State assistance programs. These include direct grants and loans, indirect financial assistance (wherein the State acts as a financial intermediary for its local government borrowers), and nonfinancial assistance. In addition, States can also assist local governments finance infrastructure simply by removing revenue raising restrictions or by helping to improve the efficiency of local revenue raising measures [16]. As the Federal Government continues to alter its role in local government financial matters, the States should reassess their responsibilities in this area.

The State government can provide rural infrastructure either directly, through State built and operated facilities, or indirectly through local governments. Table 1 provides some insight into how each State chooses to divide the task of providing infrastructure between the two levels of government. It also indicates, in general terms, how important State intergovernmental assistance is to local budgets. While the extent to which these grant funds are used for infrastructure remains unknown, virtually every State provides grants which help local jurisdictions build, rehabilitate, or maintain public facilities [21].

As with Federal aid, State intergovernmental assistance will encourage economically efficient decisions if the size of the grant is determined by the Statewide benefits from local government activities. However, the nature of the state-local relationship may dictate that more weight be given to interjurisdictional inequities in revenue raising capacity or economic growth potential than is evident among Federal grant programs. Whatever the goal, care should be taken to insure that it is local government service that is being subsidized, not local government construction.⁸

TABLE 1.—STATE AND LOCAL GOVERNMENT INFRASTRUCTURE INVESTMENT IN FISCAL YEAR 1984, AND STATE FINANCIAL ASSISTANCE TO RURAL GOVERNMENTS IN FISCAL YEAR 1982

State	Capital outlays		Per capita nonmetro State aid, 1982			Share of local revenues percent
	Total State and local millions	State share (percent)	Local education	Public welfare	Other uses	
United States.....	\$58,139	41.4	\$277.72	\$27.33	\$80.66	38.1
Alabama.....	995	54.5	259.00	10.40	52.42	41.5
Alaska.....	1,038	35.7	904.12	755.60	499.25	46.5
Arizona.....	1,078	27.2	341.63	31.99	128.99	41.1
Arkansas.....	326	53.0	233.04	6.39	55.42	41.8
California.....	5,253	30.1	434.66	75.34	251.00	46.4
Colorado.....	972	30.6	278.29	35.30	161.58	29.6
Connecticut.....	559	44.6	153.99	24.32	36.02	27.6
Delaware.....	194	67.0	382.30	19.45	5.35	57.2
District of Columbia.....	177	0.0	0.00	0.00	0.00	0.00
Florida.....	3,109	35.3	324.52	16.12	65.18	38.3
Georgia.....	1,298	47.4	260.18	6.19	42.71	34.3
Hawaii.....	377	78.4	0.00	17.46	64.52	12.2
Idaho.....	265	59.1	277.52	10.93	62.38	37.6
Illinois.....	2,668	46.6	214.00	27.46	54.99	31.2

⁸ As Chicoine and Walzer point out, even distribution formulae based on measures of service can result in inefficient investment decisions. Secondary highway assistance based on the number of highway miles maintained can encourage local officials to continue maintaining roads even when the costs outweigh the benefits. [7].

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TABLE 1.—STATE AND LOCAL GOVERNMENT INFRASTRUCTURE INVESTMENT IN FISCAL YEAR 1984,
AND STATE FINANCIAL ASSISTANCE TO RURAL GOVERNMENTS IN FISCAL YEAR 1982—Continued

State	Capital outlays		Per capita nonmetro State aid, 1982			Share of local revenues percent
	Total State and local millions	State share (percent)	Local education	Public welfare	Other uses	
Indiana.....	1,159	44.8	254.51	26.51	67.18	37.1
Iowa.....	868	49.7	273.30	40.49	86.15	33.4
Kansas.....	649	39.4	218.97	12.88	31.68	22.3
Kentucky.....	931	74.5	277.72	29.04	36.38	58.8
Louisiana.....	1,656	57.3	371.24	16.43	93.00	41.9
Maine.....	213	44.5	227.14	15.47	23.82	32.4
Maryland.....	1,457	41.2	247.38	45.70	48.50	36.4
Massachusetts.....	1,012	43.0	137.47	18.58	78.11	20.3
Michigan.....	1,539	43.9	127.43	17.06	158.77	28.1
Minnesota.....	1,309	34.9	409.49	116.90	151.55	48.6
Mississippi.....	464	57.4	276.14	21.06	97.18	43.2
Missouri.....	977	45.5	206.00	6.77	21.28	32.3
Montana.....	337	57.5	233.85	26.77	29.37	23.9
Nebraska.....	457	49.5	129.45	35.19	80.15	22.1
Nevada.....	387	30.3	428.47	25.27	237.80	47.2
New Hampshire.....	183	45.2	45.75	28.87	76.68	16.0
New Jersey.....	1,537	37.1	195.36	41.26	130.89	28.2
New Mexico.....	687	54.2	495.93	30.06	119.74	59.5
New York.....	4,814	31.1	374.68	31.76	209.69	43.4
North Carolina.....	891	50.2	351.38	12.35	53.03	50.1
North Dakota.....	259	55.5	385.40	32.38	95.49	45.0
Ohio.....	2,257	53.9	218.35	16.02	103.24	38.0
Oklahoma.....	951	35.2	347.24	7.84	87.61	41.5
Oregon.....	649	43.2	321.15	22.15	102.33	34.5
Pennsylvania.....	2,040	36.0	254.85	18.02	49.56	42.2
Rhode Island.....	174	71.0	215.54	4.45	24.64	27.1
South Carolina.....	535	47.4	281.06	9.25	32.92	40.5
South Dakota.....	227	57.0	180.50	29.86	16.85	24.3
Tennessee.....	1,050	49.2	173.05	7.89	61.31	32.2
Texas.....	4,812	33.3	290.15	3.38	4.39	29.9
Utah.....	561	50.0	332.13	25.32	32.56	32.9
Vermont.....	110	59.4	130.48	8.16	23.37	21.4
Virginia.....	1,060	53.4	237.20	33.38	34.47	45.8
Washington.....	1,515	40.4	419.88	53.29	104.92	43.3
West Virginia.....	401	68.1	345.82	8.59	17.04	48.0
Wisconsin.....	1,213	29.0	245.48	44.37	211.24	41.3
Wyoming.....	488	46.2	343.82	114.84	197.18	26.3

Source: U.S. Bureau of the Census [19, 20, and 22].

In addition to intergovernmental grant programs, most States also offer loans or other programs to help local jurisdictions borrow money to finance their infrastructure investments. Direct loans, State guarantees, State bond banks and revolving loans are all used to funnel loanable funds to local governments. These programs are particularly helpful to small rural governments which tend to be infrequent borrowers. Whether operating through the municipal bond market, or in place of it, these nongrant programs can help rural governments overcome barriers to financial markets and obtain financing at affordable rates. If availability of credit is a problem for rural borrowers, indirect State assistance can be

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helpful.⁹ Nonetheless, it should be noted that there are limits to the savings that can be realistically expected—limits that are often much lower than program proponents believe [2].

As with the Federal Government, one of the most potentially beneficial roles State governments can play in alleviating rural infrastructure problems is to provide nonfinancial assistance to rural governments. States have long been involved in the supervision of local fiscal affairs and in the provision of technical assistance to local government officials. In the capital finance arena, State supervisory activities have both positive and negative impacts. In the infrastructure management area, the potential exists for significant gains to be made through State technical assistance programs.¹⁰

State governments have a legitimate concern for the fiscal well being of their local governments. Not only must the State take steps to insure that its citizens are not victimized by their local officials, but it also has the responsibility of minimizing the effect one government's fiscal crisis invariably has on the other jurisdictions in the State. States typically require local governments to follow specific accounting practices and to report budget figures to one or more State agencies on a periodic basis. The vast majority of States also place restrictions on the taxing and borrowing authority given to local governments. While this oversight and supervisory role cannot safely be ignored by the State, steps can and should be taken to allow local governments the maximum degree of discretionary authority that is consistent with governmental accountability and soundness. State regulations which foster sound management practices (through the imposition of generally accepted accounting practices, for example), rather than imposing arbitrary limitations and prohibitions on revenues, can be an important ingredient in the State's role in financing local infrastructure.

In addition to their supervisory responsibilities, State governments are ideally situated to provide technical assistance on a whole range of topics that affect local infrastructure decisions. Rural governments, with their limited staffs, lack of easy access to urban-based experts, and limited financial resources, are often in need of State-provided advice on financial management, debt insurance, facility design specifications, and other facility-related topics. Because these topics are often unique to a State's legal structure, they are best covered at the State level. Management training programs, licensing and certification programs, debt validation programs, and technical information on facility design, alternative financing techniques, and maintenance schedules can go a long way towards solving management-based problems with our rural infrastructure.

⁹ While it is generally believed that small, rural governments have a more difficult time issuing municipal bonds, there remains a noticeable lack of statistical evidence supporting this view. Based on 1977 municipal bond sales data, Sullivan found that rural governments were able to borrow at competitive rates [15]. Palumbo and Sacks also found rural governments were able to borrow at rates similar to highly urban governments in 1982 [8].

¹⁰ One of the recommendations of a recent Council of State Governments study was that States should provide technical support and management assistance for small and rural community officials to use in their capital improvement efforts. [5].

Local response to rural infrastructure problems

As has been argued previously, local governments have a significant, and in most cases preeminent role to play in financing, operating, and maintaining public infrastructure. While local funding of major capital projects can severely strain a community's resources, it is often the most equitable and efficient means of financing the construction and rehabilitation of infrastructure. This is particularly true when there are few interjurisdictional benefits associated with the project.

A thorough discussion of the financing options available to local governments attempting to fill their infrastructure needs is beyond the scope of this paper.¹¹ Nonetheless, it should be noted that the efficiency of investment decisions is also affected by the methods used to finance the *local* share of infrastructure projects. Here too, those benefiting from a project should be asked to bear the costs. By relying more on user fees, special allocation bonds, and developer fees, and less on general taxes, local officials may better judge what their constituents want when faced with the price of providing additional public capital [18]. By relying more on bond financing and less pay-as-you-go financing, project payments can be stretched out over the useful life of the facility. Not only does this greatly reduce the need for year-to-year fluctuations in current revenue collections, but in a world of imperfect tax capitalization, it may improve the balance between the benefits and costs of capital intensive services.

While efficiency should be a major concern of local officials, equity considerations also determine the preferred method of financing the provision of public services. Local government reliance on user fees to finance both operating and capital expenses has been increasing over the past two decades. Taxpayer resistance to rate increases, concern out government wastes, State imposed tax and debt limits, and improved management capabilities have all made user charges and revenue bonds the preferred alternative for raising revenues. Nonetheless, when local governments are in the business of providing essential services, care should be taken to insure that low-income households have adequate and affordable access to these services.

Economic trends in several regions (particularly the farm belt and those dependent upon every extractive industries), and restrictive State regulations may have placed many rural communities in precarious financial positions. Lacking the resource base, they are often unable to deal with their infrastructure problems without Federal and State financial assistance. All the management capacity in the world cannot prevent the infrastructure systems in many of these communities from undergoing further deterioration in the absence of intergovernmental aid, further depressing economic growth potential. However, for many rural communities, local government officials can take steps to alleviate perceived facility shortfalls. By changing their organizational structures or adopting

¹¹ For a description of the financing alternatives available to local governments, and a discussion of their strengths and weaknesses from the rural official's point of view, see [16].

better capital budgeting and management procedures, better use can be made of scarce governmental resources.

One of the premises of this paper is that management capacity—human and organizational infrastructure—is potentially as important as fiscal capacity in explaining why rural infrastructure problems evolve. Uninformed decisions on what facilities to build, where to place them, and particularly how to maintain them may be the basis of perceived and actual public facility shortfalls. If this premise is correct, then judicious use of special districts and more sophisticated public works planning and budgeting techniques should help reduce rural infrastructure problems.

Researchers have noted that infrastructure maintained by special districts with revenue raising authority is often kept in better condition than infrastructure maintained with general governmental funds. Not only do dedicated funds for public works tend to keep pace with needs better than general funds, but the isolation special districts tend to enjoy from political logrolling may help explain their better track record on building and maintaining infrastructure. Unfortunately, this same isolation is the major drawback of the special district form of government. A segmented approach to providing infrastructure doesn't easily allow rational comparisons between infrastructure investments. Thus, by protecting some types of infrastructure, the political system may prevent a more balanced approach toward solving overall infrastructure problems.

Preferable would be a capital budgeting and decisionmaking program that systematically examines the costs and benefits of alternative public works projects, taking the maintenance and operating costs of public facilities over their planned lives into account. A well designed capital improvement program (CIP) which is part of the general budgeting process should be able to capture some of the benefits of special districts without suffering the drawbacks.¹² By comparing life-cycle costs, identifying potential revenue sources, and estimating project benefits, a CIP can help decisionmakers make a well informed decision now, and plan for predictable expenses in the future. With the help of Federal- and State-sponsored research, computer-based CIP models could be tailored to the needs of rural governments.

Finally, rural officials experiencing infrastructure problems because of continuing growth should consider growth management techniques to help reduce increasing demands on infrastructure. Growth management need not imply building moratoria or even reduced rates of economic growth. By requiring developers to supply their own infrastructure systems (or pay for the rights to use existing systems), local governments can often accommodate the increased service demands that accompany growth. But there are also innovative ways of altering demand which do not require additions to the capital stock. The National Council on Public Works Improvement reports that Pleasanton, California was able to reduce highway congestion by requiring (with the active coopera-

¹² Of course, there are other reasons for forming special districts. The benefits of many types of infrastructure systems do not fall neatly within existing governmental boundaries. Special districts, with their more fluid boundaries, can better match infrastructure benefactors with revenue contributors, yielding more efficient investment decisions.

tion of the business community) employers of 50 or more workers to reduce the number of vehicles their employees used each day during peak traffic hours [7]. An information clearinghouse at the Federal or State level could encourage rural governments to adopt these types of innovative approaches to reduce their infrastructure investment needs.

CONCLUSION

Determining if an infrastructure problem exists and measuring its severity involves careful analysis, which represents only the first step in devising an appropriate policy response. Where infrastructure problems are judged to be severe, policymakers must also know the underlying causes of the problem if cost effective solutions are to be developed and initiated. The circumstances contributing to an inadequate public capital stock include: inadequate revenues, inappropriate financing techniques, inadequate facility management, and a lack of information and knowledge on the condition of the infrastructure stock, the determinants of demand, and the technological options available for meeting infrastructure demand.

Each level of government has a role to play in alleviating rural infrastructure problems. Given the size of the Federal deficit, direct financial assistance from the Federal Government is not likely to increase for the foreseeable future. However, the effectiveness of Federal financial assistance could be heightened by targeting aid toward communities with revenue bases insufficient to meet minimally acceptable standards of public service delivery. Furthermore, there are numerous steps the Federal Government can take to increase the flow of information to rural decision-makers and reduce barriers to the adoption of innovative technological solutions to the rural infrastructure problem.

State governments, because of their special relationship with their local governments, should normally be more involved in the local public works decisionmaking process than would the Federal Government. This involvement may be in the form of financial assistance (both direct and indirect), supervision, and technical assistance. If properly designed, each of these State responsibilities can help rural government officials recognize and correct their local infrastructure problems. For their part, local government officials must accept the lion's share of the financial responsibility for most infrastructure investments. While this can severely strain local budgets (and may overwhelm the revenue bases of many communities), in general, local funding should encourage more economically efficient decisions. Better use of capital budgeting and management techniques could also improve the ability of local governments to effectively deal with their infrastructure problems within existing budget constraints.

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RURAL INFRASTRUCTURE REQUIREMENTS AND RESPONSES IN TRANSITION

(By Carol Shapiro Star, Senior Policy Analyst and Nancy Rutledge, Executive
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INTRODUCTION

Rural America is in transition. Major shifts in demographics and farm and non-farm economies are affecting, among other things, the demand for basic public facilities and services such as clean water and safe roads and bridges in rural areas. These shifts are also affecting the capacity of rural governments to finance such services. The ability of rural governments to comprehend the nature and magnitude of the changing requirements for public infrastructure services—and adapt to them—will have far-reaching consequences for the quality of life and the economic viability of these areas.

Indeed, the ability of rural governments to react effectively to changing demands and fiscal conditions has emerged as a central issue not only to the future economic viability of these areas, but to the well-being of the nation as a whole. Major shifts in federal funding for infrastructure have descended upon rural areas at a time when state and local revenues in many areas are also declining. Rural governments, therefore, will need to be especially well-informed about options available to meet these challenges.

The purpose of this paper is to explore alternative strategies to meeting the infrastructure needs of rural areas. The paper focuses primarily on non-financial strategies and draws on practices that have recently come to the attention of the National Council on Public Works Improvement and appear to have merit.¹ It is not an exhaustive survey. It is simply intended to widen the discussion about alternative strategies to rural public works improvement through examples.

Rural infrastructure requirements in transition

Today's rural farm population, at approximately 5.7 million, is a fraction of the 30 million it was in the 1940's.² Yet, America's farmlands are more productive than ever, requiring, as before, good farms to market transportation networks. The rural *non-farm* population, by comparison, has more than doubled during the same period. At approximately 56 million today, the growth in *non-farm* population has brought new and different demands for public facilities.

¹ See "Financial Resources for Infrastructure Investment" by Patrick J. Sullivan, Economic Research Service, U.S. Department of Agriculture, 1986, for a thorough discussion of financial strategies.

² Studies prepared for the Subcommittee on Agriculture and Transportation of the Joint Economic Committee, Congress of the United States. "New Dimensions in Rural Policy: Building Upon Our Heritage," June 5, 1986, p. 42.

ties in geographic areas that were previously dominated by agricultural activities.

In spite of this large growth in rural *non-farm* population, America has steadily lost rural population relative to the nation as a whole. America's rural population has dropped from more than 48 percent of the population to 26 percent since the 1920's.³ Yet, there is wide regional diversity behind these national averages. Particularly since 1970, hundreds of rural counties, many in the western part of the United States, but elsewhere as well, have increased in population.⁴ This change was driven by the trend toward living in smaller towns beyond the suburban fringe of cities, and a growth in retirement communities. These rural communities often face a rapid escalation of demand for new and costly public infrastructure services which exceed the local governments' capacity to bring new facilities on line and to manage them properly.

Rapidly expanding rural communities face different problems than communities dependent on declining industries, such as farming, timber and mining. Those communities, with declining population, are searching for ways to maintain their existing capital stock with fewer resources. Those hardest hit by the recent farm crisis have experienced declines in their revenues, aggravated by reduced federal aid for public infrastructure, further reducing their capacity to maintain an adequate level of public infrastructure services.

Many rural counties also face costly new demands for public facilities brought about by changes in technology which have rendered existing facilities obsolete or unsafe. For example, new, heavier trucks and farm equipment necessitate the construction of wider, more durable bridges for rural roadways. These problems affect growing and declining communities alike.

In sum, the demands for basic public infrastructure services such as roads, bridges, drinking water, wastewater collection and wastewater treatment are changing as a result of population shifts, changing tastes, and new requirements imposed by changes in technology. Further, the ability of governments to meet these demands has also changed, varying considerably by region and county. This suggests that policy-makers must take into account large local differences, including differences between growing and declining communities, when remedial approaches to rural infrastructure problems are investigated.

More than ever before, there is a need to define community goals that will provide a level and quality of infrastructure services to suit community needs. Given declining resources, communities may increasingly be forced to choose between funding one public facility, or one service over another. It is conceivable that rural governments, like all governments with limited resources, must choose to cut back services in some areas to improve those deemed more crucial to the economic well-being of the community. These kinds of choices will require a thorough understanding of the communities' *priority investment needs* and the consequences of funding decisions.

³ Ibid., p. 42.

⁴ Ibid., p. 43.

Rural infrastructure problems: Are they unique?

The problems facing rural governments regarding the provision of adequate public capital facilities are similar to the problems facing urban governments. Both confront problems created by public facilities that were put in place 25-50 years ago or more, and are reaching the end of their useful life. Studies conducted by the federal government reveal that rural, as well as urban, roads and bridges are in great need of repair, although rural bridge deficiencies account for the vast majority (90 percent) of all bridge deficiencies in the United States.⁶ Similarly, both urban and rural jurisdictions must contend with the growing problem of capital obsolescence: wastewater treatment facilities ill-equipped to deal with today's pollutants, bridges that are not structurally equipped to safely handle today's heavy trucks, and public facilities that do not provide access to the handicapped, as required by law.

Other similarities between rural and urban areas include the declining fiscal capacity of some jurisdictions, and the high cost of capital construction coupled with more complicated requirements for wastewater treatment and other infrastructure services. Also, the use of outdated management, capital budgeting and record-keeping practices, ill-designed to meet the challenges of the 1980's, have led to prolonged deterioration of capital facilities and a failure to fund capital projects of greatest local importance in urban and rural areas. Similarly, conditions vary greatly from one jurisdiction to another in both urban and rural jurisdictions, making it unwise to target assistance accordingly. For instance, whereas some rural regions have gained population, others have lost. Similarly, some farming regions, such as the Northeast, have prospered recently and other have not. Similar differences occur among urban areas. In sum, solutions, that assist communities in meeting the demand for public infrastructure services must address the challenges faced by growing as well as declining regions and counties; urban and rural alike.

Nonetheless, while rural and urban areas share similar problems, some rural communities may be less able to cope with the changing infrastructure needs. The rapid onset of changes, compounded by the effects of the farm crisis and reductions in federal and state aid, may have put rural areas at a considerable disadvantage. Although the farm crisis is not likely to create a financial disaster for rural governments,⁶ it will produce revenue shortfalls in farm-dependent states and localities.⁷ Large drops in farm income and resulting declines in the value of farmland significantly erode the local tax base in some communities.⁸ Ultimately, local services will need to be cut back or taxes raised.

⁶National Association of Towns and Townships, "Roads and Bridges Falling Down: The Economic Development Implications For Rural America", A Public Policy Seminar, April 25, 1984, p. 6.

⁷Report of the Committee on Governmental Affairs, United States Senate, "Governing the Heartland: Can Rural Governments Survive the Farm Crisis?" July 1986, p. 62.

⁸See ACIR, "The Agricultural Recession: Its Impact on the Finances of State and Local Governments," June 1986.

⁹From 1980-1984, real farm incomes averaged only \$25 billion in 1982 dollars, down nearly 40 percent from the average of the 1970's. ("Governing the Heartland," Op. Cit., p. viii.)

In Minnesota, the impact has already been felt. Taxable valuations for agricultural land have dropped about 25 percent between 1983 and 1985.⁹ Based on a recent Congressional study, revenue shortfalls for eight agriculturally dependent states are, on average, reported to be \$106 per capita. If further drops in land values and cuts in intergovernmental aid occur, per capita shortfalls could exceed \$250 for some areas.¹⁰ There are already numerous accounts in the media of rural counties cutting back on essential public services such as road maintenance, police protection and garbage collection, as local coffers shrink and taxing limits are reached.¹¹

According to a recent United States Senate report, rural communities could probably manage the loss in revenues associated with lower agricultural land values, if that was the only drop in revenue, but they could well be in serious trouble when faced with the combined effects of cutbacks in federal aid programs, the elimination of general revenue sharing and reductions in state aid (due to existing tight budget situations at the state level).¹² Although federal aid, including revenue sharing, comprises a relatively small portion of the local revenue base, between 1980 and 1985, federal aid to state and local governments fell by 25 percent in constant dollars, with rural governments feeling their share of those cuts. Cutbacks in state aid, often the largest source of local revenues, can be anticipated in states heavily impacted by the farm and oil crises, and by other declining land based economies such as timber and mining.

Although general revenue sharing is only a small part of local revenue, its elimination will hurt general purpose governments in agriculturally dependent areas twice as much as those in urban areas.¹³ Revenue sharing comprised, on average, 44.5 percent of all federal aid received by general purpose local governments in farm dependent areas, compared with a national average of 21.8 percent for all general purpose governments.¹⁴ Rural areas, also, have depended heavily on general revenue sharing to support public works. In a recent four state study of rural roads and bridges in the midwest, 83.8 percent of the townships responding to a survey reported using revenue sharing funds for rural roads and bridges, with 84.5 percent of the funds allocated to roads.¹⁵

However, from the standpoint of the provision of infrastructure services, short-term revenue shortfalls caused by unanticipated high rates of property tax delinquencies (or other revenue reductions) are not a major problem if they are temporary. Local governments have often sacrificed maintenance and construction of public works facilities to help ease them through a financial crisis. More troublesome is the possibility that, for some rural communities,

⁹ Ibid. p. ix. (The impact is already apparent in Minnesota, because assessed agricultural land value is based on actual market values as opposed to the land's productive capacity, which is the basis for some states' assessments.)

¹⁰ Ibid.

¹¹ "Rural Counties Struggle to Maintain Services as Economies Falter and Revenue Sharing Ends," *The Wall Street Journal*, November 10, 1986.

¹² "Governing the Heartland," *Op. Cit.*, p. xi.

¹³ Ibid. p. 63.

¹⁴ Ibid. p. 76.

¹⁵ Chicoine, David L. and Norman Walzer, "Financing Rural Roads and Bridges in the Midwest," U.S. Department of Agriculture, Washington, D.C., October 1984.

this represents a fundamental (downward) shift in the size of the tax base which is neither temporary nor accompanied by any decline in the demand for services. More likely, in spite of declining resources, service demands are rising in response to the changing demographics of rural areas (e.g. transportation for rural elderly and increased maintenance and construction costs that rise as capital facilities wear out or become obsolete.)

A few other distinctions also seem to suggest that rural areas may be at a greater disadvantage in dealing with infrastructure problems than their urban counterparts. First, the small size and isolated character of rural governments may make it more difficult for them to obtain (or afford) specialized technical help needed during this period of change. Second, their size may also limit their access to capital markets. Lastly, the impact of recent rail abandonment has transferred traffic from rail to roads. In the rural communities affected, this rail-to-road shift is increasing the wear and tear on roads. In Illinois, the state thought to be hardest hit by rail abandonment, 42 percent of the townships reported increased truck traffic as a result of rail line abandonment. Of those townships, more than 97 percent claimed the effects of increased traffic as either somewhat or very pressing.¹⁶

*Alternative approaches to addressing rural infrastructure problems—
an increasing State role?*

The current federal budget deficit is likely to preclude a major expansion of federal infrastructure programs. In fact, most communities will probably experience a continued real decline in the amount of federal assistance available for public works improvement. Thus, it is likely that state and local governments will figure prominently in the development of remedial strategies for public works improvements.

This section examines several initiatives by states to assist their local governments in the resolution of rural infrastructure problems. It also addresses anticipated problems with expanding state assistance programs.

There is already evidence that the state role is growing in some areas. Initiatives in the areas of innovative technology for wastewater treatment activities, and state-wide financing mechanisms—such as a state lottery in Iowa, and a revolving loan fund in Washington are examples. However, recent aggregate analyses of state aid have *not* shown state assistance for capital projects to have creased to fill the gap left by diminishing federal capital outlays.¹⁷ And, there is no consensus about the financial or technical adequacy of states to rescue local governments faced with an inability to provide needed infrastructure services themselves. Continued reductions in federal aid for public works will, no doubt, encourage rural areas to examine state expenditures in this area.

Two examples of relatively low-cost state initiatives designed to assist their rural governments however, are, noteworthy:

¹⁶ Ibid., p. 152.

¹⁷ Ledebur, Larry, William Hamilton, Deborah Matz and Lori Anderson, "Federal and State Roles in Infrastructure." A paper prepared for the National Council on Public Works Improvement, October 15, 1986.

Pennsylvania Department of Environmental Resources Leak Detection and Water Resources Technical Assistance.--In response to the unmet needs of small, rural jurisdictions to improve the management of their water supply, the Pennsylvania Department of Environmental Resources (DER) established a demonstration technical assistance project in the Susquehanna River Basin (an area that includes more than one-third of the Commonwealth) to provide small, rural water systems with onsite technical assistance in the areas of leak detection, personnel training, water meter management, and rate structure design. Recognizing that many rural water systems are simply too small to afford the technical equipment such as leak detection equipment, or the staff required to properly maintain their systems, the state is offering to actually perform leak detection and other management services on site to assist small, rural water systems in their efforts to supply safe drinking water at reasonable cost.

*North Carolina's Local Government Assistance Program.*¹⁸--This program, although not new, has expanded to meet the state's growing need for financial technical assistance for rural governments in the provision of public works. The program is based on the state's diagnosis in the early 1930's that many of its municipalities did not understand how to use the bond market prudently. The state responded by establishing the Local Government Commission, consisting of the state treasurer, auditor, the secretary of state, the secretary of revenue and five appointees. Today, the Commission has a staff of 22 that offers assistance to municipalities in preparing presentations for rating agencies, issuing financial reports, and training local officials. The Commission also conducts an independent audit of the municipalities annually and maintains and publishes data on the financial condition of local governments.

In addition, the Commission also reviews, approves and markets local bonds. Local governments begin informal discussions with the Commission 18-24 months in advance of the sale. The Commission reviews the proposed bond issue and considers the following questions:

Can the locality sustain the additional taxes needed to support the issue?

Can the bonds be marketed at reasonable rates?

Is the issue sufficient to support the projects?

Is the project necessary or expedient?

When the state ensures that these questions are answered affirmatively, the collateral backing the issue is dramatically improved. After approval, the Commission prepares the official statements, sets sales dates (so that the market is not suddenly confronted with several bond issues in close succession), actively solicits bids, supervises the sale, and prints and delivers the bonds. As a result, the interest costs to the municipality are reduced by 35-100 basis points, a considerable savings to a municipality.

Numerous examples across the country also attest to state government potential for assisting local governments in:

¹⁸ This example is extracted from "Financing Economic Development in the South: Public Infrastructure and Entrepreneurship", paper prepared by Roger J. Vaughan for the Committee on the Future of the South, Atlanta, Georgia, May 1986, pp. 14-15.

Infrastructure financing, through mechanisms such as the Washington state Public Works Trust Fund;
 Assessing state-wide infrastructure needs;
 Stimulating innovation, as evidenced in the implementation of EPA waste water treatment regulations; and
 Facilitating better intergovernmental cooperation through governmental arrangements such as regional authorities, special districts and River Basin Commissions.

States also can be instrumental in improving the capital planning process, stimulating the development of long-range plans (and integrating them into the decision-making process), and improving local management of public works financing and operations through improved state oversight. A recent ACIR report, suggested increased state oversight as a means of identifying local fiscal problems before they reached crisis proportions.¹⁹ Oversight also encourages standardized accounting practices among local governments, a practice that could assist state and local governments in the analysis of intrastate infrastructure conditions. As federal assistance programs for certain capital projects wind down, such as wastewater treatment facilities, and as local governments increasingly attempt to finance these projects themselves or through regular financial markets, there may be a greater need for state oversight and technical expertise.

Factors mitigating the potential State role

The ability of a state to assist local governments may depend on the state's own fiscal health. Although local governments may view state aid as a potential resource during times of fiscal stress, states may be forced to reduce aid to local governments if the states themselves are suffering from financial stress.²⁰ Also, the ability of state aid programs to assist rural governments experiencing fiscal stress may depend upon the extent to which the aid is distributed according to need.²¹ ACIR recently examined state aid systems in ten farm states and found that in North Dakota, Iowa and Minnesota, there was a greater concern about distributing aid to localities based on need than was found in the aid formulas of other states (although the study is quick to point out that results are not conclusive since they did not trace the actual flow of funds).

A related point concerns the ability of state aid programs to effectively target assistance to specific rural infrastructure needs. To date, some "innovative" mechanisms have fallen short of expectations, failing to help those communities for which the assistance was designed. In Pennsylvania, for example, a 1983 bond issue created a \$220 million low interest loan program for small rural communities' water supply needs. The program has had disappointing results; the number of applications and loans issued fell well below what was anticipated. It is suspected that even the heavily subsidized loan rate has not lowered the cost of the improvements to a

¹⁹ ACIR, "The Agricultural Recession: Its Impact on the Finances of State and Local Governments," Op. Cit.

²⁰ Ibid., p. 51.

²¹ Ibid., p. 56. (State aid can also be distributed on the basis of where it was collected, or it can be divided in proportion to local expenditures, assessed values or property tax levies.)

level that small, rural community water systems can afford.²² Similar experiences in reaching targeted populations are reported in programs in Washington and Virginia.

The changing local role

With or without greater state involvement in the provision of public infrastructure, rural governments will need to gain a better understanding of infrastructure conditions for themselves. They will need to identify the most pressing investment needs *and* the community's financial ability and desire to make the improvements. The analysis of the demand for infrastructure services and the assessment of a community's ability to pay for improvements has, and will continue to be, the responsibility of local governments. However, with decreased state or federal assistance, and with greater competition among jurisdictions for more limited state resources, local governments will need to become more expert in defining community needs and devising alternative solutions, including financial strategies, if they are to fill the gap left by declining federal resources. In this regard, valuable lessons can be learned from past mistakes as well as recent model efforts of a few communities.

Many small communities seriously overbuilt wastewater treatment facilities during the 1970's and early 1980's because growth projections were too optimistic or because outside funding was available to cover the construction costs. Little attention was devoted to the future cost of operating an oversized facility. Now saddled with burdensome operating and maintenance costs, these communities struggle to provide effective service at reasonable cost. Such examples should provide ample warning to governments regarding the need to realistically assess community needs, affordability, and life cycle costs, before public facilities are constructed. It also suggests that maintenance costs should be calculated during the initial project design and factored into the community's decision about its ability to provide that service in the future.

Assessing rural infrastructure needs and improving management practices

Many examples of needs assessments and capital investment priority-setting activities exist, but these are mainly drawn from big city experiences. Rural needs assessments are much less frequently performed, in part, because rural governments do not have sufficient staff, resources, technical expertise, or baseline data to conduct a needs assessment. One unusual approach to counter these obstacles is observed in the Pennsylvania Agricultural Access Program.²³ Here, a broad based, grass roots effort was undertaken to (1) identify the roads and bridges in the states that were most critical to agricultural transportation and (2) identify the obstructions on that network. This and several other alternative local approaches to addressing rural infrastructure problems are presented below.

²² Dr. Bill Sharp, Water Resources Center, Pennsylvania State University.

²³ William R. Gillis, The Pennsylvania Agricultural Access Program, The Pennsylvania State University, University Park, Pennsylvania.

Pennsylvania Agricultural Access Program.—With the assistance of the Pennsylvania Department of Transportation (DOT), the Pennsylvania Cooperative Extension Service, local representatives of farm organizations, and township supervisors, a task force was established to identify those rural roadways most critical to the transportation of agricultural products. The task force decided that the most effective—and least costly—way to identify essential rural roads was to draw on the local knowledge of farm and planning organizations in each county. Using the Cooperative Extension Service to facilitate the survey process, a small group, including key representatives from farm and agricultural organizations and unions, and county leaders, was asked to identify and seek consensus on essential rural access roads, key highways and the obstructions on this network. Their analysis was based on criteria developed by the task force.

As a result, nearly, 600 obstructions were identified by the agricultural community, including 489 bridge obstructions of which 312 had weight limit restrictions. Prior to the study, only 88 of the bridge obstructions were included on the state's bridge improvements program. Additional bridges are now being considered either as future capital projects or as county maintenance projects.

A major advantage of this approach is that it can be implemented relatively quickly and at a low cost. Also, it avoids costly data collection and analysis that would otherwise be necessary. It also provides substantial flexibility with respect to criteria used in selecting priorities. Thus areas that are dominated by other industries, such as mining or lumber, could apply different criteria to address their special conditions.

Water clinics for small, independent rural water systems.—In response to recent reports about the poor condition of rural drinking water systems,²⁴ a program was established in Pennsylvania, through the Water Resources Research Center at Pennsylvania State University, and in conjunction with the Department of Agriculture's County Extension Service, to improve the management of local water supplies by providing consumers with basic information on water quality and testing procedures.

"How to" manuals were developed to teach County Extension personnel about water quality testing and management of small water systems, so that they could be prepared to answer questions. Local "water clinics" were held across the state to provide information about how to test and monitor water quality and how to correct problems such as lead and bacteria contamination. During the water clinics, information is made available to consumers about how to access the expertise of local labs to perform water quality tests. Ultimately, the "water clinics" is an educational program through which remedial consumer action is stimulated at the local level.

²⁴ A national survey of rural water condition conducted by Cornell University in 1983 concluded that 63 percent of all rural water systems in the United States failed to meet all drinking water standards. Pennsylvania's own tests revealed that approximately 85 percent of the public water systems were corrosive, 42 percent of the small rural systems were contaminated with bacteria and other pollutants such as lead, radon and nitrates existed across the state but had not been scientifically measured.

As shown in the examples above, grass roots efforts can be used to identify the most pressing rural infrastructure problems and to mobilize community involvement and resources. However, this is usually an alternative born out of necessity. Nonetheless, it is shown to be an effective strategy in seeking public works improvements. Other strategies, which are not new, but seem to be gaining greater acceptance as resources available to local governments shrink include (1) consolidation of services (2) sharing of services between communities and (3) developing more effective and sophisticated pricing mechanisms for public services. The latter involves charging users according to the amount of service used and the cost of providing service to that user. Thus, if heavy trucks wear out roadways 10 times faster than automobiles, and travel 20 times as many miles a year as the average non-truck user, then they would be charged a fee commensurate with the nature and level of their use, taking into account the cost to the government of providing the service.

Fiscally strained communities which have pared down services to minimum levels only to find it is still too expensive to provide the needed level of service, are increasingly attempting to reduce their costs by sharing public facilities and services with neighboring jurisdictions. Included are a wide range of examples such as libraries, schools, police, fire and emergency assistance, parks and recreational facilities, land fills, and snow removal. The sharing of such services is usually neither welcome, nor ideal—from the community's point of view. Rather, it represents a compromise of local expectations, often accompanied by a reduction in service levels and increased transportation costs. Occasionally, it results in improved services. For example, in some instances when schools are combined they can provide a richer mix of instruction than could be achieved independently. (Alternatively, rural school districts may argue that an equalization of per pupil costs statewide, would sufficiently increase revenues in their school districts to raise the quality of their schools. Similarly, the argument of equalizing urban/rural revenues statewide is frequently used to call attention to funding disparities between urban and rural infrastructure systems.) Ultimately, consolidation and shared services is a solution that conflicts with traditional, small town desires to preserve a sense of community. But, many feel that this kind of thinking weds rural communities to an outdated concept of service delivery which has little merit given the access these communities have today to quick and affordable transportation. (We are reminded that the distance between county government seats was initially based on the territory one could cover in a full day's horseback ride.)

CONCLUSION

In summary, it would seem that a greater regional orientation to the provision of basic rural infrastructure services should be explored as an alternative when town and county level service delivery mechanisms are unable to adequately meet the demand for public facilities and related services. However, even regionalization of responsibilities, accompanied by a considerable amount of planning, may only go so far in resolving rural infrastructure problems.

There is a class of rural infrastructure problems which is not well documented, but is untouched by conventional solutions. It involves the high cost of providing public facilities to low-income rural areas. This problem has not been helped much by current aid programs and probably will not benefit from a reorganization of public works responsibilities by various levels of governments unless it is accompanied by improved targeted assistance to rural infrastructure problems. This issue, while critically important to the well being of rural America, is somewhat outside the scope of this paper.

This paper attempted to explore primarily non-financial alternative strategies to improving public facilities and related services in rural America. During this period of transition, it is critically important for rural governments to recognize how the changes taking place around them affect the demand for public infrastructure and the government's ability to provide such services, now and in the future.

Very little is known about the precise condition of rural public facilities—or the changing level of demands. This information simply does not exist at the national level, and exists only sparsely at the local level. This paper suggests that the changing nature of rural demographics, accompanied by changing economic conditions and a host of other factors, will affect upon the demand for, and ability to provide, rural infrastructure services. But data are sketchy at best.

It is clear that such information will need to be generated in detail, at the rural government level, before state or federal policymakers are persuaded to re-examine their roles in assisting rural governments in the provisions of public infrastructure services. The challenge facing rural governments today is to provide comprehensive and convincing evidence for local, state and federal policymakers about the demands for rural public infrastructure, the priority investment needs, and the consequences of not meeting those needs. State and federal policy decisions should, at a minimum, be predicated on this requirement.

WHAT INDUSTRIES FUELED THE RURAL ECONOMY IN THE EIGHTIES

(By Bernal L. Green)*

INTRODUCTION

Rural America has experienced an economic transformation of unusual proportions during the last two decades—a rural renaissance during the seventies. Great changes have occurred in employment and income patterns as well as in residential preferences.¹ In fact, Calvin Beale's 1975 paper, "Revival of Population Growth in Non-metropolitan America," contributed greatly to raising our consciousness of the changing non-metropolitan environment: "Population grew faster in non-metro than in metro counties between 1970 and 1973. This trend reverses the previous pattern of immigration to cities." [1] Other trends include employment declines in farming, manufacturing and mining, but large increases in the services-producing sectors. The current serious condition of farming and mining (especially energy) are receiving increasing attention by researchers. [4, 5, 6].

As community leaders consider the implications for policy of these changes, the question emerges, "Is it appropriate to consider rural America as a relatively homogeneous unit?" If major economic and social diversities exist and are clustered by large geographic areas, then policies tailored appropriately for each major area would be justified. In late 1982 this question resulted in formation of a research team² in USDA's Economic Research Service. The team completed its Policy Impacts Project in late 1985. The research issue was framed in terms of whether or not each nonmetropolitan county had emerged in 1980 with a balanced mix of economic activities as contrasted with specialization in a particular sector such as farming or manufacturing. The researchers reasoned that if specialization characterized the new rural economic and social landscapes, then individual county groupings would experience widely varying impacts of government policy measures and major economic events.

CLASSIFICATION OF NONMETROPOLITAN COUNTIES

The Policy Impacts Project focused on U.S. industrial structure and associated trends (such as employment declines in farming,

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¹ Italicized numbers in brackets refer to items in the references at the end of this article. The main reference report, containing maps of county prototypes, is [2].

² The project leader is Lloyd D. Bender. Other members include Bernal L. Green, Thomas F. Hady, John A. Kuehn, Mariys K. Nelson, Leon B. Perkinson, and Peggy J. Ross.

mining, and other natural resource sectors), the presence of national and international forces causing pressure sufficient to require decisive national responses, and the policy orientations of Federal expenditures for national programs [9]. National data files were combined to construct special measures of income, employment and other characteristics of the almost 2,500 nonmetropolitan counties. Seven groups of counties, plus a residual group not elsewhere classified, were identified (Table 1). Four of the seven classifications describe the degree of economic specialization in broad classes of economic activities: farming, manufacturing, mining, and government. A fifth group includes counties with a high proportion (33 percent more) of Federally owned land. The remaining two groups—retirement destination counties, and persistent-poverty counties—are based on social dimensions that are not necessarily related to the economic speciality of the county, but are of continuing interest to policymakers. The classification system accounts for 2,073 (85 percent) of 2,443 nonmetropolitan counties in one or more overlapping types, with 370 (15 percent) remaining unclassified. For the farm counties, 68 percent were so specialized that no overlap occurred with the other county types. A similar pattern appeared for the manufacturing and mining county groups [9].

TABLE 1.—CLASSIFICATION OF NONMETRO COUNTIES INTO SEVEN SOCIOECONOMIC TYPES

Types	Definition	Counties ¹ (number)	Proportion of total (N=2, 443) (percent)
Agriculture.....	Greater than or equal to 20 percent income from agriculture ²	702	28.7
Manufacturing.....	Greater than or equal to 30 percent income from manufacturing ²	678	27.7
Mining.....	Greater than or equal to 20 percent income from mining ²	200	8.2
Government.....	Greater than or equal to 25 percent income from government ²	315	12.9
Federal lands.....	Greater than or equal to 33 percent land federally owned.....	247	10.1
Poverty.....	Persistent low income county ³	242	9.9
Retirement.....	Retirement immigration county ⁴	515	21.1

¹ About 27 percent of counties overlapped on 2 or more types, and 15 percent (370 counties) fell into none of the types.

² Equal to or greater than specified percentage of labor and proprietor income.

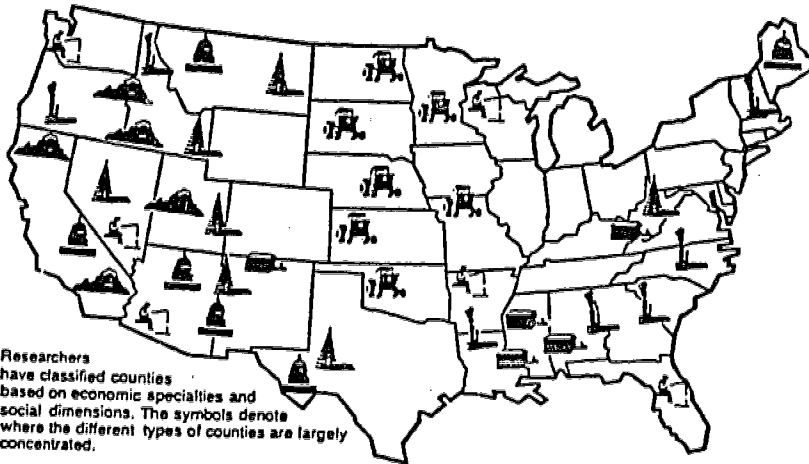
³ Per capita income in bottom quintile in 4 time periods.

⁴ Equal to or greater than 15 percent 1970-80 net immigration of persons aged 60 and over.








Source: Ross and Green [9].

These eight county groups show that, while there is much diversity among some counties, economic specialization characterizes many counties in large geographic parts of the United States. Nonmetropolitan counties are generally too small to develop diversified economies, thus they tend to specialize in a particular type of economic activity (Figure 1) [8].

The New Look to Rural Landscapes Is a Diverse One



Researchers have classified counties based on economic specialties and social dimensions. The symbols denote where the different types of counties are largely concentrated.

-  **Farming**—702 counties, concentrated largely in the Plains portion of the North Central states
-  **Retirement**—515 counties, concentrated in several northern Lake states as well as in the South and Southwest
-  **Federal lands**—247 counties, concentrated in the West
-  **Manufacturing**—678 counties, concentrated in the Southeast
-  **Government**—315 counties, scattered throughout the country, but with some concentration in the West
-  **Poverty**—242 counties, concentrated in the South, especially along the Mississippi Delta and in parts of Appalachia
-  **Mining**—200 counties, concentrated in the West and Appalachia

Source (8).

The counties in each category have distinct economic, demographic and geographic profiles that bring into sharper relief the differing implications of government policies for individual rural areas. The following comparisons illustrate some aspects of these profiles: [2; 8]

Farming

Farming continues to be the dominant economic activity in 702 nonmetropolitan counties. These counties tend to be remote from metro areas and regional population centers, have sparse populations, and have high proportions of residents aged 65 and over. Their economies are more often based on a highly capitalized farming industry and are especially sensitive to agricultural policies, changing interest rates, and foreign trade. Farming accounted for a third of their income in 1979. Half are located in the North Central region, especially the Great Plains. Smaller concentrations are along the Mississippi River Delta in Arkansas, Mississippi, and Louisiana, in parts of the Southeast, and in Montana, Idaho, or Washington. The number of farming counties has declined sharply since 1950 when there were more than 2,000 such farm-specialized counties [7]. Population decline characterizes nearly half of the 702 farm counties, based on population change 1980-84 (Table 2). Ripple effects from the current farm crisis are spreading to other community components—suppliers of inputs (especially farm machinery and banking), mainstreet businesses, and public services. Indirect impacts appear ominous for local and state governments because tax revenues are difficult to sustain.

TABLE 2.—POPULATION CHANGE BY COUNTY TYPE

Population gain or loss, 2 time periods		County type							All nonmetro counties (2,443)
1970-80	1980-84	Ag. (702)	Manufacturing (678)	Mining (200)	Gov't (315)	Federal land (247)	Poverty (242)	Retirement (515)	
RATE OF POPULATION CHANGE									
Percent of counties									
Gain	Gain	38.3	68.7	69.0	69.8	78.5	62.4	90.5	64.8
Loss	Gain	13.4	1.6	6.0	7.3	4.0	6.6	.2	6.6
Gain	Loss	18.5	25.4	20.5	15.3	13.8	24.8	8.9	17.5
Loss	Loss	29.8	4.3	4.5	7.6	3.7	6.2	.4	11.1
Number of counties									
Gain	Gain	269	466	138	220	194	151	466	1,519
Loss	Gain	94	11	12	23	10	16	1	163
Gain	Loss	130	172	41	48	34	60	46	461
Loss	Loss	209	29	9	24	9	15	2	300

Source: Bureau of the Census; Prepared by ERS, Bernal L. Green.

Manufacturing

Manufacturing has become the major economic specialty in 678 nonmetro counties, concentrated most heavily in the Southeast. These counties have larger populations with more urban areas. Because of their reliance on income from the sale of manufactured goods, they are subject to recessions in goods-producing industries and are especially vulnerable to foreign competition. The degree of

specialization in manufacturing is striking in these counties: manufacturing accounted for an average of 42 percent of labor and proprietor income in 1979. Nearly seventy percent of these counties experienced population gains in the 1980-84 time period (Table 2). Relocations of many types of manufacturing activities to foreign countries with lower labor and management costs, automated factories, and protectionist trade policies can influence the economic condition of people in manufacturing-dependent counties.

Mining

Some 200 counties are primarily dependent on mining of non-renewable natural resources. These counties are concentrated in Appalachia and scattered parts of the West. Mining counties have been subject to wide swings in demand for their products, although wage rates and average incomes have tended to remain high. In 1979 incomes in these mining counties averaged the highest of any of the county groups. Although no data are yet available, the current increased supplies of petroleum have probably changed the income picture in 1986, especially in the Southwest where a number of counties depend heavily on earnings in the oil and gas industry. Frequently such counties depend on both energy and farming for income and employment.

Government

Government plays a major economic role in 315 rural counties scattered throughout the United States. The dispersed location pattern is due to each state having major government activities such as universities, hospitals, and prisons. Thus, location of government functions is tied more to political decisions than to market forces. Government counties have had rapid population increases, but incomes are lower than in most other county groups. Heavy dependence on Federal and state government activities such as national parks, military bases, prisons, health centers, and state universities means that shifts in governmental functions and in spending priorities will often affect these counties more quickly than other county groups. Changes in programs that provide special assistance to areas with high concentrations of government activities, such as school aid for federally-impacted areas, will also affect these counties heavily.

Federal lands

Federal land ownership is a dominant factor in 247 nonmetro counties, mostly in the western part of the United States. Their populations have grown more rapidly than most other counties, even though their population density remains very low overall. Federal ownership in these areas constrains the types and levels of economic development that are possible because much of the land is available for only limited private use. These counties are sensitive to changes in Federal policy regarding payments in lieu of taxes and in regulations regarding the private use of Federal lands for livestock grazing, timber production, and other activities.

Poverty

Persistent poverty continues to affect 242 nonmetro counties. These counties, concentrated in the Southeast, have ranked in the lowest fifth in income for the past three decades. They have high proportions of people with low education levels, disabled persons, and households headed by females. Minorities tend to be heavily represented in their populations. Insights about resources in poverty counties (chronic under-investment in education, job skills, and health services) may suggest that more emphasis be placed on income transfers coupled with human capital expenditures, such as education and job training. We clearly need to know about the levels and categories of assistance to counties at the bottom of the economic ladder since the effectiveness of past programs is under increased scrutiny in this era of Federal budget austerity.

Retirement

In the U.S., the proportion of older Americans (11 percent age 65 and over in 1980) is increasing and will continue to do so, reaching 21 percent of the population in 2030 [10]. New retirement populations are forming in 515 nonmetro counties concentrated in Florida and eastern Texas and stretching into the Great Lakes area. They are also in the Southwest and Pacific Coast States. These counties have grown rapidly for the past two decades. Their populations tend to be located predominantly in the open country, and many of these counties are completely rural. Retirement income from outside sources fosters development of a wide range of economic activities and creates new employment of people of all ages. Enticing retirees to move may be one of the few good strategies left for improving the economic viability of many nonmetro areas. Success will depend mainly on growth in income from Social Security and other transfer payments as well as enhancement of the major social and physical attributes that attract retirees. Many retirees have sufficient income and wealth to afford to live where they choose. Public officials in retirement destination counties will recognize that the influx of higher-income retirees offers local development potential. But, the features that attract retirees need special care to keep retirement destination counties attractive to retirees.

Unclassified

The economies of these 370 counties are too diverse to permit classification into any of the seven county prototypes. On average, 17 percent of their labor and proprietor income (1979) was in manufacturing, 16 percent in government, 11 percent in farming and 4 percent in mining. The largest proportion (34 percent) was in services-producing businesses. These counties are scattered throughout the nonmetropolitan United States, except for large areas of the West where they are absent. Ungrouped counties have high proportions of populations living in urban places. The diverse mix of economic activities in the ungrouped counties may act as a form of insurance against major changes in a particular economic sector. For example, if declines occur in employment in farming, redistribution of released farm employees to other sectors may occur. This added stability may mitigate in favor of selecting certain of the un-

grouped counties as centers or magnet counties for consolidation of education, health and other services from adjacent counties that are experiencing severe economic stress and are no longer able to afford their present levels of services.

TAILORED RURAL POLICY

The advent of New Federalism happens to coincide with major stress in American farming areas, especially grains and dairy. The energy counties, due to relatively low prices for petroleum and natural gas, are also experiencing economic stress as are many manufacturing counties. Thus, state and local officials need accurate, current information about the economic restructuring process, which covers major portions of rural America, if they are to do efficient decisionmaking.

Coupled with current economic stress, the cumulative effects of forces shaping rural America during the post-World War II decades are not well documented. Thus, the Policy Impacts team developed a research approach designed to uncover the socio-economic diversity among nonmetro areas. They were looking for a policy-relevant disaggregation of nonmetro counties that would be of high use to both public and private decisionmakers. The findings in the form of a typology of rural counties permit a way of seeing where common features and the differences lie. The differences suggest differential impacts of proposed policies. The power of the typology is its capacity to capture in a handful of categories an enormous amount of social detail about rural areas, thus providing important insight into the current problems and likely futures of large regions of the United States. [9] by considering important resource similarities and differences among the county types, together with expected variations in impacts of structural forces, policies can be tailored to fit the needs of each county type.

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CAN RURAL COMMUNITIES SURVIVE THE FARM CRISIS?

(By Dr. Thomas Stinson) *

For three years the nation's newspapers have been filled with headlines describing the growing farm crisis. The public has learned of serious financial problems facing America's farmers, and of the massive drops in real farm income and farm land values which have occurred during this decade. Attention has been focused on the direct, often dramatic impacts on individual farmers, their families, and on small businesses in America's agriculturally dependent communities.

Another dimension of the farm crisis has been largely overlooked—the growing threat to the financial viability of rural local governments. Declining farm incomes and farm property values erode the local tax base. At the same time, demands for many publicly provided services increase, creating a squeeze between falling revenues and higher costs. In many communities this financial vise is being tightened further by cuts in federal and state aid.

If these trends continue local officials cannot avoid both cutting services and increasing taxes. In the absence of such actions, local government revenues will fall short of existing expenditure levels by \$132 per capita on average in the nine agriculturally dependent Southwestern Minnesota counties examined. Results in seven other States studied were similar. Under more pessimistic assumptions about further drops in land values and cuts in intergovernmental aids, per capita revenue shortfalls of \$250 or more were estimated for some areas. The higher taxes and reductions in services necessary to overcome those shortfalls have the potential to permanently change the quality of life in much of rural America.

THE TROUBLED AGRICULTURAL ECONOMY

Since 1980, net farm incomes have fallen precipitously. From 1980 through 1984, real farm incomes averaged only \$25 billion in 1982 dollars, down nearly 40 percent from the average of the seventies and down more than 25 percent from the average of the sixties.

In southwest Minnesota, the losses have been dramatic. Farm income in the region peaked at more than \$372 million in 1973. By 1983, it had slumped to only \$141 million—over \$80 million less than local residents received from transfer payments such as social security and veterans benefits. Farm management records compiled at the University of Minnesota present a similar picture. The average incomes of those participating in the survey (generally thought to be among the region's better farmers) reached more than \$62,000 in

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1978. By 1981, incomes for those same farmers averaged \$2,271; in 1984, \$9,871; and in 1985, \$5,487.

VANISHING WEALTH

The decline in agriculture income since 1981 has produced an enormous drop in the value of farmland. Nationwide, agricultural land values fell by more than 30 percent, or \$227 per acre, during the past four years. Farm land values declined only one other time in the postwar period, in 1954, when they fell by one dollar.

When viewed in constant dollars, the results are even more sobering. Nationwide, between 1982 and 1985, farm land values fell by \$146 billion—a loss of wealth for farm land owners equal to the combined assets of IBM, GE, Kodak, Proctor & Gamble, 3M, Dow Chemical, McDonalds, RCA, Upjohn, Weyerhaeuser, and CBS. In Minnesota alone, the loss in farm real estate value between 1982 and 1986 was in excess of \$20 billion, or an amount equal to the entire value of all farmland in Missouri, Kansas, or Nebraska.

NONFARM IMPACTS

When farm incomes decline, main street spending falls. Jobs in the local commercial sector disappear, and incomes in that sector decline as well. Downtown property values reflect the net income which can be earned from that property, so over time the commercial property segment of the local property tax base also will decline. And, as with agricultural property, these declines will not occur instantaneously. Instead, they occur gradually over a number of years as some businesses close and others relocate.

The impact of declining farm incomes on the main street business community was estimated using data from Minnesota's CRD7 located in the southwestern Minnesota. A simple econometric model was constructed which estimates changes in local income, employment and property values associated with changing farm incomes. Some specific findings are summarized below.

A \$1,000 change in net farm income produces \$190 change in the net income of the region's merchants. This is substantially less than the impact from a similar sized increase in manufacturing incomes or transfer payments.

Main street employment also depends on the income of the region's agricultural sector. A long term increase or decrease of \$64,000 in net farm income will add to, or cutback local commercial employment by one job. Again, the multiplier for agricultural income is less than that for manufacturing or transfer payments. It is important to note, however, that the job estimates are the total of full and part-time jobs, not solely full time equivalent positions.

Downtown property values decrease by approximately \$15 for each permanent \$1,000 decrease in agricultural incomes. The adjustment process is slow, however, taking more than 5 years to complete after the change in income is recognized as permanent.

Impacts of the recent decline in farm incomes depend on the year chosen as the baseline. If one chooses the historically high income years of 1974-1977 as the baseline, and assumes that the level of permanent income observed in 1983 will continue in the future, then, other things equal, the decline in farm income has

caused a decline of \$47 million in off-farm income, and there are 3650 or about 15 percent fewer commercial sector jobs. Downtown property values will eventually decrease by about \$3.1 million.

When a period with lower levels of agricultural incomes is used as the baseline, impacts on jobs, employment, and property values are smaller. If farm income had held at 1979-1981 levels, other things equal, local incomes would be \$22 million greater and today the local commercial sector would employ 1735 more full and part-time workers. In addition, the ultimate decrease in downtown property values would be about \$1.5 million less.

These estimates are specific to Southwest Minnesota and do not take into account impacts which might occur outside the region's boundaries in trading centers such as Mankato, Minnesota; Sioux Falls, South Dakota, or Minneapolis-St. Paul. If impacts in those cities were counted, multipliers would have been larger. The estimated impacts are expected to be typical of those which would occur in other agriculturally dependent regions in the upper midwest not containing a major trade center.

IMPACTS ON LOCAL PROPERTY TAXES

Over time this massive devaluation in farm assets will significantly erode the local tax base in some communities. Those impacts are already evident in Minnesota where taxable valuations dropped about 25 percent between 1983 and 1985. In other states, agricultural assessed values have remained relatively stable when measured in current dollars because assessment systems based on the productivity of agricultural land are slower to adjust to changes in market values. Nevertheless, taxable valuations have already dropped an average of 20 percent since 1981 in inflation adjusted dollars. With land values continuing to fall, it is only a matter of time before declines in assessed valuations in current dollars are observed.

Dramatically increased rates of property tax delinquencies are a leading indicator of future problems. Between 1980 and 1985, annual delinquencies jumped sevenfold in the Nebraska localities examined—rising from \$.75 million to over \$5.5 million. Delinquencies also more than doubled in the Iowa, Kansas, Minnesota, and Montana communities surveyed.

THE SERVICE SQUEEZE

Rural governments are being squeezed by increased service demands as well as falling revenues. Many of the new demands for services are a direct response to increasing unemployment in the agriculturally dependent regions. Although national unemployment rates fell 9 percent from January 1985 to January, 1986, unemployment rose an average of 10 percent in five of the states studied and fell in only two.

Rising unemployment and financial stress are taking their toll on rural Americans and straining social service facilities. A regional mental health center in southwest Minnesota reports outpatient services up 30 percent since 1984; 24 hour crisis intervention activities are up over 300 percent; and substance and family abuse consultations are up 67 percent. Similarly, overall social service de-

mands are up 30 percent in northern Iowa, despite declining population.

DIM PROSPECTS FOR STATE AID

Financially stressed local governments can expect little added assistance from their states. State tax bases also depend on the health of the agricultural economy, and many states are under severe budgetary stress. Six of the eight study states had tax revenues grow more slowly than the national average in fiscal 1985, 1986, or both. There were absolute declines in revenues in four of those states in either 1985 or 1986. Six of the states surveyed were forced to take the extreme step of making mid-year reductions in their fiscal 1986 budgets.

FEDERAL AID CUTS COMPOUND THE FISCAL SQUEEZE

Federal aid reductions, past and prospective, are compounding the impact of the farm crisis on local governments. Between 1982 and 1984, federal aid to general purpose local governments, excluding General Revenue Sharing, rose by .1 percent nationwide. In the eight agriculturally dependent regions examined in this study, federal aid actually declined by 18 percent during that same period.

The proposed elimination of revenue sharing will hit rural local governments twice as hard as the average locality. Revenue sharing comprised 44.5 percent of all federal aid received by agriculturally dependent local governments, but only 21.8 percent of the federal aid received by all general purpose local governments.

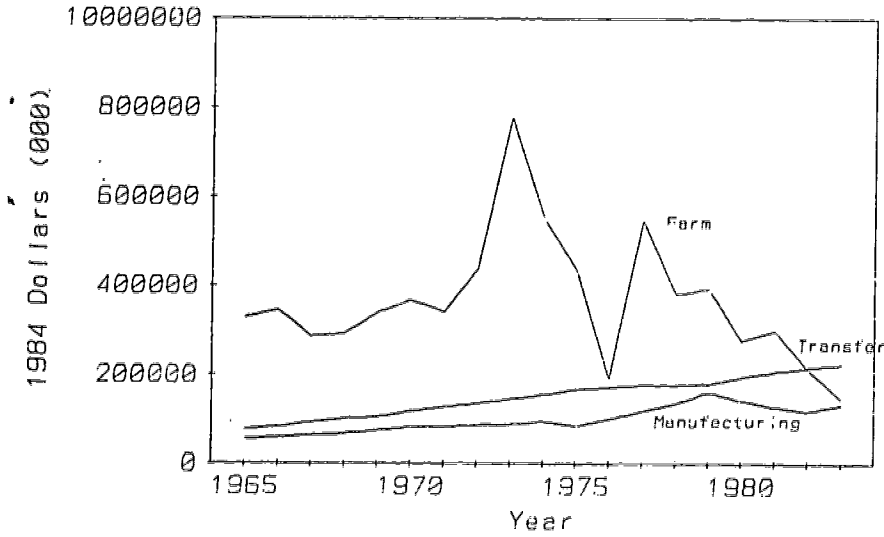
POLICY RESPONSES

The fiscal bind confronting rural governments is both immediate and long term. In the short run the difficulties stem from the rapid rise in property tax delinquencies. The resulting cash flow problems are being compounded by reductions in state and federal aid.

Ultimately, the most serious problems will be posed by the dramatic declines in farm land values. But, because assessed values in most states have only begun to reflect the steep fall in market values, serious long term erosion in public services can still be avoided if prompt actions are taken at all levels of government. For local governments this means continuing efforts to "do more with less," although there is evidence that many have already exhausted the efficiency gains from cutback management. For state governments, it means diversifying and broadening the tax base, and attempting to maintain a constant level of state aid through tough fiscal times. For the federal government it means preserving a leaner, more targeted version of general aid to local governments and maintaining those portions of the tax code that support local economic development and self-help.

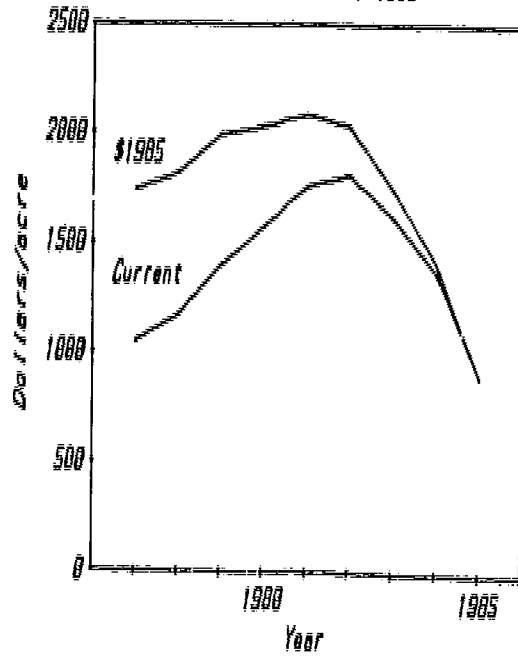
The farm crisis ranks among the most severe regional economic recessions since the 1930s. If left unchecked, it has the potential to seriously—and in some cases permanently—undermine the fiscal foundations of many rural communities. But, intelligent policy decisions made before the situation worsens, can ease the impacts of transition to a more stable agricultural economy, and rural local governments can avoid becoming another victim of the farm crisis.

Sources of Basic Income
Southwest Minnesota
1965-1983

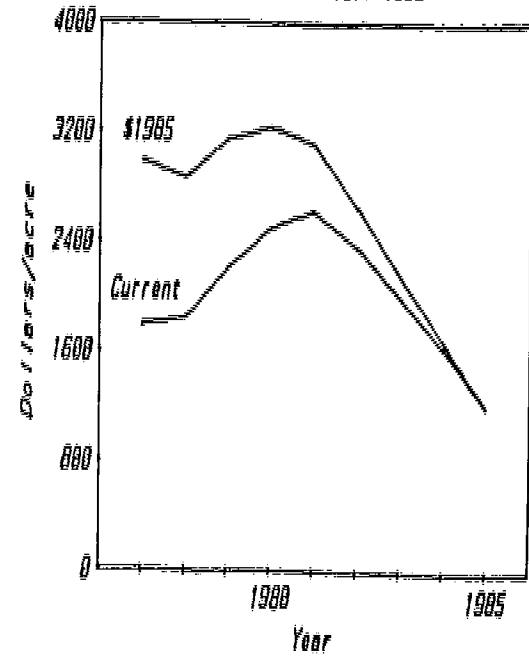


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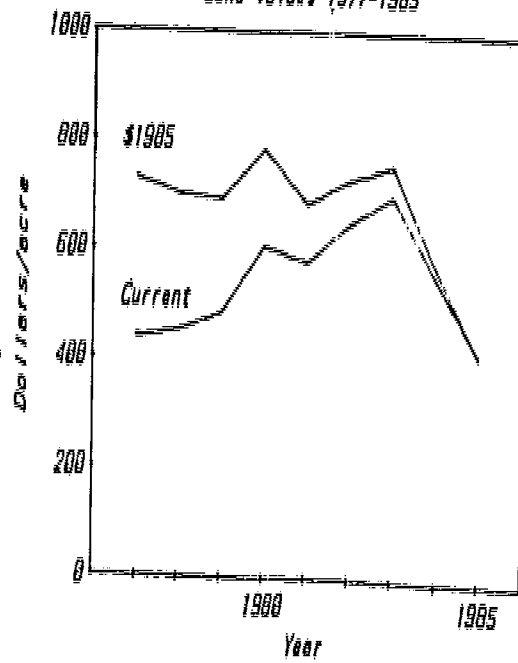
Minnesota
Crop Reporting District 7
Land Values 1977-1985



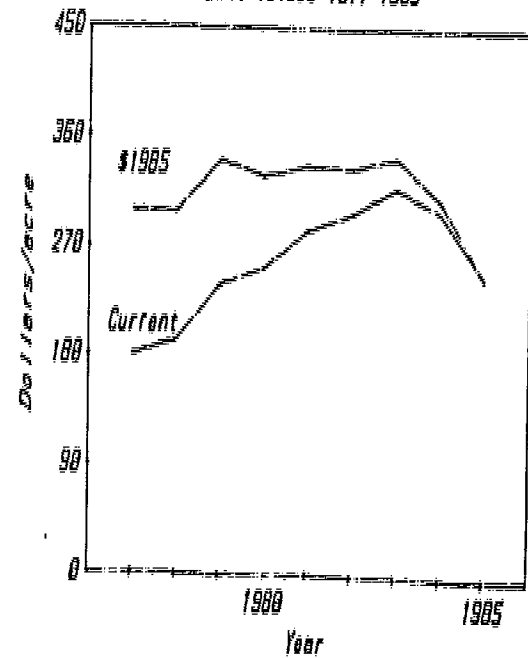
Iowa
Crop Reporting District 1
Land Values 1977-1985



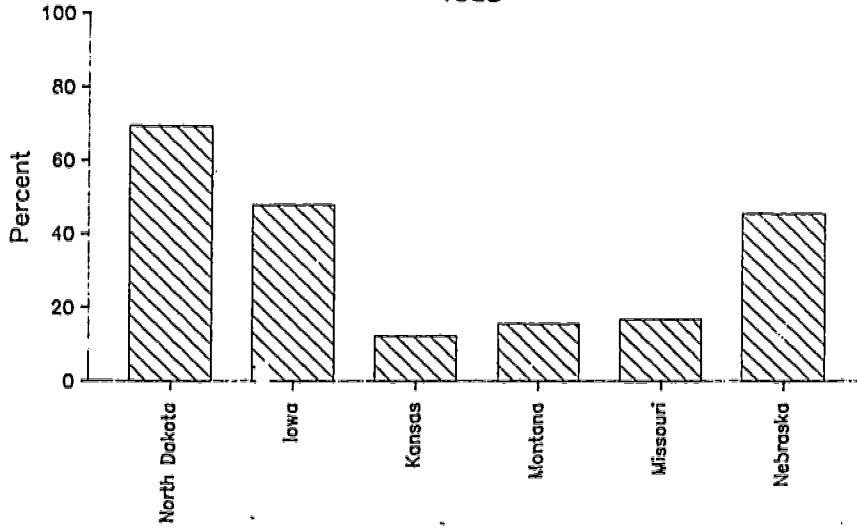
North Dakota
Crop Reporting District 9
Land Values 1977-1985



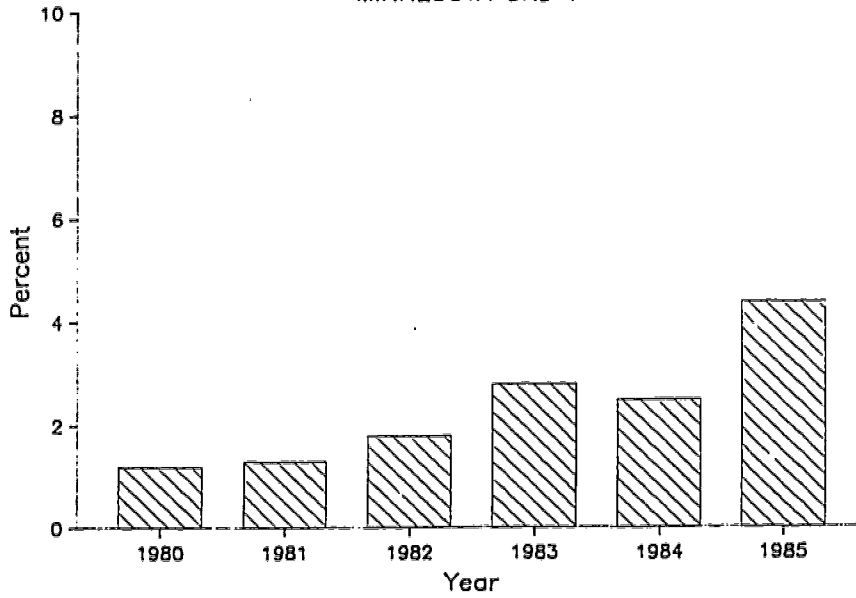
Montana
Crop Reporting District 2
Land Values 1977-1985



Ag Assessed Value as a Percent of Total
1985

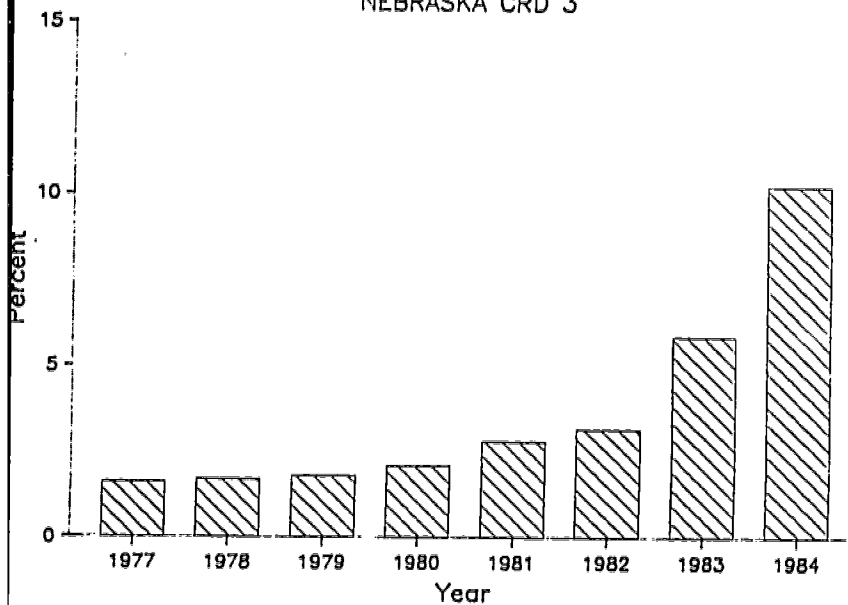


CURRENT PROPERTY TAXES DELINQUENT
MINNESOTA CRD 7



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CURRENT PROPERTY TAXES DELINQUENT
NEBRASKA CRD 3



LOCAL GOVERNMENT REVENUES IN FARM-DEPENDENT VERSUS ALL COUNTIES IN 10 SAMPLE STATES, 1982

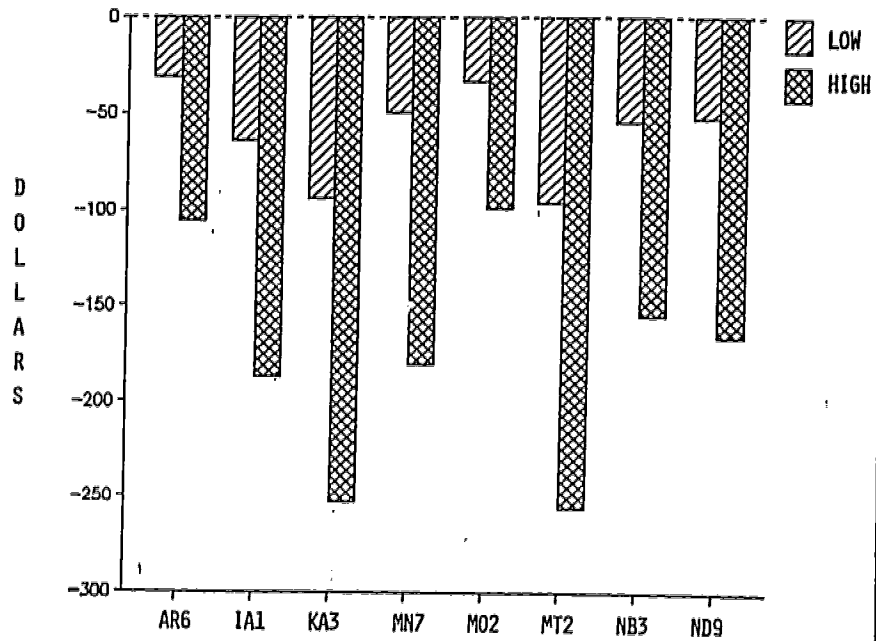
	Percentage of all counties ag-dependent	General revenue sharing as a percent of all federal aid
U.S. percent distribution, all local.....	N.A.	21.8
North Dakota:		
Nonagriculture.....		20.6
Agriculture.....	71.7	38.6
Owa:		
Nonagriculture.....		25.8
Agriculture.....	52.5	46.6
Nebraska:		
Nonagriculture.....		22.6
Agriculture.....	69.9	49.3
Arkansas:		
Nonagriculture.....		29.9
Agriculture.....	37.3	29.4
Mississippi:		
Nonagriculture.....		24.1
Agriculture.....	38.1	51.3
Georgia:		
Nonagriculture.....		21.2
Agriculture.....	20.1	54.1
Minnesota:		
Nonagriculture.....		22.4
Agriculture.....	40.2	42.2
Wisconsin:		
Nonagriculture.....		32.2
Agriculture.....	23.2	67.8

LOCAL GOVERNMENT REVENUES IN FARM-DEPENDENT VERSUS ALL COUNTIES IN 10 SAMPLE STATES,
1982—Continued

	Percentage of all counties ag- dependent	General revenue sharing as a percent of all federal aid
Missouri:		
Nonagriculture.....		18.7
Agriculture.....	31.3	32.1
Montana:		
Nonagriculture.....		23.9
Agriculture.....	42.9	33.4

Source: USDA list of counties that have 20% or more of all personal income directly from agriculture; government finance data from U.S. Bureau of the Census, "1982 Census of Governments, Compendium of Government Finance," Vol. 4, No. 5, Table 50.

ESTIMATED LOCAL EXPENDITURE DEFICITS ATTRIBUTABLE TO LOWER
PROPERTY TAXES AND CUTS IN AID, SELECTED CROP REPORTING DISTRICTS



RURAL AMERICA BEYOND THE FARM: THE PROBLEMS OF UNDIVERSIFIED ECONOMIES—TRANSFER PAYMENTS

(By Dr. Daniel H. Garnick)*

Transfer payments to persons are defined as government and business payments to persons for which they do not render current services. Government retirement, survivors, disability and health insurance benefit payments constitute about $\frac{3}{4}$ of transfer payments to persons. As a share of total personal income (TPI), these benefit payments are relatively more important in rural counties than in metropolitan counties.

The tables appended to this paper show transfer payments by major category of payment as a percent of TPI for the years 1979 through 1984, the most recent year for which the Bureau of Economic Analysis (BEA) has prepared county estimates. The estimates are shown for the Nation and eight BEA regions, by metro and nonmetro (rural) county summation.

Transfer payments accounted for 17.2 percent of TPI in rural counties in 1984, compared with 13.0 percent of TPI in metropolitan counties. Most of the relative difference in the weight of transfer payments in area TPI can be explained by the relative incidence of retirement-age population. Rural counties tend to have a larger share of their population in the retirement-age category than metro areas and receive a larger share of their TPI therefrom.

Some of the other major categories of transfer payments like unemployment insurance benefits also represent a more important source of TPI in rural counties than in metro counties (0.7 percent of rural TPI, compared with 0.5 percent of metro TPI in 1984—a 40 percent difference). It is not infrequent that a person residing in a rural county works in a metropolitan county. That person's wage or salary income would be reported by the county of employment. If he or she becomes unemployed, the unemployment insurance benefits would be reported by the county of residence. Because TPI is a "received income" concept rather than a "produced income" concept, BEA makes a "residence adjustment" to wages and other produced income to assign the correct total income received to the county of residence. Thus, when residents of rural counties lose their jobs in a metro county, the accounting procedure would entail: (1) decreasing wage income in the metro county, (2) reducing the negative residence adjustment to the metro county, (3) reducing the positive residence adjustment to the rural county, and (4) increasing transfer payments to the rural county to reflect the receipt of unemployment insurance benefit payments to that county.

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Even though the job was lost in the metro county, the net effect on TPI in that county is zero. The net effect on the rural county is the difference between the residence adjustment item (which equals the wages received) and the unemployment insurance benefit item.

Several observations can also be drawn from data not shown here. The Bureau of Economic Analysis has prepared estimates of TPI and its components on a regional basis for years going back to 1929, when transfer payments accounted for only 1.3 percent of TPI. While rural counties, on average, have consistently had a higher share of TPI originate in transfer payments than metro counties, both types of counties have experienced a more than 10-fold increase in the relative importance of transfer payments to TPI over this long period.

The geographic disparity of income maintenance transfers has substantially narrowed over this period, while the disparity for most other transfer payments has tended to hold. Since the 1960s, the share of transfer payments received in the most highly populated metropolitan counties has tended to approach that of the rural counties, reflecting both relatively rising unemployment rates as well as the relative aging of populations in counties where employment growth falls below the national average for extended periods.

Employment in rural areas received a special impetus in the 1970s that seems, for the most part, to have been reversed thus far in the 1980s:

1. There was a slow down in the 1970s in the reduction in the number of farmers, owing to rising prices for farm output early in that decade. In the 1980s, farm decline reaccelerated.

2. Labor intensive manufacturing employment grew in rural areas while declining, for the most part, in urban areas. During the 1970s, the trade weighted value of the dollar declined vis-a-vis major trading partners' currencies. This pattern reversed in the 1980s, and manufacturing jobs in rural counties began to fall, replicating the urban experience.

3. Boom and bust conditions took hold in logging and lumber, and in other raw materials and fossil fuels industries at various times between the 1970s and 1980s.

4. Related industrial activities, such as construction and services, amplified the boom and bust conditions in the affected rural counties.

Retirement and tourist related industrial activities continue to be an important spur to rural areas in the 1980s, but with the aging of the small cohort of population born during the depression years, the increment in retirement population will have a less stimulating effect on rural growth by the early 1990s.

TABLE 1A.—1979-84 TRANSFER PAYMENTS AS A PERCENT OF TOTAL PERSONAL INCOME [TPI]

United States	1979	1980	1981	1982	1983	1984
Transfer payments.....	12.88	13.80	13.94	14.60	14.81	13.82
Government payments to individuals.....	11.99	12.89	13.08	13.78	13.98	12.99
Ret., disab. and health ins. benefit pay.....	8.63	9.05	9.46	9.96	10.17	9.88
Old-age, surv. and disability insur. pay.....	5.28	5.50	5.73	5.97	6.01	5.73
Railroad retirement and disability pay.....	.22	.22	.22	.22	.22	.22
Federal civil. employee retirement pay.....	.67	.72	.75	.77	.77	.73

TABLE 1A.—1979–84 TRANSFER PAYMENTS AS A PERCENT OF TOTAL PERSONAL INCOME [TPT]—
Continued

United States	1979	1980	1981	1982	1983	1984
State and local govt. employee ret. pay.....	.68	.70	.72	.76	.81	.82
Medical insurance payments.....	1.52	1.66	1.80	1.99	2.11	2.15
Workers' comp. pay. (Federal and State).....	.13	.13	.13	.14	.15	.15
Oth. Govt. disab. insur. and ret. pay.....	.12	.12	.11	.10	.10	.09
Unemployment insurance benefit payment.....	.53	.87	.70	.99	.97	.53
State unemployment insur. compensation.....	.47	.71	.62	.95	.93	.51
Unemp. comp. for Fed. civ. empl. [UCF].....	.01	.01	.01	.01	.01	.01
Unemp. compensation for RR employees.....	.01	.01	.01	.02	.02	.01
Unemp. compensation for veterans [UCX].....	.01	.02	.01	.00	.01	.00
Other unemployment compensation.....	.03	.12	.05	.00	.00	.00
Fed. educ. and trng. asst. pay (excl. vets).....	.15	.19	.20	.18	.19	.18
Income maintenance benefit payments.....	1.39	1.52	1.47	1.41	1.43	1.34
SSI, AFDC, general assistance payment.....	.99	1.01	.96	.94	.94	.91
Suppl. security income [SSI] payment.....	.36	.37	.36	.35	.34	.34
Aid to families with dep. child. [AFDC].....	.57	.58	.54	.52	.52	.49
General assistance payments.....	.06	.07	.07	.07	.07	.08
Food stamps.....	.33	.38	.42	.38	.41	.35
Other income maintenance.....	.07	.13	.10	.09	.09	.08
Veterans benefit payments.....	1.28	1.26	1.23	1.23	1.20	1.05
Vets pensions and comp. and military ret.....	1.08	1.10	1.09	1.10	1.09	.96
Educ. asst. to vets, depend., and surv.....	.13	.10	.08	.06	.05	.04
Veterans life insurance benefit pay.....	.06	.06	.05	.05	.05	.05
Other assistance to veterans.....	.01	.01	.01	.01	.01	.01
Other payments to individuals.....	.02	.01	.01	.02	.02	.01
Business payments to individuals.....	.41	.43	.43	.45	.47	.47
Payments to nonprofit institutions.....	.48	.47	.43	.37	.37	.35
Federal Government payments.....	.14	.15	.14	.10	.11	.10
State and local government payments.....	.22	.21	.18	.16	.16	.15
Business payments.....	.12	.11	.10	.10	.10	.10

Regional Economic Measurement Division, Bureau of Economic Analysis.

TABLE 1B.—1979–84 TRANSFER PAYMENTS AS A PERCENT OF TPI

United States—Metro	1979	1980	1981	1982	1983	1984
Transfer payments.....	12.27	13.06	13.22	13.80	13.94	13.04
Government payments to individuals.....	11.41	12.19	12.40	13.01	13.13	12.24
Ret., disab. and health ins. benefit pay.....	8.17	8.52	8.93	9.38	9.54	9.29
Old-age, surv. and disability insur. pay.....	4.88	5.05	5.28	5.49	5.50	5.26
Railroad retirement and disability pay.....	.20	.20	.19	.20	.19	.18
Federal civil. employee retirement pay.....	.68	.73	.76	.78	.78	.74
State and local govt. employee ret. pay.....	.71	.71	.74	.78	.82	.84
Medical insurance payments.....	1.48	1.60	1.74	1.91	2.02	2.06
Workers' comp. pay. (Federal and State).....	.13	.14	.13	.14	.15	.15
Oth. Govt. disab. insur. and ret. pay.....	.09	.09	.08	.08	.08	.07
Unemployment insurance benefit payment.....	.51	.82	.66	.92	.89	.50
State unemployment insur. compensation.....	.44	.66	.58	.88	.86	.48
Unemp. comp. for Fed. civ. empl. [UCF].....	.01	.01	.01	.01	.01	.01
Unemp. compensation for employees.....	.01	.01	.01	.02	.01	.01
Unemp. compensation for veterans [UCX].....	.01	.02	.01	.00	.01	.00
Other unemployment compensation.....	.03	.13	.05	.00	.00	.00
Fed. educ. and trng. asst. pay (excl. vets).....	.15	.19	.20	.18	.19	.17
Income maintenance benefit payments.....	1.36	1.47	1.43	1.37	1.37	1.29
SSI, AFDC, general assistance payment.....	1.00	1.01	.96	.94	.94	.91
Suppl. security income [SSI] payment.....	.33	.33	.32	.32	.31	.31
Aid to families with dep. child. [AFDC].....	.60	.60	.57	.54	.54	.51
General assistance payments.....	.07	.08	.08	.08	.08	.09
Food stamps.....	.30	.34	.38	.34	.36	.31
Other income maintenance.....	.06	.11	.09	.08	.08	.07
Veterans benefit payments.....	1.22	1.19	1.17	1.16	1.13	.99

TABLE 1B.—1979-84 TRANSFER PAYMENTS AS A PERCENT OF TPI—Continued

United States—Metro	1979	1980	1981	1982	1983	1984
Vets pensions and comp. and military ret	1.03	1.03	1.03	1.04	1.02	.90
Educ. asst. to vets, depend., and surv .....	.12	.09	.08	.06	.05	.04
Veterans life insurance benefit pay .....	.06	.06	.05	.05	.05	.05
Other assistance to veterans .....	.01	.01	.01	.01	.01	.01
Other payments to individuals .....	.01	.00	.00	.01	.01	.01
Business payments to individuals .....	.40	.42	.42	.43	.45	.46
Payments to nonprofit institutions .....	.47	.45	.41	.36	.36	.34
Federal Government payments .....	.14	.14	.13	.10	.10	.10
State and local government payments .....	.22	.21	.18	.16	.16	.14
Business payments .....	.11	.11	.10	.10	.10	.10

Regional Economic Measurement Division, Bureau of Economic Analysis.

TABLE 1C.—1979-84 TRANSFER PAYMENTS AS A PERCENT OF TPI

United States—nonmetro	1979	1980	1981	1982	1983	1984
Transfer payments	15.42	16.95	16.95	18.01	18.65	17.18
Government payments to individuals	14.41	15.91	15.98	17.09	17.69	16.24
Ret., disab. and health ins. benefit pay	10.57	11.36	11.70	12.43	12.94	12.42
Old-age, surv. and disability insur. pay	6.95	7.42	7.62	8.02	8.25	7.80
Railroad retirement and disability pay .....	.33	.34	.33	.34	.34	.31
Federal civil. employee retirement pay .....	.62	.68	.71	.74	.77	.72
State and local govt. employee ret. pay .....	.60	.63	.64	.69	.74	.74
Medical insurance payments	1.70	1.93	2.07	2.31	2.51	2.53
Workers' comp. pay. (Federal and State) .....	.12	.12	.12	.14	.15	.15
Oth. Govt. disab. insur. and ret. pay .....	.25	.24	.21	.19	.19	.16
Unemployment insurance benefit payment .....	.64	1.05	.88	1.29	1.28	.70
State unemployment insur. compensation .....	.57	.93	.80	1.24	1.23	.68
Unemp. comp. for Fed. civ. empl. [UCF] .....	.01	.01	.01	.01	.01	.01
Unemp. compensation for RR employees .....	.01	.02	.02	.03	.02	.01
Unemp. compensation for veterans [UCX] .....	.02	.02	.02	.00	.01	.01
Other unemployment compensation .....	.04	.07	.04	.01	.01	.00
Fed. educ. and trng. asst. pay (excl. vets) .....	.15	.20	.21	.19	.21	.19
Income maintenance benefit payments	1.49	1.73	1.67	1.61	1.70	1.57
SSI, AFDC, general assistance payment .....	.96	1.00	.94	.93	.96	.93
Suppl. security income (SSI) payment .....	.51	.52	.49	.48	.49	.48
Aid to families with dep. child. [AFDC] .....	.42	.45	.42	.41	.43	.41
General assistance payments .....	.02	.03	.03	.03	.03	.04
Food stamps .....	.44	.55	.58	.56	.62	.53
Other income maintenance .....	.10	.19	.14	.13	.13	.11
Veterans benefit payments	1.51	1.53	1.49	1.50	1.50	1.32
Vets pensions and comp. and military ret	1.31	1.36	1.33	1.37	1.38	1.22
Educ. asst. to vets, depend., and surv .....	.14	.11	.09	.07	.06	.05
Veterans life insurance benefit pay .....	.06	.06	.06	.05	.05	.05
Other assistance to veterans .....	.02	.01	.01	.01	.01	.01
Other payments to individuals .....	.05	.04	.03	.06	.06	.04
Business payments to individuals .....	.46	.49	.48	.50	.53	.53
Payments to nonprofit institutions .....	.55	.55	.49	.43	.43	.41
Federal Government payments .....	.18	.19	.17	.13	.14	.13
State and local government payments .....	.24	.24	.21	.18	.18	.16
Business payments .....	.13	.12	.12	.12	.12	.12

Regional Economic Measurement Division, Bureau of Economic Analysis.

TABLE 2A.—1979-84 TRANSFER PAYMENTS AS A PERCENT OF TPI

New England	1979	1980	1981	1982	1983	1984
Transfer payments	13.22	13.56	13.83	14.03	13.84	12.95
Government payments to individuals	12.39	12.73	13.04	13.29	13.08	12.21

TABLE 2A.—1979-84 TRANSFER PAYMENTS AS A PERCENT OF TPI—Continued

New England	1979	1980	1981	1982	1983	1984
Ret., disab. and health ins. benefit pay.....	8.99	9.21	9.70	9.98	9.95	9.61
Old-age, surv. and disability insur. pay.....	5.61	5.75	6.02	6.17	6.02	5.69
Railroad retirement and disability pay.....	.12	.12	.11	.11	.11	.10
Federal civil. employee retirement pay.....	.56	.59	.62	.61	.60	.56
State and local government employee ret. pay.....	.85	.86	.89	.99	.99	.99
Medical insurance payments.....	1.77	1.82	1.99	2.08	2.17	2.21
Workers' comp. pay. (Federal and State).....	.06	.05	.05	.04	.04	.04
Oth. Govt. disab. insur. and ret. pay.....	.02	.02	.02	.02	.02	.02
Unemployment insurance benefit payment.....	.56	.66	.60	.76	.71	.44
State unemployment insur. compensation.....	.49	.58	.55	.74	.69	.43
Unemp. comp. for Fed. civ. empl. [UCF].....	.01	.01	.01	.01	.01	.00
Unemp. compensation for RR employees.....	.00	.00	.00	.01	.01	.00
Unemp. compensation for veterans [UCX].....	.02	.01	.01	.00	.01	.00
Other unemployment compensation.....	.05	.05	.03	.00	.00	.00
Fed. educ. and trng. asst. pay (excl. vets).....	.18	.23	.25	.22	.20	.18
Income maintenance benefit payments.....	1.52	1.54	1.45	1.30	1.23	1.11
SSI, AFDC, general assistance payment.....	1.14	1.11	1.04	.94	.88	.82
Suppl. security income [SSI] payment.....	.32	.31	.29	.28	.28	.27
Aid to families with dep. child. [AFDC].....	.75	.73	.67	.58	.53	.47
General assistance payments.....	.07	.07	.07	.08	.08	.08
Food stamps.....	.29	.30	.31	.27	.26	.21
Other income maintenance.....	.08	.13	.10	.09	.08	.08
Veterans benefit payments.....	1.14	1.09	1.05	1.03	.99	.87
Vets pensions and comp. and military ret.....	.96	.94	.92	.93	.90	.79
Educ. asst. to vets, depend., and surv.....	.11	.07	.06	.04	.04	.03
Veterans life insurance benefit pay.....	.06	.06	.06	.05	.05	.05
Other assistance to veterans.....	.01	.01	.01	.01	.01	.01
Other payments to individuals.....	.00	.00	.00	.00	.00	.00
Business payments to individuals.....	.39	.41	.41	.42	.44	.44
Payments to nonprofit institutions.....	.43	.42	.37	.32	.32	.30
Federal Government payments.....	.14	.14	.13	.09	.10	.09
State and local government payments.....	.20	.19	.16	.14	.14	.12
Business payments.....	.10	.09	.08	.08	.08	.08

Regional Economic Measurement Division, Bureau of Economic Analysis.

TABLE 2B.—1979-84 TRANSFER PAYMENTS AS A PERCENT OF TPI

New England—metro	1979	1980	1981	1982	1983	1984
Transfer payments.....	12.85	13.14	13.38	13.54	13.36	12.50
Government payments to individuals.....	12.04	12.32	12.61	12.82	12.61	11.77
Ret., disab. and health ins. benefit pay.....	8.71	8.91	9.37	9.62	9.61	9.27
Old-age, surv. and disability insur. pay.....	5.38	5.50	5.77	5.90	5.75	5.42
Railroad retirement and disability pay.....	.11	.10	.10	.10	.10	.09
Federal civil. employee retirement pay.....	.52	.54	.57	.56	.55	.51
State and local govt. employee ret. pay.....	.87	.88	.90	.94	1.03	1.03
Medical insurance payments.....	1.75	1.80	1.96	2.04	2.13	2.16
Workers' comp. pay. (Federal and State).....	.06	.06	.05	.05	.04	.04
Oth. Govt. disab. insur. and ret. pay.....	.03	.02	.02	.02	.02	.02
Unemployment insurance benefit payment.....	.55	.64	.58	.75	.69	.43
State unemployment insur. compensation.....	.48	.56	.54	.73	.67	.42
Unemp. comp. for fed. civ. empl. [UCF].....	.01	.01	.01	.01	.01	.00
Unemp. compensation for RR employees.....	.00	.00	.00	.01	.01	.00
Unemp. compensation for veterans [UCX].....	.02	.01	.01	.00	.00	.00
Other unemployment compensation.....	.05	.06	.03	.00	.00	.00
Fed. educ. and trng. asst. pay (excl. vets).....	.18	.23	.25	.22	.20	.18
Income maintenance benefit payments.....	1.54	1.53	1.44	1.28	1.21	1.09
SSI, AFDC, general assistance payment.....	1.17	1.14	1.06	.95	.88	.82
Suppl. security income [SSI] payment.....	.33	.31	.29	.28	.27	.27
Aid to families with dep. child. [AFDC].....	.77	.75	.69	.58	.53	.47
General assistance payments.....	.08	.07	.08	.09	.08	.08

TABLE 2B.—1979-84 TRANSFER PAYMENTS AS A PERCENT OF TPI—Continued

New England—metro	1979	1980	1981	1982	1983	1984
Food stamps .....	.28	.27	.29	.25	.24	.19
Other income maintenance.....	.08	.13	.09	.09	.08	.08
Veterans benefit payments.....	1.06	1.01	.97	.94	.91	.80
Vets pensions and comp. and military ret.....	.88	.86	.85	.85	.81	.71
Educ. assist. to vets, depend., and surv.....	.10	.07	.06	.04	.03	.03
Veterans life insurance benefit pay.....	.06	.06	.06	.05	.05	.05
Other assistance to veterans .....	.01	.01	.01	.01	.01	.01
Other payments to veterans.....	.00	.00	.00	.00	.00	.00
Business payments to individuals.....	.39	.41	.41	.42	.44	.44
Payments to nonprofit institutions.....	.42	.41	.36	.30	.30	.29
Federal Government payments.....	.14	.14	.13	.09	.09	.09
State and local government payments.....	.19	.18	.15	.13	.13	.12
Business payments .....	.09	.09	.08	.08	.08	.08

Regional Economic Measurement Division, Bureau of Economic Analysis.

TABLE 2C.—1979-84 TRANSFER PAYMENTS AS A PERCENT OF TPI

New England—nonmetro	1979	1980	1981	1982	1983	1984
Transfer payments.....	15.56	16.27	16.68	17.15	16.94	15.89
Government payments to individuals.....	14.63	15.34	15.80	16.32	16.08	15.05
Ret. disab. and health ins. benefit pay.....	10.79	11.16	11.80	12.29	12.16	11.78
Old-age, sur. and disability insur. pay.....	7.12	7.35	7.61	7.90	7.81	7.45
Railroad retirement and disability pay.....	.19	.19	.18	.18	.18	.16
Federal civil, employee retirement pay.....	.86	.91	.94	.95	.94	.88
State and local govt. employee ret. pay.....	.71	.72	.87	.88	.76	.76
Medical insurance payments.....	1.86	1.96	2.16	2.33	2.44	2.49
Workers' comp. pay. (Federal and State).....	.03	.02	.03	.04	.03	.03
Oth. Gov't. disab. insur. and ret. pay.....	.02	.01	.01	.01	.01	.01
Unemployment insurance benefit payment.....	.62	.77	.70	.85	.83	.52
State unemployment insur. compensation.....	.54	.69	.65	.84	.81	.51
Unemp. comp. for. fed. civ. empl. [UCF].....	.01	.01	.01	.01	.01	.00
Unemp. compensation for RR employees.....	.00	.01	.00	.01	.01	.00
Unemp. compensation for veterans [UCX].....	.02	.02	.02	.00	.01	.00
Other unemployment compensation.....	.04	.04	.02	.00	.00	.00
Fed. educ. and trng. asst. pay (excl. vets).....	.16	.21	.24	.22	.19	.18
Income maintenance benefit payments.....	1.42	1.58	1.50	1.40	1.36	1.22
SSI, AFDC, general assistance payment.....	.95	.96	.91	.87	.85	.81
Suppl. security income [SSI] payment.....	.30	.30	.29	.29	.29	.29
Aid to families with dep. child. [AFDC].....	.60	.62	.58	.54	.52	.48
General assistance payments.....	.04	.05	.04	.05	.05	.04
Food stamps.....	.40	.45	.47	.42	.40	.32
Other income maintenance.....	.08	.18	.12	.11	.10	.09
Veterans benefit payments.....	1.64	1.62	1.57	1.56	1.54	1.35
Vets pensions and comp. and military ret.....	1.44	1.45	1.43	1.45	1.43	1.25
Educ. asst. to vets, depend., and surv.....	.13	.09	.07	.05	.05	.04
Veterans life insurance benefit pay.....	.06	.06	.06	.06	.05	.05
Other assistance to veterans .....	.01	.01	.01	.01	.01	.01
Other payments to individuals.....	.00	.00	.00	.00	.01	.01
Business payments to individuals.....	.41	.43	.43	.44	.46	.47
Payments to nonprofit institutions.....	.52	.50	.45	.39	.40	.38
Federal government payments.....	.17	.17	.15	.11	.12	.11
State and local government payments.....	.25	.24	.21	.20	.20	.18
Business payments .....	.10	.09	.09	.08	.08	.08

Regional Economic Measurement Division, Bureau of Economic Analysis.

TABLE 3A.—1979-84 TRANSFER PAYMENTS AS A PERCENT OF TPI

	Midwest	1979	1980	1981	1982	1983	1984
Transfer payments.....	14.13	14.76	14.93	15.41	15.43	14.61	
Government payments to individuals.....	13.07	13.69	13.93	14.46	14.45	13.64	
Ret. disab. and health ins. benefit pay.....	9.53	9.91	10.40	10.82	10.87	10.61	
Old-age, sur. and disability insur. pay.....	5.65	5.84	6.13	6.33	6.25	5.95	
Railroad retirement and disability pay.....	.22	.22	.21	.22	.21	.19	
Federal civil, employee retirement pay.....	.74	.79	.84	.85	.84	.80	
State and local govt. employee ret. pay.....	.98	.98	.99	1.04	1.07	1.11	
Medical insurance payments.....	1.66	1.81	1.97	2.15	2.26	2.33	
Workers' comp. pay (Federal and State).....	.11	.10	.11	.11	.11	.12	
Oth. Gov't disab. insur. and ret. pay.....	.18	.17	.15	.13	.12	.11	
Unemployment insurance benefit payment.....	.76	.92	.76	.99	.99	.62	
State unemployment insur. compensation.....	.67	.80	.68	.95	.96	.60	
Unemp. comp. for fed. civ. empl. (UCF).....	.01	.01	.01	.01	.01	.01	
Unemp. compensation for RR employees.....	.01	.01	.01	.03	.02	.01	
Unemp. compensation for veterans (UCX).....	.02	.02	.01	.00	.01	.00	
Other unemployment compensation.....	.05	.09	.04	.00	.00	.00	
Fed. educ. and trng. asst. pay (excl. vets.).....	.20	.26	.29	.26	.26	.24	
Income maintenance benefit payments.....	1.72	1.77	1.68	1.60	1.57	1.49	
SSI, AFDC, general assistance payment.....	1.32	1.27	1.16	1.14	1.10	1.08	
Suppl. security income (SSI) payment.....	.33	.32	.32	.31	.31	.31	
Aid to families with dep. child. (AFDC).....	.82	.77	.68	.66	.63	.60	
General assistance payments.....	.18	.18	.17	.18	.17	.18	
Food stamps.....	.33	.37	.41	.36	.37	.33	
Other income maintenance.....	.07	.14	.11	.09	.09	.08	
Veterans benefit payments.....	.85	.82	.80	.78	.76	.68	
Vets pensions and comp. and military ret.....	.72	.71	.70	.69	.68	.61	
Educ. asst. to vets, depend., and surv.....	.07	.05	.04	.03	.03	.02	
Veterans life insurance benefit pay.....	.06	.06	.05	.05	.05	.05	
Other assistance to veterans.....	.01	.01	.01	.00	.00	.00	
Other payments to individuals.....	.00	.00	.00	.00	.00	.00	
Business payments to individuals.....	.41	.43	.43	.45	.47	.47	
Payments to nonprofit institutions.....	.66	.63	.57	.51	.51	.49	
Federal government payments.....	.14	.14	.13	.09	.10	.10	
State and local government payments.....	.39	.36	.32	.29	.30	.28	
Business payments.....	.13	.13	.12	.12	.12	.12	

Regional Economic Measurement Division, Bureau of Economic Analysis.

TABLE 3B.—1979-84 TRANSFER PAYMENTS AS A PERCENT OF TPI

	Midwest—metro	1979	1980	1981	1982	1983	1984
Transfer payments.....	13.87	14.46	14.61	15.06	15.05	14.26	
Government payments to individuals.....	12.83	13.42	13.64	14.12	14.09	13.32	
Ret., disab. and health ins. benefit pay.....	9.32	9.69	10.16	10.56	10.60	10.35	
Old-age, surv. and disability insur. pay.....	5.49	5.67	5.95	6.13	6.05	5.76	
Railroad retirement and disability pay.....	.20	.20	.20	.20	.19	.18	
Federal civil, employee retirement pay.....	.75	.81	.85	.86	.85	.80	
State and local govt. employee ret. pay.....	.97	.97	.98	1.02	1.05	1.09	
Medical insurance payments.....	1.65	1.80	1.95	2.13	2.24	2.31	
Workers' comp. pay. (Federal and State).....	.11	.11	.11	.11	.11	.12	
Oth. Gov't disab. insur. and ret. pay.....	.15	.14	.12	.11	.11	.10	
Unemployment insurance benefit payment.....	.74	.89	.73	.95	.94	.59	
State unemployment insur. compensation.....	.65	.77	.66	.90	.91	.58	
Unemp. comp. for Fed. civ. empl. (UCF).....	.01	.01	.01	.01	.01	.01	
Unemp. compensation for RR employees.....	.01	.01	.01	.03	.02	.01	
Unemp. compensation for veterans (UCX).....	.01	.02	.01	.00	.01	.00	
Other unemployment compensation.....	.05	.09	.04	.00	.00	.00	
Fed. educ. and trng. asst. pay (excl. vets.).....	.20	.26	.29	.26	.26	.24	
Income maintenance benefit payments.....	1.74	1.79	1.68	1.60	1.56	1.48	
SSI, AFDC, general assistance payment.....	1.34	1.29	1.17	1.15	1.11	1.08	
Suppl. security income (SSI) payment.....	.32	.32	.31	.30	.30	.30	

TABLE 3B.—1979-84 TRANSFER PAYMENTS AS A PERCENT OF TPI—Continued

Midwest—metro	1979	1980	1981	1982	1983	1984
Aid to families with dep. child, [AFDC].....	.84	.79	.69	.67	.64	.61
General assistance payments.....	.18	.18	.17	.18	.17	.18
Food stamps.....	.33	.37	.41	.36	.36	.32
Other income maintenance.....	.07	.13	.10	.09	.09	.08
Veterans benefit payments.....	.82	.79	.77	.75	.73	.65
Vets pensions and comp. and military ret.....	.69	.67	.67	.66	.65	.58
Educ. asst. to vets, depend., and surv.....	.07	.05	.04	.03	.02	.02
Veterans life insurance benefit pay.....	.06	.06	.05	.05	.05	.05
Other assistance to veterans.....	.01	.01	.01	.00	.00	.00
Other payments to individuals.....	.00	.00	.00	.00	.00	.00
Business payments to individuals.....	.40	.42	.42	.44	.46	.46
Payments to nonprofit institutions.....	.64	.62	.56	.50	.50	.48
Federal Government payments.....	.13	.14	.13	.09	.09	.09
State and local government payments.....	.38	.35	.31	.28	.28	.27
Business payments.....	.13	.13	.12	.12	.12	.12

Regional Economic Measurement Division, Bureau of Economic Analysis.

TABLE 3C.—1979-84 TRANSFER PAYMENTS AS A PERCENT OF TPI

Midwest—nonmetro	1979	1980	1981	1982	1983	1984
Transfer payments.....	17.47	18.64	18.99	20.07	20.48	19.13
Government payments to individuals.....	16.09	17.25	17.69	18.82	19.18	17.84
Ret., disab. and health ins. benefit pay.....	12.23	12.84	13.48	14.13	14.37	14.03
Old-age, surv. and disability insur. pay.....	7.69	8.09	8.52	8.91	8.90	8.54
Railroad retirement and disability pay.....	.45	.46	.45	.46	.46	.42
Federal civil. employee retirement pay.....	.56	.61	.66	.69	.70	.68
State and local govt. employee ret. pay.....	1.10	1.11	1.16	1.20	1.28	1.32
Medical insurance payments.....	1.77	1.97	2.15	2.38	2.56	2.64
Workers' comp. pay. (Federal and State).....	.10	.09	.09	.09	.10	.10
Other Govt. disab. insur. and ret. pay.....	.54	.50	.44	.39	.38	.33
Unemployment insurance benefit payment.....	1.03	1.35	1.09	1.61	1.73	.92
State unemployment insur. compensation.....	.94	1.23	1.01	1.56	1.69	.90
Unemp. comp. for Fed. civ. empl. [UCF].....	.01	.01	.01	.01	.01	.01
Unemp. compensation for RR employees.....	.01	.01	.01	.03	.02	.01
Unemp. compensation for veterans [UCX].....	.02	.03	.02	.00	.01	.01
Other unemployment compensation.....	.06	.07	.04	.00	.00	.00
Fed. educ. and trng. asst. pay (excl. vets).....	.19	.26	.32	.31	.28	.27
Income maintenance benefit payments.....	1.40	1.57	1.57	1.57	1.61	1.55
SSI, AFDC, general assistance payment.....	1.01	1.02	.99	1.03	1.02	1.02
Supp. security income [SSI] payment.....	.39	.38	.36	.35	.36	.36
Aid to families with dep. child, [AFDC].....	.50	.50	.47	.49	.49	.47
General assistance payments.....	.12	.14	.16	.19	.17	.18
Food stamps.....	.29	.37	.45	.41	.46	.42
Other income maintenance.....	.10	.18	.14	.13	.12	.11
Veterans benefit payments.....	1.23	1.24	1.22	1.20	1.20	1.08
Vets pensions and comp. and military ret.....	1.09	1.11	1.11	1.10	1.10	.98
Educ. asst. to vets, depend., and surv.....	.08	.06	.05	.03	.03	.03
Veterans life insurance benefit pay.....	.06	.07	.06	.06	.06	.06
Other assistance to veterans.....	.01	.01	.01	.01	.01	.01
Other payments to individuals.....	.00	.00	.00	.00	.00	.00
Business payments to individuals.....	.51	.55	.54	.57	.60	.61
Payments to nonprofit institutions.....	.86	.84	.76	.68	.70	.67
Federal Government payments.....	.18	.19	.17	.13	.13	.13
State and local government payments.....	.54	.51	.45	.42	.43	.41
Business payments.....	.14	.14	.14	.13	.13	.14

Regional Economic Measurement Division, Bureau of Economic Analysis.

TABLE 4A.—1979-84 TRANSFER PAYMENTS AS A PERCENT OF TPI

Great Lakes	1979	1980	1981	1982	1983	1984
Transfer payments.....	11.71	13.59	13.79	15.04	15.37	14.04
Government payments to individuals.....	10.82	12.69	12.92	14.20	14.50	13.18
Ret., disab. and health ins. benefit pay.....	8.05	8.71	9.31	10.12	10.48	10.15
Old-age, surv. and disability insur. pay.....	5.17	5.53	5.92	6.37	6.49	6.14
Railroad retirement and disability pay.....	.22	.23	.23	.24	.24	.22
Federal civil. employee retirement pay.....	.33	.36	.39	.41	.42	.40
State and local govt. employee ret. pay.....	.64	.67	.70	.77	.83	.85
Medical insurance payments.....	1.47	1.67	1.85	2.07	2.23	2.27
Workers' comp. pay. (Federal and State).....	.14	.18	.15	.20	.22	.22
Oth. Govt. disab. insur. and ret. pay.....	.07	.07	.06	.06	.06	.05
Unemployment insurance benefit payment.....	.66	1.63	1.18	1.62	1.45	.65
State unemployment insur. compensation.....	.59	1.20	1.01	1.57	1.41	.62
Unemp. comp. for Fed. civ. empl. [HCF].....	.01	.01	.01	.01	.00	.00
Unemp. compensation for RR employees.....	.01	.02	.02	.03	.02	.01
Unemp. compensation for veterans (UCX).....	.01	.02	.02	.00	.01	.00
Other unemployment compensation.....	.03	.38	.13	.01	.00	.00
Fed. educ. and trng. asst. pay (excl. vets).....	.13	.18	.20	.19	.21	.20
Income maintenance benefit payments.....	1.27	1.48	1.55	1.57	1.67	1.58
SSI, AFDC, general assistance payment.....	.95	1.02	1.04	1.04	1.09	1.06
Suppl. security income (SSI) payment.....	.22	.22	.22	.22	.22	.23
Aid to families with dep. child (AFDC).....	.65	.70	.70	.69	.72	.67
General assistance payments.....	.08	.10	.12	.13	.15	.16
Food stamps.....	.26	.33	.41	.43	.49	.44
Other income maintenance.....	.05	.12	.10	.09	.09	.08
Veterans benefit payments.....	.69	.68	.68	.69	.68	.60
Vets pensions and comp. and military ret.....	.55	.56	.57	.59	.59	.52
Educ. asst. to vets, depend., and surv.....	.08	.07	.06	.05	.04	.03
Veterans life insurance benefit pay.....	.05	.05	.05	.05	.04	.04
Other assistance to veterans.....	.01	.01	.01	.01	.00	.00
Other payments to individuals.....	.03	.00	.00	.00	.00	.00
Business payments to individuals.....	.43	.45	.45	.47	.50	.50
Payments to nonprofit institutions.....	.46	.45	.42	.37	.37	.36
Federal Government payments.....	.14	.15	.14	.10	.11	.11
State and local government payments.....	.20	.20	.17	.16	.15	.14
Business payments.....	.12	.11	.11	.11	.11	.11

Regional Economic Measurement Division, Bureau of Economic Analysis.

TABLE 4B.—1979-84 TRANSFER PAYMENTS AS A PERCENT OF TPI

Great Lakes—metro	1979	1980	1981	1982	1983	1984
Transfer payments.....	11.12	12.92	13.12	14.30	14.57	13.39
Government payments to individuals.....	10.27	12.05	12.29	13.49	13.73	12.56
Ret., disab. and health ins. benefit pay.....	7.54	8.14	8.74	9.53	9.85	9.60
Old-age, surv. and disability insur. pay.....	4.77	5.08	5.47	5.89	5.99	5.70
Railroad retirement and disability pay.....	.19	.20	.20	.21	.21	.19
Federal civil. employee retirement pay.....	.32	.35	.38	.40	.41	.39
State and local govt. employee ret. pay.....	.65	.67	.70	.77	.83	.85
Medical insurance payments.....	1.43	1.62	1.80	2.02	2.16	2.21
Workers' comp. pay. (Federal and State).....	.15	.18	.16	.21	.22	.23
Oth. Govt. disab. insur. and ret. pay.....	.04	.04	.04	.04	.03	.03
Unemployment insurance benefit payment.....	.62	1.61	1.15	1.54	1.37	.60
State unemployment insur. compensation.....	.56	1.14	.96	1.49	1.33	.58
Unemp. comp. for Fed. civ. empl. (UCF).....	.01	.01	.01	.01	.00	.00
Unemp. compensation for RR employees.....	.01	.02	.02	.03	.02	.01
Unemp. compensation for veterans (UCX).....	.01	.02	.01	.00	.01	.00
Other unemployment compensation.....	.03	.43	.14	.01	.00	.00
Fed. educ. and trng. asst. pay (excl. vets).....	.13	.18	.20	.19	.21	.20
Income maintenance benefit payments.....	1.31	1.51	1.58	1.60	1.69	1.61
SSI, AFDC, general assistance payment.....	.99	1.06	1.08	1.08	1.12	1.10
Suppl. security income (SSI) payment.....	.20	.20	.21	.21	.21	.22

TABLE 4B.—1979-84 TRANSFER PAYMENTS AS A PERCENT OF TPI—Continued

Great Lakes—metro	1979	1980	1981	1982	1983	1984
Aid to families with dep. child [AFDC].....	.70	.74	.73	.72	.74	.70
General assistance payments.....	.10	.12	.14	.15	.17	.18
Food stamps.....	.27	.34	.42	.43	.49	.44
Other income maintenance.....	.05	.11	.09	.08	.08	.07
Veterans benefit payments.....	.63	.62	.61	.63	.61	.54
Vets pensions and comp. and military ret.....	.50	.50	.50	.53	.52	.47
Educ. asst. to vets, depend., and surv.....	.08	.07	.06	.05	.04	.03
Veterans life insurance benefit pay.....	.04	.05	.05	.05	.04	.04
Other assistance to veterans.....	.01	.01	.01	.01	.00	.00
Other payments to individuals.....	.03	.00	.00	.00	.00	.00
Business payments to individuals.....	.42	.43	.43	.46	.48	.49
Payments to nonprofit institutions.....	.44	.43	.40	.36	.35	.34
Federal Government payments.....	.13	.14	.13	.10	.10	.10
State and local government payments.....	.19	.19	.16	.15	.14	.13
Business payments.....	.11	.10	.10	.11	.11	.11

Regional Economic Measurement Division, Bureau of Economic Analysis.

TABLE 4C.—1979-1984 TRANSFER PAYMENTS AS A PERCENT OF TPI

Great Lakes—nonmetro	1979	1980	1981	1982	1983	1984
Transfer payments.....	14.23	16.49	16.64	18.17	18.83	16.78
Government payments to individuals.....	13.21	15.44	15.64	17.21	17.82	15.81
Ret., disab. and health ins. benefit pay.....	10.22	11.18	11.73	12.64	13.24	12.46
Old-age, surv. and disability insur. pay.....	6.87	7.47	7.84	8.40	8.67	8.01
Railroad retirement and disability pay.....	.35	.37	.37	.39	.39	.35
Federal civil. employee retirement pay.....	.39	.43	.45	.48	.49	.45
State and local govt. employee ret. pay.....	.64	.67	.70	.76	.84	.83
Medical insurance payments.....	1.65	1.90	2.08	2.31	2.52	2.51
Workers; comp. pay. (Federal and State).....	.12	.16	.13	.17	.18	.18
Oth. Govt. Disab. insur. and ret. pay.....	.19	.18	.16	.15	.14	.12
Unemployment insurance benefit payment.....	.80	1.75	1.34	1.95	1.79	.85
State unemployment insur. compensation.....	.74	1.50	1.23	1.90	1.74	.82
Unemp. comp. for Fed. civ. empl. [UCF].....	.00	.01	.01	.01	.01	.00
Unemp. compensation for RR employees.....	.01	.03	.03	.04	.03	.01
Unemp. compensation for veterans [UCX].....	.02	.02	.02	.01	.01	.01
Other unemployment compensation.....	.03	.19	.07	.01	.00	.00
Fed. educ. and trng. asst. pay (excl. vets).....	.13	.18	.21	.20	.21	.20
Income maintenance benefit payments.....	1.07	1.35	1.40	1.43	1.59	1.45
SSI, AFDC, general assistance payment.....	.76	.86	.87	.88	.95	.90
Suppl. security income [SSI] payment.....	.29	.29	.27	.26	.27	.26
Aid to families with dep. child. [AFDC].....	.45	.53	.56	.56	.61	.56
General assistance payments.....	.03	.04	.05	.06	.07	.08
Food stamps.....	.23	.32	.39	.42	.51	.44
Other income maintenance.....	.07	.17	.13	.13	.13	.10
Veterans benefit payments.....	.95	.97	.95	.97	.98	.84
Vets pensions and comp. and military ret.....	.81	.84	.83	.87	.88	.76
Educ. asst. to vets, depend., and sur.....	.09	.07	.06	.05	.04	.03
Veterans life insurance benefit pay.....	.05	.05	.05	.05	.05	.04
Other assistance to veterans.....	.01	.01	.01	.01	.01	.00
Other payments to individuals.....	.04	.01	.01	.01	.01	.00
Business payments to individuals.....	.48	.51	.50	.52	.56	.55
Payments to nonprofit institutions.....	.55	.55	.50	.44	.45	.42
Federal Government payments.....	.17	.18	.16	.12	.13	.13
State and local government payments.....	.24	.24	.21	.19	.19	.17
Business payments.....	.14	.13	.13	.13	.13	.13

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TABLE 5A.—1979-84 TRANSFER PAYMENTS AS A PERCENT OF TPI

Plains	1979	1980	1981	1982	1983	1984
Transfer payments.....	11.86	13.09	13.03	13.89	14.31	13.08
Government payments to individuals.....	11.02	12.22	12.21	13.11	13.50	12.30
Ret., disab. and health ins. benefit pay.....	8.56	9.20	9.43	10.13	10.50	9.89
Old-age, surv. and disability insur. pay.....	5.64	6.00	6.16	6.58	6.72	6.21
Railroad retirement and disability pay.....	.37	.38	.37	.38	.38	.34
Federal civil. employee retirement pay.....	.52	.57	.59	.62	.64	.59
State and local govt. employee ret. pay.....	.39	.41	.39	.42	.46	.45
Medical insurance payments.....	1.57	1.78	1.86	2.07	2.24	2.24
Workers' comp. pay. (Federal and State).....	.05	.05	.05	.05	.05	.05
Oth. Govt. disab. insur. and ret. pay.....	.02	.02	.01	.01	.01	.01
Unemployment insurance benefit payment.....	.43	.80	.62	.85	.79	.44
State unemployment insur. compensation.....	.36	.65	.54	.81	.75	.41
Unemp. comp. for fed. civ. empl. [UCF].....	.00	.01	.01	.01	.01	.00
Unemp. compensation for RR employees.....	.01	.02	.02	.03	.03	.01
Unemp. compensation for veterans [UCX].....	.01	.02	.01	.00	.01	.00
Other unemployment compensation.....	.03	.11	.04	.00	.00	.00
Fed. educ. and trng. asst. pay (excl. vets).....	.16	.22	.23	.21	.24	.22
Income maintenance benefit payments.....	.84	.98	.96	.92	.99	.90
SSI, AFDC, general assistance payment.....	.62	.65	.63	.59	.63	.59
Suppl. security income [SSI] payment.....	.19	.19	.18	.18	.19	.18
Aid to families with dep. child. [AFDC].....	.41	.44	.42	.39	.42	.38
General assistance payments.....	.02	.02	.03	.02	.03	.03
Food stamps.....	.18	.24	.27	.27	.30	.26
Other income maintenance.....	.05	.09	.07	.06	.06	.05
Veterans benefit payments.....	1.02	1.00	.96	.98	.97	.84
Vets pensions and comp. and military ret.....	.83	.84	.82	.85	.86	.74
Educ assist to vets, depend., and surv.....	.13	.10	.08	.07	.05	.04
Veterans life insurance benefit pay.....	.06	.05	.05	.05	.05	.05
Other assistance to individuals.....	.01	.01	.01	.01	.01	.00
Other payments to individuals.....	.02	.01	.01	.01	.01	.01
Business payments to individuals.....	.40	.43	.42	.43	.47	.46
Payments to nonprofit institutions.....	.43	.44	.40	.34	.34	.32
Federal Government payments.....	.15	.16	.14	.10	.11	.11
State and local government payments.....	.18	.18	.16	.14	.13	.12
Business payments.....	.11	.10	.10	.10	.10	.10

Regional Economic Measurement Division, Bureau of Economic Analysis.

TABLE 5B.—1979-84 TRANSFER PAYMENTS AS A PERCENT OF TPI

Plains—metro	1979	1980	1981	1982	1983	1984
Transfer payments.....	10.50	11.42	11.60	12.14	12.29	11.39
Government payments to individuals.....	9.71	10.62	10.83	11.41	11.54	10.65
Ret., disab. and health ins. benefit pay.....	7.39	7.78	8.16	8.63	8.79	8.43
Old-age, surv. and disability insur. pay.....	4.65	4.85	5.10	5.37	5.39	5.08
Railroad retirement and disability pay.....	.34	.35	.35	.35	.35	.31
Federal civil. employee retirement pay.....	.55	.59	.62	.64	.64	.61
State and local govt. employee ret. pay.....	.40	.40	.39	.42	.45	.45
Medical insurance payments.....	1.38	1.53	1.63	1.79	1.90	1.92
Workers' comp. pay. (Federal and State).....	.06	.05	.05	.05	.05	.05
Oth. Govt. disab. insur. and ret. pay.....	.01	.01	.01	.01	.01	.01
Unemployment insurance benefit payment.....	.41	.82	.64	.84	.75	.40
State unemployment insur. compensation.....	.34	.62	.54	.79	.71	.38
Unemp. comp. for fed. civ. empl. [UCF].....	.01	.01	.01	.01	.01	.00
Unemp. compensation for RR employees.....	.01	.02	.02	.03	.02	.01
Unemp. compensation for veterans [UCX].....	.01	.01	.01	.00	.01	.00
Other unemployment compensation.....	.04	.16	.07	.00	.00	.00
Fed. educ. and trng. asst. pay (excl. vets).....	.15	.20	.21	.19	.21	.20
Income maintenance benefit payments.....	.83	.94	.95	.89	.94	.87
SSI, AFDC, general assistance payment.....	.62	.65	.64	.59	.62	.60
Suppl. security income [SSI] payment.....	.15	.15	.15	.15	.15	.15

TABLE 5B.—1979-84 TRANSFER PAYMENTS AS A PERCENT OF TPI—Continued

Plains—metro	1979	1980	1981	1982	1983	1984
Aid to families with dep. child. [AFDC].....	.45	.47	.46	.42	.44	.41
General assistance payments.....	.02	.03	.03	.03	.03	.03
Food stamps.....	.18	.22	.26	.26	.28	.24
Other income maintenance.....	.03	.07	.05	.04	.04	.04
Veterans benefit payments.....	.93	.88	.87	.87	.85	.74
Vets pensions and comp. and military ret.....	.73	.73	.73	.74	.74	.65
Educ. asst. to vets, depend., and surv.....	.13	.10	.09	.07	.06	.04
Veterans life insurance benefit pay.....	.06	.05	.05	.05	.05	.05
Other assistance to veterans.....	.01	.01	.01	.01	.01	.00
Other payments to individuals.....	.00	.00	.00	.00	.00	.00
Business payments to individuals.....	.39	.41	.40	.42	.44	.44
Payments to nonprofit institutions.....	.40	.39	.36	.31	.31	.29
Federal Government payments.....	.13	.14	.13	.10	.10	.10
State and local government payments.....	.16	.16	.15	.13	.12	.11
Business payments.....	.10	.09	.09	.09	.09	.09

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TABLE 5C.—1979-84 TRANSFER PAYMENTS AS A PERCENT OF TPI

Plains—nonmetro	1979	1980	1981	1982	1983	1984
Transfer payments.....	13.83	15.64	15.08	16.52	17.50	15.63
Government payments to individuals.....	12.92	14.66	14.21	15.67	16.59	14.78
Ret., disab. and health ins. benefit pay.....	10.27	11.39	11.26	12.41	13.19	12.09
Old-age, surv. and disability insur. pay.....	7.08	7.77	7.68	8.42	8.81	7.93
Railroad retirement and disability pay.....	.40	.43	.40	.43	.44	.38
Federal civil. employee retirement pay.....	.49	.55	.55	.59	.62	.56
State and local govt. employee ret. pay.....	.38	.41	.38	.42	.47	.44
Medical insurance payments.....	1.85	2.16	2.19	2.49	2.79	2.71
Workers' comp. pay. (Federal and State).....	.04	.04	.04	.04	.04	.04
Oth. Govt. disab. insur. and ret. pay.....	.03	.03	.02	.02	.02	.02
Unemployment insurance benefit payment.....	.45	.77	.59	.87	.86	.49
State unemployment insur. compensation.....	.39	.70	.54	.83	.81	.47
Unemp. comp. for Fed. civ. empl. [UCF].....	.00	.01	.01	.01	.01	.00
Unemp. compensation for rr employees.....	.01	.02	.02	.04	.03	.01
Unemp. compensation for veterans [UCX].....	.01	.02	.01	.00	.01	.00
Other unemployment compensation.....	.02	.02	.01	.00	.00	.00
Fed. educ. and trng. asst pay (excl. vets).....	.18	.25	.26	.25	.27	.25
Income maintenance benefit payments.....	.85	1.05	.98	.97	1.08	.95
SSI, AFDC, general assistance payment.....	.61	.66	.61	.60	.65	.59
Suppl. security income [SSI] payment.....	.25	.25	.23	.23	.24	.23
Aid to families with dep. child. [AFDC].....	.34	.40	.36	.35	.39	.34
General assistance payments.....	.01	.02	.02	.02	.02	.02
Food stamps.....	.18	.25	.27	.29	.34	.28
Other income maintenance.....	.06	.14	.10	.09	.09	.07
Veterans benefit payments.....	1.15	1.18	1.09	1.14	1.16	.98
Vets pensions and comp. and military ret.....	.96	1.02	.95	1.01	1.05	.89
Educ. asst. to vets, depend., and surv.....	.12	.09	.08	.06	.05	.04
Veterans life insurance benefit pay.....	.06	.06	.06	.05	.05	.05
Other assistance to veterans.....	.01	.01	.01	.01	.01	.00
Other payments to individuals.....	.03	.03	.03	.03	.03	.03
Business payments to individuals.....	.42	.47	.44	.46	.51	.48
Payments to nonprofit institutions.....	.49	.51	.44	.39	.40	.36
Federal Government payments.....	.16	.18	.15	.12	.13	.12
State and local government payments.....	.20	.21	.18	.16	.16	.14
Business payments.....	.12	.12	.11	.11	.11	.11

Regional Economic Measurement Division, Bureau of Economic Analysis.

TABLE 6A.—1979-84 TRANSFER PAYMENTS AS A PERCENT OF TPI

	1979	1980	1981	1982	1983	1984
Transfer payments.....	14.45	15.36	15.47	15.98	16.16	15.03
Government payments to individuals.....	13.58	14.49	14.65	15.21	15.37	14.25
Ret., disab. and health ins. benefit pay.....	9.56	10.06	10.44	10.89	11.08	10.69
Old-age, surv. and disability insur. pay.....	6.04	6.30	6.47	6.70	6.76	6.43
Railroad retirement and disability pay.....	.26	.26	.25	.25	.25	.23
Federal civil. employee retirement pay.....	.92	.99	1.03	1.05	1.05	.99
State and local govt. employee ret. pay.....	.49	.51	.53	.56	.59	.60
Medical insurance payments.....	1.57	1.73	1.91	2.10	2.20	2.23
Workers' comp. pay. (Federal and State).....	.08	.08	.09	.09	.10	.10
Oth. Govt. disab. insur. and ret. pay.....	.20	.18	.16	.14	.14	.12
Unemployment insurance benefit payment.....	.41	.63	.53	.80	.78	.43
State unemployment insur. compensation.....	.35	.54	.48	.77	.75	.41
Unemp. comp. for Fed. civ. empl. (UCF).....	.01	.01	.01	.01	.01	.01
Unemp. compensation for RR employees.....	.01	.01	.01	.01	.01	.01
Unemp. compensation for veterans (UCX).....	.02	.02	.01	.00	.01	.00
Other unemployment compensation.....	.03	.05	.02	.00	.00	.00
Fed. educ. and trng. asst. pay (excl. vets).....	.14	.18	.17	.13	.17	.14
Income maintenance benefit payments.....	1.44	1.60	1.55	1.43	1.42	1.30
SSI, AFDC, general assistance payment.....	.81	.81	.78	.75	.74	.71
Suppl. security income (SSI) payment.....	.50	.50	.49	.48	.47	.47
Aid to families with dep. child. (AFDC).....	.31	.31	.28	.26	.26	.24
General assistance payments.....	.00	.00	.00	.00	.00	.00
Food stamps.....	.55	.64	.66	.58	.59	.51
Other income maintenance.....	.08	.15	.12	.10	.10	.08
Veterans benefit payments.....	2.03	2.01	1.96	1.96	1.91	1.68
Vets pensions and comp. and military ret.....	1.76	1.79	1.76	1.79	1.77	1.56
Educ. asst. to vets, depend., and surv.....	.18	.14	.12	.10	.07	.06
Veterans life insurance benefit pay.....	.06	.07	.06	.06	.06	.05
Other assistance to veterans.....	.02	.02	.02	.02	.01	.01
Other payments to individuals.....	.00	.00	.00	.00	.00	.00
Business payments to individuals.....	.41	.43	.42	.44	.46	.46
Payments to nonprofit institutions.....	.45	.45	.39	.33	.33	.32
Federal Government payments.....	.17	.17	.16	.12	.12	.12
State and local government payments.....	.18	.17	.15	.12	.12	.11
Business payments.....	.11	.10	.09	.09	.09	.09

Regional Economic Measurement Division, Bureau of Economic Analysis.

TABLE 6B.—1979-84 TRANSFER PAYMENTS AS A PERCENT OF TPI

	1979	1980	1981	1982	1983	1984
Transfer payments.....	13.28	13.97	14.11	14.56	14.64	13.66
Government payments to individuals.....	12.48	13.17	13.36	13.85	13.90	12.94
Ret., Disab. and health ins. benefit pay.....	8.88	9.27	9.63	10.06	10.18	9.84
Old-age, surv. and disability insur. pay.....	5.49	5.68	5.83	6.03	6.06	5.78
Railroad retirement and disability pay.....	.25	.24	.24	.24	.23	.21
Federal civil. employee retirement pay.....	1.02	1.09	1.13	1.15	1.13	1.07
State and local govt. employee ret. pay.....	.47	.48	.50	.53	.56	.57
Medical insurance payments.....	1.50	1.63	1.79	1.97	2.06	2.08
Workers' comp. pay. (Federal and State).....	.08	.08	.08	.09	.09	.09
Oth. Govt. disab. insur. and ret. pay.....	.07	.07	.06	.05	.05	.04
Unemployment insurance benefit payment.....	.31	.49	.41	.62	.61	.34
State unemployment insur. compensation.....	.26	.41	.37	.59	.58	.32
Unemp. comp. for Fed. civ. empl. (UCF).....	.01	.01	.01	.01	.01	.01
Unemp. compensation for RR employees.....	.01	.01	.01	.01	.01	.01
Unemp. compensation for veterans (UCX).....	.02	.02	.01	.00	.01	.00
Other unemployment compensation.....	.02	.05	.02	.00	.00	.00
Fed. educ. and trng. asst. pay (excl. vets).....	.14	.18	.16	.13	.16	.14
Income maintenance benefit payments.....	1.11	1.23	1.19	1.09	1.07	.97
SSI, AFDC, general assistance payment.....	.61	.61	.59	.56	.55	.53
Suppl. security income (SSI) payment.....	.34	.34	.34	.33	.33	.33

TABLE 6B.—1979-84 TRANSFER PAYMENTS AS A PERCENT OF TPI—Continued

Southeast—metro	1979	1980	1981	1982	1983	1984
Aid to families with dep. child. (AFDC).....	.26	.27	.24	.23	.22	.20
General assistance payments.....	.01	.00	.00	.00	.00	.00
Food stamps.....	.44	.51	.52	.45	.44	.38
Other income maintenance.....	.06	.11	.08	.07	.07	.06
Veterans benefit payments.....	2.04	2.01	1.95	1.95	1.88	1.65
Vets pensions and comp. and military ret.....	1.77	1.78	1.76	1.78	1.75	1.53
Educ. asst. to vets, depend., and surv.....	.18	.14	.12	.10	.07	.06
Veterans life insurance benefit pay.....	.07	.07	.06	.06	.06	.05
Other assistance to veterans.....	.02	.02	.01	.01	.01	.01
Other payment ^a ; to individuals.....	.00	.00	.00	.00	.00	.00
Business payments to individuals.....	.39	.41	.40	.42	.44	.44
Payments to nonprofit institutions.....	.41	.40	.35	.30	.30	.29
Federal Government payments.....	.15	.16	.14	.11	.11	.11
State and local government payments.....	.16	.15	.13	.11	.11	.10
Business payments.....	.10	.09	.08	.08	.08	.08

Regional Economic Measurement Division, Bureau of Economic Analysis.

TABLE 6C.—1979-84 TRANSFER PAYMENTS AS A PERCENT OF TPI

Southeast—nonmetro	1979	1980	1981	1982	1983	1984
Transfer payments.....	17.13	18.68	18.72	19.42	19.94	18.43
Government payments to individuals.....	16.11	17.63	17.75	18.51	19.00	17.50
Ret., disab. and health ins. benefit pay.....	11.12	11.96	12.36	12.89	13.32	12.80
Old-age, surv. and disability insur. pay.....	7.31	7.80	8.00	8.30	8.50	8.05
Railroad retirement and disability pay.....	.28	.28	.28	.28	.28	.26
Federal civil. employee retirement pay.....	.59	.75	.79	.82	.83	.79
State and local govt. employee ret. pay.....	.53	.57	.58	.62	.67	.67
Medical insurance payments.....	1.73	1.99	2.19	2.40	2.56	2.59
Worker's comp. pay. (federal and State).....	.10	.10	.10	.11	.12	.12
oth. govt. disab. insur. and ret. pay.....	.50	.47	.41	.37	.36	.32
Unemployment insurance benefit payment.....	.62	.96	.82	1.24	1.22	.67
State unemployment insur. compensation.....	.55	.86	.75	1.20	1.17	.64
Unemp. comp. for Fed. civ. empl. (UCF).....	.01	.01	.01	.02	.01	.01
Unemp. compensation for RR employees.....	.01	.01	.01	.01	.02	.01
Unemp. compensation for veterans (UCX).....	.02	.02	.02	.00	.01	.01
Other unemployment compensation.....	.04	.06	.03	.00	.00	.00
Fed. educ. and trng. asst. pay (excl. vets).....	.15	.19	.18	.15	.18	.16
Income maintenance benefit payments.....	2.21	2.50	2.41	2.25	2.31	2.12
SSI, AFDC, general assistance payment.....	1.28	1.30	1.23	1.19	1.19	1.16
Suppl. security income (SSI) payment.....	.87	.88	.85	.84	.84	.83
Aid to families with dep. child. (AFDC).....	.40	.41	.38	.35	.35	.33
General assistance payments.....	.00	.00	.00	.00	.00	.00
Food stamps.....	.80	.95	.99	.90	.96	.83
Other income maintenance.....	.13	.25	.19	.17	.16	.13
Veterans benefit payments.....	2.00	2.02	1.97	1.98	1.97	1.75
Vets pensions and comp. and military ret.....	1.74	1.80	1.78	1.80	1.82	1.62
Educ. asst. to vets, depend., and surv.....	.18	.14	.12	.10	.07	.06
Veterans life insurance benefit pay.....	.06	.06	.06	.06	.06	.05
Other assistance to veterans.....	.02	.02	.02	.02	.01	.01
Other payments to individuals.....	.00	.00	.00	.00	.00	.00
Business payments to individuals.....	.46	.49	.48	.50	.53	.53
Payments to nonprofit institutions.....	.56	.56	.49	.41	.41	.39
Federal Government payments.....	.20	.22	.19	.14	.15	.15
State and local government payments.....	.23	.23	.19	.16	.15	.14
Business payments.....	.13	.12	.11	.11	.11	.11

Regional Economic Measurement Division, Bureau of Economic Analysis.

TABLE 7A.—1979–84 TRANSFER PAYMENTS AS A PERCENT OF TPI

Southwest	1979	1980	1981	1982	1983	1984
Transfer payments.....	11.35	11.75	11.44	11.81	12.44	11.62
Government Payments to individuals.....	10.51	10.89	10.63	11.05	11.66	10.85
Ret., disab. and health ins. benefit pay.....	7.38	7.60	7.59	7.94	8.32	8.09
Old-age, surv. and disability insur. pay.....	4.60	4.68	4.72	4.76	4.94	4.76
Railroad retirement and disability pay.....	.20	.20	.19	.19	.19	.17
Federal civil. employee retirement pay.....	.74	.78	.79	.79	.81	.78
State and local govt. employee ret. pay.....	.42	.44	.46	.48	.54	.53
Medical insurance payments.....	1.30	1.39	1.35	1.63	1.75	1.71
Workers' comp. pay. (Federal and State).....	.11	.10	.09	.08	.09	.09
Oth. Gov't Disab. Insur. and retirement pay.....	.01	.01	.01	.01	.01	.01
Unemployment insurance benefit payment.....	.19	.29	.23	.48	.68	.56
State unemployment insur. compensation.....	.16	.25	.21	.46	.66	.35
Unemp. Comp. for Fed. civ. empl. [UCF].....	.01	.01	.01	.01	.01	.01
Unemp. compensation for RR employees.....	.01	.01	.01	.01	.01	.00
Unemp. compensation for veterans [UCX].....	.01	.01	.01	.00	.01	.00
Other unemployment compensation.....	.01	.01	.01	.00	.00	.00
Fed. educ. and trng. asst. pay (excl. vets).....	.12	.15	.14	.12	.13	.13
Income maintenance benefit payments.....	.90	1.00	.91	.83	.89	.83
SSI, AFDC, general assistance payment.....	.48	.46	.42	.39	.41	.41
Suppl. security income [SSI] payment.....	.32	.31	.29	.27	.27	.27
Aid to families with dep. child. [AFDC].....	.16	.16	.14	.12	.14	.14
General assistance payments.....	.00	.00	.00	.00	.00	.00
Food stamps.....	.34	.41	.39	.35	.39	.35
Other income maintenance.....	.07	.13	.10	.09	.08	.07
Veterans benefits payments.....	1.88	1.82	1.72	1.66	1.61	1.42
Vets pensions and comp. and military ret.....	1.62	1.61	1.55	1.53	1.50	1.32
Educ. asst. to vets, depend., and surv.....	.18	.13	.10	.08	.06	.04
Veterans life insurance benefit pay.....	.06	.06	.05	.05	.05	.05
Other assistance to veterans.....	.02	.02	.01	.01	.01	.01
Other payments to individuals.....	.04	.03	.03	.02	.03	.02
Business payments to individuals.....	.43	.45	.44	.45	.47	.48
Payments to nonprofit institutions.....	.41	.41	.36	.30	.30	.29
Federal Governments payments.....	.15	.15	.14	.10	.11	.11
State and local government payments.....	.16	.16	.13	.11	.10	.09
Business payments.....	.10	.10	.09	.09	.09	.09

Regional Economic Measurement Division, Bureau of Economic Analysis.

TABLE 7B.—1979–84 TRANSFER PAYMENTS AS A PERCENT OF TPI

Southwest—metro	1979	1980	1981	1982	1983	1984
Transfer payments.....	10.21	10.49	10.23	10.57	11.09	10.33
Government Payments to individuals.....	9.41	9.67	9.46	9.84	10.35	9.59
Ret., disab. and health ins. benefit pay.....	6.52	6.67	6.68	6.99	7.29	7.08
Old-age, surv. and disability insur. pay.....	3.96	4.00	4.04	4.07	4.22	4.06
Railroad retirement and disability pay.....	.17	.17	.16	.16	.16	.14
Federal civil. employee retirement pay.....	.72	.76	.76	.76	.78	.75
State and local govt. employee ret. pay.....	.41	.43	.45	.47	.52	.52
Medical insurance payments.....	1.14	1.21	1.18	1.43	1.53	1.52
Workers' comp. pay. (Federal and State).....	.10	.10	.09	.08	.08	.09
Oth. gov't disab. Insur. and retirement pay.....	.01	.01	.01	.00	.00	.00
Unemployment insurance benefit payment.....	.18	.26	.21	.43	.64	.34
State unemployment insur. compensation.....	.15	.23	.18	.41	.62	.33
Unemp. Comp. for Fed. civ. empl. [UCF].....	.01	.01	.00	.01	.01	.00
Unemp. compensation for RR employees.....	.00	.01	.00	.01	.01	.00
Unemp. compensation for veterans [UCX].....	.01	.01	.01	.00	.01	.00
Other unemployment compensation.....	.01	.01	.01	.00	.00	.00
Fed. educ. and trng. asst. pay (excl. vets).....	.12	.14	.14	.11	.13	.12
Income maintenance benefit payments.....	.74	.82	.76	.69	.73	.69
SSI AFDC, general assistance payment.....	.37	.36	.33	.31	.33	.33
Suppl. security income [SSI] payment.....	.23	.23	.21	.20	.21	.21

TABLE 8A.—1979-84 TRANSFER PAYMENTS AS A PERCENT OF TPI

Rocky Mtn	1979	1980	1981	1982	1983	1984
Transfer payments.....	11.19	11.68	11.86	12.49	12.90	12.14
Government payments to individuals.....	10.29	10.79	11.01	11.67	12.09	11.33
Ret., disab. and health ins. benefit pay.....	7.42	7.64	7.94	8.33	8.65	8.53
Old-age, surv. and disability insur. pay.....	4.26	4.37	4.48	4.63	4.75	4.64
Railroad retirement and disability pay.....	.36	.36	.35	.35	.35	.32
Federal civil. employee retirement pay.....	.91	.97	1.01	1.03	1.05	1.01
State and local govt. employee ret. pay.....	.49	.52	.52	.56	.63	.63
Medical insurance payments.....	1.05	1.12	1.19	1.34	1.43	1.47
Workers' comp. pay. (Federal and State).....	.30	.26	.35	.38	.40	.42
Oth. Govt. disab. insur. and ret. pay.....	.06	.05	.04	.04	.04	.03
Unemployment insurance benefit payment.....	.39	.54	.55	.88	.95	.56
State unemployment insur. compensation.....	.33	.48	.49	.82	.89	.52
Unemp. comp. for Fed. civ. empl. (UCF).....	.02	.02	.02	.02	.02	.02
Unemp. compensation for RR employees.....	.01	.02	.02	.03	.02	.01
Unemp. compensation for veterans (UCV).....	.01	.02	.01	.00	.01	.01
Other unemployment compensation.....	.02	.01	.01	.00	.00	.01
Fed. educ. and trng. asst. pay (excl. vets).....	.16	.21	.23	.21	.21	.21
Income maintenance benefit payments.....	.75	.86	.81	.78	.83	.78
SSI, AFDC, general assistance payment.....	.49	.50	.47	.46	.48	.48
Suppl. security income (SSI) payment.....	.19	.20	.19	.19	.19	.20
Aid to families with dep. child. (AFDC).....	.30	.30	.27	.26	.28	.26
General assistance payments.....	.01	.01	.01	.01	.01	.01
Food stamps.....	.20	.26	.27	.26	.28	.25
Other income maintenance.....	.05	.10	.07	.06	.06	.06
Veterans benefit payments.....	1.54	1.51	1.46	1.46	1.43	1.25
Vets pensions and comp. and military rel.....	1.30	1.31	1.28	1.31	1.30	1.15
Educ. asst. to vets, depend., and surv.....	.17	.13	.11	.09	.07	.05
Veterans life insurance benefit pay.....	.06	.06	.05	.06	.05	.04
Other assistance to veterans.....	.01	.01	.01	.01	.01	.01
Other payments to individuals.....	.03	.03	.02	.01	.01	.01
Business payments to individuals.....	.41	.43	.43	.44	.46	.47
Payments to nonprofit institutions.....	.48	.46	.42	.37	.35	.34
Federal Government payments.....	.15	.16	.14	.11	.11	.11
State and local government payments.....	.20	.19	.16	.15	.12	.11
Business payments.....	.13	.12	.12	.12	.12	.12

Regional Economic Measurement Division, Bureau of Economic Analysis.

TABLE 8B.—1979-84 TRANSFER PAYMENTS AS A PERCENT OF TPI

Rocky Mtn—metro	1979	1980	1981	1982	1983	1984
Transfer payments.....	10.40	10.84	11.03	11.40	11.66	10.88
Government payments to individuals.....	9.55	9.98	10.21	10.62	10.88	10.12
Ret., disab. and health ins. benefit pay.....	6.68	6.87	7.15	7.44	7.66	7.49
Old-age, surv. and disability insur. pay.....	3.62	3.72	3.82	3.90	3.97	3.85
Railroad retirement and disability pay.....	.32	.32	.31	.31	.30	.27
Federal civil. employee retirement pay.....	.99	1.06	1.09	1.10	1.11	1.05
State and local govt. employee ret. pay.....	.46	.49	.49	.52	.59	.58
Medical insurance payments.....	.95	1.00	1.05	1.20	1.27	1.29
Workers' comp. pay. (Federal and State).....	.30	.26	.36	.39	.41	.43
Oth. Govt. disab. insur. and ret. pay.....	.03	.03	.02	.02	.02	.02
Unemployment insurance benefit payment.....	.31	.44	.44	.67	.73	.41
State unemployment insur. compensation.....	.26	.39	.40	.63	.69	.38
Unemp. comp. for Fed. civ. empl. (UCF).....	.01	.01	.01	.02	.01	.01
Unemp. compensation for RR employees.....	.01	.01	.01	.02	.02	.01
Unemp. compensation for veterans (UCV).....	.01	.02	.01	.00	.01	.01
Other unemployment compensation.....	.02	.01	.00	.00	.00	.00
Fed. educ. and trng. asst. pay (excl. vets).....	.15	.20	.22	.20	.20	.19
Income maintenance benefit payments.....	.72	.82	.78	.74	.77	.71
SSI, AFDC, general assistance payment.....	.49	.50	.48	.46	.47	.46
Suppl. security income (SSI) payment.....	.17	.18	.18	.18	.18	.19

TABLE 7B.—1979-84 TRANSFER PAYMENTS AS A PERCENT OF TPI—Continued

Southwest—metro	1979	1980	1981	1982	1983	1984
Aid to families with dep. child (AFDC).....	.14	.13	.12	.10	.12	.12
General assistance payments.....	.00	.00	.00	.00	.00	.00
Food stamps.....	.31	.36	.35	.31	.34	.30
Other income maintenance.....	.06	.10	.08	.07	.07	.06
Veterans benefits payments.....	1.84	1.77	1.67	1.62	1.56	1.36
Vets pensions and comp. and military ret.....	1.58	1.56	1.50	1.48	1.45	1.27
Educ. asst. to vets, depend., and surv.....	.18	.13	.11	.08	.06	.04
Veterans life insurance benefit pay.....	.06	.06	.05	.04	.05	.05
Other assistance to veterans.....	.02	.01	.01	.01	.01	.01
Other payments to individuals.....	.00	.00	.00	.00	.00	.00
Business payments to individuals.....	.42	.44	.43	.44	.46	.46
Payments to nonprofit institutions.....	.38	.38	.34	.29	.28	.27
Federal Government payments.....	.14	.15	.13	.10	.10	.10
State and local government payments.....	.15	.14	.12	.10	.10	.09
Business payments.....	.09	.09	.08	.08	.08	.09

Regional Economic Measurement Division, Bureau of Economic Analysis.

TABLE 7C.—1979-84 TRANSFER PAYMENTS AS A PERCENT OF TPI

Southwest—nonmetro	1979	1980	1981	1982	1983	1984
Transfer payments.....	15.27	16.29	15.79	16.33	17.48	16.51
Government payments to individuals.....	14.32	15.29	14.86	15.46	16.58	15.61
Ret., disab. and health ins. benefit pay.....	10.34	10.95	10.89	11.39	12.18	11.93
Old-age, surv. and disability insur. pay.....	6.80	7.13	7.15	7.23	7.63	7.40
Railroad retirement and disability pay.....	.31	.32	.30	.30	.31	.29
Federal civil. employee retirement pay.....	.81	.87	.88	.89	.94	.91
State and local govt. employee ret. pay.....	.45	.48	.49	.52	.60	.61
Medical insurance payments.....	1.82	2.01	1.94	2.33	2.58	2.60
Workers' comp. pay. (Federal and State).....	.11	.11	.10	.09	.10	.10
Oth. Govt. disab. insur. and ret. pay.....	.03	.03	.03	.02	.02	.02
Unemployment insurance benefit payment.....	.25	.40	.34	.65	.86	.43
State unemployment insur. compensation.....	.21	.35	.30	.62	.82	.41
Unemp. comp. for Fed. civ. empl. (UCF).....	.01	.01	.01	.01	.01	.01
Unemp. compensation for RR employees.....	.01	.02	.01	.02	.02	.01
Unemp. compensation for veterans (UCV).....	.01	.01	.01	.00	.01	.00
Other unemployment compensation.....	.01	.01	.01	.00	.00	.00
Fed. educ. and trng. asst. pay (excl. vets).....	.14	.17	.16	.13	.15	.15
Income maintenance benefit payments.....	1.44	1.63	1.46	1.34	1.47	1.38
SSI, AFDC, general assistance payment.....	.86	.85	.76	.69	.73	.71
Suppl. security income (SSI) payment.....	.61	.60	.54	.51	.51	.50
Aid to families with dep. child (AFDC).....	.25	.25	.21	.18	.22	.21
General assistance payments.....	.00	.00	.00	.00	.00	.00
Food stamps.....	.46	.57	.53	.50	.60	.54
Other income maintenance.....	.11	.21	.16	.14	.14	.13
Veterans benefit payments.....	2.00	2.00	1.90	1.84	1.81	1.62
Vets pensions and comp. and military ret.....	1.75	1.79	1.72	1.70	1.69	1.52
Educ. asst. to vets, depend., and surv.....	.17	.13	.10	.07	.05	.04
Veterans life insurance benefit pay.....	.06	.07	.06	.05	.05	.05
Other assistance to veterans.....	.02	.02	.02	.01	.01	.01
Other payments to individuals.....	.16	.14	.11	.10	.11	.10
Business payments to individuals.....	.45	.50	.49	.50	.52	.53
Payment to nonprofit institutions.....	.50	.51	.44	.37	.38	.36
Federal Government payments.....	.18	.19	.17	.12	.13	.13
State and local government payments.....	.20	.20	.17	.14	.13	.12
Business payments.....	.12	.12	.11	.11	.11	.11

Regional Economic Measurement Division, Bureau of Economic Analysis.

TABLE 8B.—1979-84 TRANSFER PAYMENTS AS A PERCENT OF TPI—Continued

Rocky Mtn—metro	1979	1980	1981	1982	1983	1984
Aid to families with dep. child. (AFDC).....	.31	.31	.29	.27	.28	.26
General assistance payments.....	.01	.01	.01	.01	.01	.01
Food stamps.....	.19	.24	.25	.23	.24	.21
Other income maintenance.....	.04	.08	.06	.05	.05	.05
Veterans benefit payments.....	1.69	1.66	1.60	1.58	1.52	1.32
Vets pensions and comp. and military ret.....	1.43	1.44	1.42	1.42	1.40	1.22
Educ. asst. to vets, depend., and surv.....	.19	.14	.12	.09	.07	.05
Veterans life insurance benefit pay.....	.06	.06	.05	.05	.05	.04
Other assistance to veterans.....	.01	.01	.01	.01	.01	.01
Other payments to individuals.....	.00	.00	.00	.00	.00	.00
Business payments to individuals.....	.40	.42	.42	.43	.45	.45
Payments to nonprofit institutions.....	.46	.44	.40	.35	.33	.32
Federal Government payments.....	.14	.15	.13	.10	.10	.10
State and local government payments.....	.19	.18	.16	.14	.11	.10
Business payments.....	.12	.11	.11	.11	.11	.11

Regional Economic Measurement Division, Bureau of Economic Analysis.

TABLE 8C.—1979-84 TRANSFER PAYMENTS AS A PERCENT OF TPI

Rocky Mtn—nonmetro	1979	1980	1981	1982	1983	1984
Transfer payments.....	12.60	13.20	13.38	14.54	15.32	14.66
Government payments to individuals.....	11.65	12.24	12.47	13.67	14.43	13.76
Ret., disab. and health ins. benefit pay.....	8.77	9.03	9.37	10.03	10.56	10.59
Old-age, surv. and disability insur. pay.....	5.41	5.53	5.68	6.03	6.28	6.23
Railroad retirement and disability pay.....	.42	.42	.41	.43	.44	.42
Federal civil. employee retirement pay.....	.77	.81	.84	.90	.93	.92
State and local govt. employee ret. pay.....	.54	.57	.58	.63	.71	.72
Medical insurance payments.....	1.23	1.34	1.44	1.61	1.75	1.84
Workers' comp. pay. (Federal and State).....	.29	.26	.33	.35	.38	.41
Oth. Govt. disab. insur. and ret. pay.....	.11	.10	.08	.08	.07	.07
Unemployment insurance benefit payment.....	.53	.74	.74	1.27	1.38	.85
State unemployment insur. compensation.....	.46	.65	.65	1.19	1.29	.80
Unemp. comp. for Fed. civ. empl. (UCF).....	.02	.03	.03	.03	.03	.03
Unemp. compensation for RR employees.....	.02	.03	.03	.05	.04	.02
Unemp. compensation for veterans (UCX).....	.02	.02	.01	.00	.01	.01
Other unemployment compensation.....	.02	.02	.02	.00	.01	.01
Fed. educ. and trng. asst. pay (excl. vets).....	.17	.22	.24	.22	.24	.24
Income maintenance benefit payments.....	.80	.93	.87	.87	.96	.92
SSI, AFDC, general assistance payment.....	.51	.51	.46	.46	.51	.52
Suppl. security income (SSI) payment.....	.22	.22	.21	.21	.22	.23
Aid to families with dep. child. (AFDC).....	.28	.29	.25	.25	.28	.27
General assistance payments.....	.01	.01	.00	.01	.01	.01
Food stamps.....	.23	.29	.31	.32	.36	.33
Other income maintenance.....	.06	.13	.09	.09	.09	.08
Veterans benefit payments.....	1.28	1.25	1.21	1.24	1.25	1.12
Vets pensions and comp. and military ret.....	1.06	1.06	1.04	1.10	1.12	1.01
Educ. asst. to vets, depend., and surv.....	.15	.11	.10	.08	.07	.05
Veterans life insurance benefit pay.....	.06	.06	.05	.06	.06	.04
Other assistance to veterans.....	.01	.01	.01	.01	.01	.01
Other payments to individuals.....	.08	.07	.06	.04	.04	.03
Business payments to individuals.....	.44	.45	.45	.47	.49	.51
Payments to nonprofit institutions.....	.52	.50	.46	.41	.40	.40
Federal Government payments.....	.17	.17	.16	.12	.13	.13
State and local government payments.....	.22	.20	.17	.16	.14	.13
Business payments.....	.14	.13	.13	.13	.13	.13

Regional Economic Measurement Division, Bureau of Economic Analysis.

TABLE 9A.—1979–84 TRANSFER PAYMENTS AS A PERCENT OF TPI

Far West	1979	1980	1981	1982	1983	1984
Transfer payments.....	12.41	12.96	13.38	14.05	14.17	13.39
Government payments to individuals.....	11.59	12.15	12.60	13.30	13.40	12.63
Ret., disab. and health ins. benefit pay.....	7.98	8.19	8.69	9.11	9.25	9.15
Old-age, surv. and disability insur. pay.....	4.36	4.47	4.70	4.88	4.91	4.79
Railroad retirement and disability pay.....	.15	.15	.15	.15	.15	.13
Federal civil. employee retirement pay.....	.67	.71	.74	.76	.76	.72
State and local govt. employee ret. pay.....	.87	.87	.91	.99	.99	1.02
Medical insurance payments.....	1.48	1.57	1.75	1.87	1.98	2.03
Workers' comp. pay. (Federal and State).....	.26	.24	.25	.25	.27	.27
Oth. Govt. disab. insur. and ret. pay.....	.19	.19	.20	.20	.20	.19
Unemployment insurance benefit payment.....	.49	.68	.68	1.01	1.00	.61
State unemployment insur. compensation.....	.44	.61	.62	.98	.97	.59
Unemp. comp. for Fed. civ. empl. [UCF].....	.01	.01	.01	.01	.01	.01
Unemp. compensation for RR employees.....	.00	.00	.00	.01	.01	.00
Unemp. compensation for veterans [UCX].....	.01	.01	.01	.00	.01	.00
Other unemployment compensation.....	.03	.05	.04	.01	.01	.00
Fed. educ. and trng. asst. pay (excl. vets).....	.10	.12	.14	.12	.13	.12
Income maintenance benefit payments.....	1.63	1.79	1.74	1.73	1.74	1.64
SSI, AFDC, general assistance payment.....	1.37	1.45	1.40	1.41	1.41	1.36
Suppl. security income [SSI] payment.....	.59	.62	.58	.57	.53	.53
Aid to families with dep. child. [AFDC].....	.75	.81	.79	.81	.83	.79
General assistance payments.....	.03	.03	.03	.03	.04	.04
Food stamps.....	.20	.22	.25	.23	.24	.20
Other income maintenance.....	.06	.11	.09	.09	.09	.08
Veterans benefit payments.....	1.38	1.35	1.34	1.33	1.28	1.10
Vets pensions and comp. and military ret.....	1.17	1.18	1.18	1.19	1.16	1.01
Educ. asst. to vets, depend., and surv.....	.15	.11	.10	.07	.06	.04
Veterans life insurance benefit pay.....	.05	.05	.05	.05	.05	.04
Other assistance to veterans.....	.01	.01	.01	.01	.01	.00
Other payments to individuals.....	.01	.01	.01	.00	.00	.00
Business payments to individuals.....	.40	.42	.41	.43	.45	.46
Payments to nonprofit institutions.....	.42	.40	.36	.32	.32	.31
Federal Government payments.....	.13	.13	.12	.09	.10	.10
State and local government payments.....	.16	.16	.14	.12	.12	.11
Business payments.....	.13	.11	.11	.11	.10	.10

Regional Economic Measurement Division, Bureau of Economic Analysis.

TABLE 9B.—1979–84 TRANSFER PAYMENTS AS A PERCENT OF TPI

Far West—Metro	1979	1980	1981	1982	1983	1984
Transfer payments.....	12.16	12.66	13.03	13.66	13.78	12.99
Government payments to individuals.....	11.36	11.85	12.26	12.92	13.02	12.24
Ret., disab. and health ins. benefit pay.....	7.79	7.98	8.45	8.82	8.95	8.84
Old-age, surv. and disability insur. pay.....	4.20	4.30	4.51	4.67	4.69	4.56
Railroad retirement and disability pay.....	.14	.14	.14	.14	.14	.13
Federal civil. employee retirement pay.....	.66	.69	.72	.74	.73	.69
State and local govt. employee ret. pay.....	.87	.87	.91	.99	.99	1.01
Medical insurance payments.....	1.47	1.55	1.73	1.84	1.95	2.00
Workers' comp. pay. (Federal and State).....	.25	.23	.24	.24	.25	.26
Other Govt. disab. insur. and ret. pay.....	.19	.19	.21	.20	.20	.19
Unemployment insurance benefit payment.....	.46	.63	.62	.95	.95	.57
State unemployment insur. compensation.....	.41	.56	.57	.92	.92	.56
Unemp. comp. for Fed. civ. empl. [UCF].....	.01	.01	.01	.01	.01	.01
Unemp. compensation for RR employees.....	.00	.00	.00	.01	.01	.00
Unemp. compensation for veterans [UCX].....	.01	.01	.01	.00	.01	.00
Other unemployment compensation.....	.02	.04	.03	.00	.00	.00
Fed. educ. and trng. asst. pay (excl. vets).....	.10	.12	.13	.12	.13	.12
Income maintenance benefit payments.....	1.64	1.79	1.74	1.73	1.73	1.63
SSI, AFDC, general assistance payment.....	1.38	1.47	1.42	1.43	1.42	1.36
Suppl. security income [SSI] payment.....	.60	.63	.59	.57	.54	.54

TABLE 9B.—1979-84 TRANSFER PAYMENTS AS A PERCENT OF TPI—Continued

Far West—Metro	1979	1980	1981	1982	1983	1984
Aid to families with dep. child. [AFDC].....	.75	.81	.80	.82	.83	.78
General assistance payments.....	.03	.03	.03	.04	.04	.04
Food stamps.....	.20	.21	.24	.22	.22	.19
Other income maintenance.....	.06	.11	.09	.08	.09	.08
Veterans benefit payments.....	1.37	1.34	1.32	1.30	1.25	1.08
Vets pensions and comp. and military ret.....	1.16	1.16	1.16	1.17	1.14	.99
Educ. asst. to vets, depend., and surv.....	.15	.11	.10	.07	.06	.04
Veterans life insurance benefit pay.....	.05	.05	.05	.05	.05	.04
Other assistance to veterans.....	.01	.01	.01	.01	.01	.00
Other payments to individuals.....	.00	.00	.00	.00	.00	.00
Business payments to individuals.....	.39	.41	.41	.43	.45	.45
Payments to nonprofit institutions.....	.41	.40	.36	.31	.31	.30
Federal Government payments.....	.12	.13	.12	.09	.09	.09
State and local government payments.....	.16	.15	.14	.12	.12	.11
Business payments.....	.13	.11	.10	.10	.10	.10

Regional Economic Measurement Division, Bureau of Economic Analysis.

TABLE 9C.—1979-84 TRANSFER PAYMENTS AS A PERCENT OF TPI

Far West—nonmetro	1979	1980	1981	1982	1983	1984
Transfer payments.....	15.24	16.59	17.54	18.98	19.13	18.57
Government payments to individuals.....	14.31	15.64	16.62	18.10	18.22	17.64
Ret., disab. and health ins. benefit pay.....	10.17	10.78	11.66	12.69	13.02	13.16
Old-age, surv. and disability insur. pay.....	6.18	6.55	7.00	7.57	7.72	7.73
Railroad retirement and disability pay.....	.22	.22	.23	.24	.24	.22
Federal civil. employee retirement pay.....	.84	.91	.98	1.05	1.06	1.04
State and local govt. employee ret. pay.....	.84	.88	.94	1.04	1.02	1.06
Medical insurance payments.....	1.56	1.72	1.99	2.20	2.37	2.48
Workers' comp. pay. (Federal and State).....	.41	.37	.40	.45	.48	.50
Oth. govt. disab. insur. and ret. pay.....	.12	.12	.13	.13	.13	.13
Unemployment insurance benefit payment.....	.90	1.34	1.45	1.79	1.58	1.12
State unemployment insur. compensation.....	.77	1.18	1.24	1.68	1.49	1.08
Unemp. comp. for Fed. civ. empl. [UCF].....	.01	.01	.02	.02	.02	.02
Unemp. compensation for RR employees.....	.01	.01	.01	.01	.01	.00
Unemp. compensation for veterans [UCX].....	.02	.02	.02	.00	.01	.01
Other unemployment compensation.....	.10	.12	.17	.07	.05	.01
Fed. educ. and trng. asst. pay (excl. vets).....	.11	.14	.16	.15	.16	.15
Income maintenance benefit payments.....	1.57	1.80	1.74	1.80	1.83	1.77
SSI, AFDC, general assistance payment.....	1.21	1.30	1.19	1.26	1.28	1.30
Suppl. security income [SSI] payment.....	.49	.50	.47	.48	.46	.47
Aid to families with dep. child. [AFDC].....	.71	.78	.70	.76	.79	.80
General assistance payments.....	.02	.02	.02	.02	.02	.02
Food stamps.....	.27	.34	.43	.42	.43	.36
Other income maintenance.....	.08	.15	.12	.12	.12	.10
Veterans benefit payments.....	1.52	1.54	1.58	1.64	1.60	1.42
Vets pensions and comp. and military ret.....	1.31	1.37	1.42	1.49	1.47	1.31
Educ. asst. to vets, depend., and surv.....	.14	.11	.10	.08	.07	.05
Veterans life insurance benefit pay.....	.05	.06	.06	.05	.05	.05
Other assistance to veterans.....	.01	.01	.01	.01	.01	.01
Other payments to individuals.....	.04	.03	.03	.03	.03	.03
Business payments to individuals.....	.44	.46	.47	.49	.51	.53
Payments to nonprofit institutions.....	.49	.48	.45	.40	.40	.40
Federal Government payments.....	.15	.16	.15	.12	.12	.12
State and local government payments.....	.19	.19	.17	.15	.15	.14
Business payments.....	.15	.13	.13	.13	.13	.13

Regional Economic Measurement Division, Bureau of Economic Analysis.

DIVERSIFICATION: AN ICONOCLASTIC VIEW

(By Monroe Newman, Ph.D.) *

Going back for at least a quarter of a century, Appalachia has meant at least two things in the popular press and consciousness—it has meant economic distress and a program to overcome the deep seated problems that produce it. However, it is more than that. It has also been a testing ground for ideas about how alternative proposed remedies might work in practice. A part of all of this has been a class monitoring of the economy of the Region and of the counties that comprise it. And this monitoring has led to the questioning of some of the most deeply held beliefs about the economic performance of regions. A look at the data for Appalachia makes it clear that satisfactory economic performance cannot be assured through diversification. Some diversified counties in the Region have done poorly, some specialized counties have done relatively well.

In the tables that are to follow, the data that relate to that assertion are presented. Rather than use the brief time that has been allotted for this presentation exclusively for dissecting the data with you, I would prefer to focus first on some lessons that seem evident to me.

Customarily, we have come to measure satisfactory economic performance by growth in real income, growth in population, growth in employment—all relative to some standard, usually the national rates. However, standards such as these can mislead us. For years, counties in Appalachian New York and Pennsylvania have experienced out-migration rates above the national average. Yet data show that 11 (out of 12) New York counties and 18 (out of 52) Pennsylvania counties have unemployment levels below the national average. That's good, you say. And as is true of the national pattern, incomes in the northern parts of Appalachia tend to be relatively high. What sense is there to this—higher incomes and lower unemployment are not usually in the same set without migration? The answer, it seems to me, is that these areas are achieving a new balance between their opportunities and their resources. They are capitalizing on their physical infrastructure, their locational position, and on their human resources. I would be the last to minimize the personal and social disruption that accompany out-migration. But to view outmigration as necessarily an unfortunate economic characteristic is to misread the implications of the data.

Another commonly sought goal is economic stability and the test for its presence is again usually the national performance. The question becomes a comparison of the cyclical stability of the area

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The opinions expressed in this paper are purely personal and do not reflect the personal opinion or institutional viewpoint of any others.

with the nation's. In other words, an area is considered to be doing well when it does no worse than the nation does. Going back to 1982 we do really mean that a country is doing well if it "only" has 9.7 percent unemployment? I doubt it. Moreover, the national rate is a composite of some industries that are increasing employment while employment is falling in others. Quite clearly, a county could have the same level of unemployment as the nation but have all its sectors losing employment—or gaining it. Do we really want mimicking the national performance to be used as a standard of judgment? Put this way, I am sure that it's clear that you can't talk about the stability or desirability of economic performance without talking about the structure of employment, that is, the industries represented.

Are we back then to talking about the virtues of diversification? I think not, though it may sound that way. Let's visualize two counties with identical economic structures. They have the same percentages in agriculture, manufacturing, services, government employment, etc. We can even go a step further and say that they have the same per capita incomes. It is still possible for them to be in very different economic boats. There are two reasons for this—one obvious, one less so.

The obvious reason for their potential differences is that one may be concentrating on products or services whose markets are disappearing while the other faces markets that are burgeoning. Clearly, equal diversification does not mean equal potential for the future. But less obviously, there can be another important difference. Different industries encourage different types of services and require different types of skills. For example, the industries of one area may ship their goods in their own vehicles, forestalling the development of contract transportation services. The result is that this area will be missing a feature that encourages new firms to develop. The other area may have an industrial structure that relies on contact carriers, an enticement to further development. Or, to take another example, one area may have an educational system or provide a range of on-the-job experiences that encourages versatility and adaptability in its labor force while the reverse is true elsewhere. Counties in New England that have high tech industries attract a disproportionate level of legal, professional, and other high value added services than those with diversity but whose diversity is in apparel, textile, wood products, food, etc.

To put it simply, diversification is not always the key to successful development. But let's look at the obverse. Is specialization a sure harbinger of future problems? The temptation is to say yes, but that is not true either.

The coal economies of Appalachia, the one-crop counties of the Midwest, the oil areas of the Southwest, the one-product economies of Silicon Valley all seem to say that you shouldn't put all your eggs in one basket. Whatever truth there is in that can be found if the focus is on the nature of the basket. All across a map of the United States that portrays relative economic performance can be found what look like islands of relatively better performance surrounded by less well-performing neighbors. A closer look finds that these better-performing areas are highly specialized. They tend to be college towns, the site of major health facilities, government-

dominated economies, and the like. Those are not bad baskets in which to place your eggs.

The point to this is not that every town in distress should start a college. The point is that specialization is not necessarily bad, just as diversification is not necessarily good.

Having made these generalizations, I'd now like to use some of the remaining time to review some data about Appalachia that support them.

Let's turn first to a list of diversified Appalachian counties. This is a selected list of those that have a predominance of manufacturing across at least five industries with a substantial share of each. If these counties are large, they are usually SMSAs and therefore will have high levels of trade and services as well. Looking at their population experience for the first half of this decade, it is evident that diversification in economic structure and population growth are not highly correlated. For those same counties, employment experience is also diverse. Not that they have employment growth of as high as 33 percent and as low as minus 24 percent. Perhaps other definitions of diversification would lead to other lists of counties and other measures of change, but overall, the message is clear. Diversification is not an assurance of favorable economic performance.

If that point needs further emphasis, the next table presents employment data for the Pittsburgh metropolitan area, surely one with a highly diversified structure. Note that of the five counties in the SMSA, one had an employment gain of 20 percent in the last 6 years while another had an employment loss of 34 percent. Moreover, it is obvious that the five counties as a whole lost employment in a period when the U.S. economy was growing. Note also that all the counties in the SMSA lost population during this decade. A likely response to these data is that this is a biased basis for an argument. After all, it is common knowledge that Pittsburgh is reeling from the loss of employment in basic industries. That is true, but it is also diversified. The example was picked to make the case. Diversification and relatively good performance are not the same.

To establish that point further, look at the unemployment rates among the diversified counties in the Appalachian sample of counties. For the first half of this year, the average ranges from 4.1 percent to 16.1 percent. And look at their rates of per capita income growth for the first four years of the decade. They range from a high of 43.3 percent to a low of 22.6 percent.

Turning attention now to specialized counties, there are many of those in Appalachia too. Focusing on the coal counties, let's see how they have done. For the first four years of the decade, they show a range of per capita income growth from 11.5 percent to 39.0 percent. Their employment change during this decade ranges from plus 38 percent to minus 39 percent. And not a single one experienced notable population growth while many had important population losses.

It seems obvious to me, and I hope it is to you, that reducing the problems of economic development to a few simple ideas is not helpful. Just as diversification is not a cure and specialization a curse, so too is access or infrastructure or enterprise zones or ven-

ture capital alone not the answer. The things we do know about the development process confirm the belief that development is a complex web of the tangible and the intangible. It consists of the interaction of what are customarily identified as economic factors with a host of cultural, social, attitudinal forces which distinguish individuals and areas from each other. The very complexity of the process should warn us against attempts to expect rapid results from the most well-meaning and well-structured programs. Impacts of programs are usually incremental over time and diffused. One easy fix never works. In addition, the range of events that impact on the fortunes of an area are so large that we should not be surprised by a statistical or even conceptual inability to isolate the impact of any set of public actions on the goal-oriented measures of income, employment, or population change.

Experience should also warn us of something else—an excessive concern with the fortunes of an area. We can become so concerned with the data for an area that we lose sight of the people of the area. Though there is some congruity of interest between the people of an area and the institutions in an area, they are not synonymous. There are numerous examples of this, but perhaps the clearest case is the need for heavy and even burdensome investments in education in areas whose young people are prone to out-migrate. While it is true that superior educational programs and the students they produce can be powerful forces for assisting the growth of area economic activity, that is not the primary reason for expecting or desiring quality educational programs. The primary reason is concern for the future of the people of the area regardless of where they may choose to live. That concern may demand sacrifice in an area to achieve benefits that may not be experienced in it.

Less obviously, improving the economic performance of an area is likely to have a greater beneficial impact on some parts of the local population than on others. Those with highly immobile capital—the banker, the undertaker, the local merchant, for example—are more likely to benefit to a greater extent than are others. We can expect from them a greater devotion and attention to the improvement of the local area's performance. But we should not take their interests to be fully congruent with the interests of all who reside or work or hope to work in it. Those with highly immobile investments in an area are, for example, not likely to favor programs that lead to a new equilibrium of performance at a lower level of activity. But just as I believe this type of adjustment can be read into the data from New York and Pennsylvania that I mentioned earlier, so I believe that programs for graceful decline may sometimes be warranted though they may not have vocal spokespersons among those with immobile resources invested in the area.

Seeking diversified viewpoints on the appropriate strategy for area economic development, is, I believe, essential. Seeking diversification of the local economy is, in my view, not essential for its future prosperity.

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TABLE I
DIVERSIFIED COUNTIES

State	Population				Employment				Unemployment Rate		Per Capita Personal Income			
	County (H = Metro)	1980	1985	Change	Percent Change	1980	1986	Change	Percent Change	January 1986	August 1986	1980	1984	Percent Change
Alabama														
	Etowah (H)	103,600	103,500	(100)	-0.1	36,000	37,000	(1,000)	-2.6	10.1	12.0	\$7,495	\$9,722	29.7
	Morgan	93,900	95,700	1,800	1.9	30,000	40,000	10,000	33.3	9.3	11.8	\$7,909	\$10,839	36.0
Georgia														
	Floyd (H)	76,800	76,700	(100)	-0.1	34,900	35,000	100	0.3	15.6	10.6	\$8,082	\$11,422	41.3
Maryland														
	Washington (H)	112,000	112,800	800	0.7	40,200	47,600	(600)	-1.2	6.4	5.4	\$8,317	\$11,610	39.7
Mississippi														
	Lowndes	60,500	59,200	(1,300)	-2.1	23,000	23,500	500	2.2	8.3	11.1	\$7,013	\$9,038	28.9
	Alcorn	32,400	33,800	800	1.9	12,900	13,500	600	4.7	15.3	16.1	\$6,603	\$9,023	35.4
New York														
	Allegany	51,500	50,900	(600)	-1.2	19,300	17,700	(1,600)	-8.3	10.0	7.0	\$8,014	\$11,120	38.9
	Cattaraugus	86,100	85,300	(800)	-0.9	33,400	32,000	(1,400)	-4.2	10.5	7.4	\$8,930	\$13,794	53.9
	Chautauque	146,300	144,200	(2,100)	-1.4	63,500	57,600	(5,900)	-9.3	8.9	7.2	\$8,530	\$12,230	43.3
	Stauben	89,400	87,300	(2,100)	-2.1	41,300	35,500	(5,800)	-14.0	10.6	8.6	\$8,389	\$8,300	-0.9
North Carolina														
	Buncombe (H)	165,300	166,000	700	1.4	74,000	82,000	8,000	10.8	5.6	5.0	\$7,031	\$9,354	33.0
	Forsyth (H)	255,700	258,300	2,600	1.0	120,100	138,000	17,900	14.9	5.2	4.1	\$8,114	\$10,909	35.4
	Henderson	64,900	66,200	1,300	2.0	24,500	26,400	1,900	7.8	5.2	4.7	\$8,190	\$10,747	31.1
Ohio														
	Coshocton	36,400	36,300	(100)	-0.3	15,500	15,000	(500)	-3.2	13.2	9.6	\$8,281	\$10,978	32.6
	Tuscarawas	85,400	85,400	0	0.0	33,100	36,600	3,500	10.6	12.9	10.4	\$7,954	\$10,638	33.7

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Pennsylvania													
Columbia (H)	81,800	81,100	(700)	-1.1	28,300	28,200	(100)	-0.4	10.7	0.5	\$7,515	\$9,817	30.0
Crawford	89,000	89,000		0.0	34,200	34,200		0.0	11.9	9.5	\$7,409	\$9,492	28.1
Armstrong	82,200	78,700	(3,500)	-4.3	27,400	25,000	(2,400)	-8.8	12.0	9.4	\$8,221	\$10,409	27.3
Indiana	93,300	92,400	(900)	-1.0	40,300	38,000	(2,300)	-5.7	13.0	11.3	\$7,929	\$9,834	24.0
Northumberland	100,200	99,300	(900)	-0.9	40,600	41,500	900	2.2	12.2	7.1	\$7,837	\$9,986	30.0
South Carolina													
Anderson (H)	138,500	139,000	500	0.4	58,800	59,900	1,100	1.9	8.6	8.0	\$7,325	\$9,876	34.8
Spartanburg (H)	1200,000	211,100	3,100	1.5	95,200	101,000	5,800	6.1	7.8	5.0	\$7,829	\$10,761	35.7
Tennessee													
Hamblen	57,100	53,800	(3,300)	-5.8	18,900	22,800	3,900	20.6	9.3	10.2	\$6,424	\$7,873	22.8
Heflin	42,800	43,000	200	0.5	15,000	17,900	2,900	19.3	10.9	8.2	\$6,815	\$9,224	35.3
Warren	33,300	33,500	200	0.6	12,800	12,400	(400)	-3.1	17.2	13.3	\$7,885	\$9,902	28.0
West Virginia													
Cabell (H)	105,800	108,300	2,500	2.4	41,200	34,800	(6,400)	-15.5	8.8	9.3	\$8,594	\$10,829	26.0

TABLE 2
EMPLOYMENT
Pittsburgh, SMSA

Pennsylvania County	Employment				Population			
	1980	1988	Change	Percent Change	1980	1988	Change	Percent Change
Allegheny	615,553	568,000	(47,553)	-7.7	1,409,829	1,388,327	(21,502)	-1.5
Beaver	86,784	57,000	(29,784)	-34.3	199,161	194,707	(4,454)	-2.2
Fayette	53,136	64,000	10,864	20.4	159,178	157,083	(2,095)	-1.3
Washington	92,147	87,500	(4,647)	-5.0	217,184	213,992	(3,192)	-1.5
Westmoreland	166,527	157,600	(8,927)	-5.7	386,603	383,304	(3,299)	-0.9

TABLE 3
Appalachian Coal Counties

State County	Employment				Population				Per Capita Personal Income		
	1980	1986	Change	Percent Change	1980	1986	Change	Percent Change	1980	1984	Percent Change
Kentucky											
Bell	11,545	9,700	(1,845)	-16.0	134,235	34,277	42	0.1	\$6,514	\$8,114	24.6
Breathitt	6,631	4,000	(2,631)	-39.7	116,569	16,482	(87)	-0.5	\$5,813	\$7,371	26.8
Clay	6,794	5,700	(1,094)	-16.1	123,650	23,612	(98)	-0.2	\$5,200	\$7,232	39.0
Floyd	13,796	13,600	(196)	-1.4	150,802	50,786	(16)	.0	\$6,182	\$7,068	14.3
Harlan	11,247	11,200	(47)	-0.4	142,101	42,318	217	0.5	\$6,803	\$7,848	15.4
Johnson	7,897	7,900	3	.0	125,611	25,691	80	0.3	\$6,483	\$7,903	21.9
Knott	4,086	4,100	14	0.3	118,308	18,386	78	0.4	\$5,389	\$6,850	27.1
Leslie	4,084	3,100	(984)	-23.7	115,304	15,310	6	.0	\$4,693	\$6,119	30.4
Letcher	5,956	7,600	1,644	27.6	130,927	30,181	(746)	-2.4	\$6,096	\$7,359	20.7
McCreary	4,083	3,200	(883)	-21.8	116,176	16,482	306	1.9	\$4,066	\$4,852	19.3
Perry	11,258	9,600	(1,658)	-14.7	135,097	34,773	(324)	-0.9	\$6,304	\$7,668	21.6
Pike	28,437	23,500	(4,937)	-17.4	183,348	82,910	(438)	-0.5	\$7,264	\$8,291	14.1
Virginia											
Dickerson	5,132	4,700	(432)	-8.4	120,149	20,053	(96)	-0.5	\$6,740	\$8,246	22.3
Russell	10,708	9,300	(1,408)	-13.1	132,873	32,320	(553)	-1.7	\$6,450	\$7,838	21.5
Tazewell	18,729	14,900	(3,829)	-20.4	151,544	50,850	(686)	-1.3	\$8,031	\$9,615	19.7
West Virginia											
Boone	9,151	8,100	(1,051)	-11.5	130,839	30,095	(744)	-2.4	\$7,409	\$8,539	15.3
Logan	14,442	13,300	(1,142)	-7.9	151,037	50,246	(791)	-1.5	\$7,521	\$8,630	14.7
McDowell	12,072	9,100	(2,972)	-24.6	147,414	46,434	(980)	-2.1	\$7,189	\$8,048	12.3
Mingo	9,362	8,500	(862)	-9.2	138,460	37,033	(1,427)	-3.7	\$6,729	\$8,142	21.0
Morgan	4,231	4,500	269	6.4	111,128	10,163	(965)	-8.7	\$6,965	\$9,662	38.7
Nicholas	8,492	7,400	(1,092)	-12.9	128,006	28,382	376	1.3	\$7,266	\$8,669	19.3
Raleigh	27,957	26,900	(1,057)	-3.8	180,335	85,776	(559)	-0.6	\$7,811	\$9,835	25.9
Wyoming	9,942	7,600	(2,342)	-23.6	135,476	35,858	382	1.1	\$6,391	\$7,551	18.2

FINDING LOCAL MARKETS FOR FARM PRODUCTS IN SOUTHEAST MINNESOTA

(By Loni Kemp) *

Rural Minnesota is suffering from severe economic problems as a result of the crisis in agriculture. These economic reversals are forcing communities to take charge of their own survival. Rather than waiting for rescue, many communities are initiating a wide range of economic development activities on their own. One of the themes that arises over and over is diversification, as a way to avoid over-dependence on a single economic sector that is subject to fluctuation, such as mining or agriculture. There is also a tremendous amount of interest in diversifying within agriculture itself. Diversification of crops and creative strategies for marketing agricultural products can help put the profit back into farming. That helps farmers, and that helps rural communities.

The Minnesota Project is a non-profit organization with a goal of stable, economically viable communities in rural Minnesota. Community-based development in rural Minnesota is fostered through public information and education, technical assistance, and leadership development. Nearly eight years of research and experience have borne out how crucial the health of the farm economy is to the health of small communities.

When the primary economic activity of our region—farming—is threatened by loss of revenues and foreclosures, the entire local economy is threatened. Our rural communities are being crippled by loss of jobs, loss of retail sales, loss of tax-base, reduced local government services, hurting schools, damaged banks, and loss of spirit.

Even small actions to stem this tide can help. The Minnesota Project believes that part of the answer to the current agriculture crisis and the longer-term health of rural Minnesota depends on diversification of crops and creative marketing of agriculture products. By reducing heavy dependence on just one or two products, farmers can reduce risk by deflecting some of the fluctuation in prices and demand, and improve overall profit.

In order to explore the economic potential for farm diversification in southeast Minnesota, the Minnesota Project undertook a study entitled "Agmarket Search for Southeast Minnesota".

A market survey was sponsored by The Minnesota Project, to find out if area bulk food purchasers, such as restaurants, grocery stores, schools, and hospitals, are willing to buy any of over 100 food commodities from local growers. A striking 58% say they are willing to buy from local farmers when the crops are in season.

* Director, Southeastern Office, The Minnesota Project.

In all, 348 bulk food purchasers were contacted. Thirty seven percent (130) responded, representing over \$9 million in annual food purchases. The study area includes the four counties of Fillmore, Houston, Olmsted, and Winona, plus the city of LaCrosse.

These buyers are willing to more than double their purchases of food products from local farmers. Respondents reported that they would be willing to purchase an additional 23% of their stock from local growers, beyond the 18% they already purchase locally. The potential new market for area farmers is worth about \$2 million.

Interestingly, about half the identified market is for meats, primarily beef. About a fifth of the market is for miscellaneous products, mainly vegetable oil and whole wheat flour. Vegetables, dairy products, and poultry each represent about 8% of the potential market, followed by fruits and nuts at 4%. Little local demand was found for grains.

The survey looked at buyer attitudes to see how local markets could be expanded. On the plus side, it was found that quality and price are the most important criteria used in purchasing decisions. Other criteria which local farmers would find much harder to meet—such as year-round availability, dependable quantities, and packaging—are not nearly as important to buyers.

On the negative side, the majority of buyers do prefer to deal with a single supplier, rather than many individual farmers. While direct marketing can work for some farmers, the survey suggests an opportunity for local farmers and wholesalers to explore how they can work together to meet buyers' needs.

Finding a market must be the primary consideration when farmers decide to diversify. This research produced detailed listings of area buyers, volumes of commodities they buy, and what products are sought from local growers. We hope the survey will begin the process of bringing local farmers and buyers together, ultimately resulting in agreements to produce and buy.

While full-scale conversion from field crops to specialty crops is not expected, the Minnesota Project does hope that area farmers will begin growing and marketing products that return greater profits than corn. Even a small venture into diversification can provide a valuable supplement to farm income, once the market is identified. It is important to note that specialty crops are not a panacea. Obviously, everyone can't switch to the same product, or that market will disappear. But the point is that diversification can provide small but significant opportunities to a small but significant number of farmers. In general, the experience of the Minnesota Project working with many communities on many development issues is that there are no big fixes. Healthy, viable rural communities will result from many small actions. It is the creativity of the grass roots—both farmers and rural communities—that's going to revitalize rural Minnesota.

A part of the problem is overdependence on a limited number of crops. Four commodities—dairy products, hogs, corn, and soybeans—represent over 85% of Southeast Minnesota farm cash receipts (Austin Tech. Institute).

At the same time, much of our food is imported, with consumer dollars flowing out of the local economy. Based on the USDA national average of \$1,200 per capita, the people of the Survey region

spent approximately \$276-million per year on food. But over 85% of the Minnesota's supply of fresh fruits and vegetables comes from outside the state. On the whole, the state imports 44% of its food ("A Study of the Food System in Minnesota", Cornucopia Project, 1984). Thus, approximately \$221-million is spent in this region on imported food. A significant portion of this food could be grown locally.

When farmers produce for local markets there are many advantages.

Farmers and buyers can benefit from the reduction of transportation and handling cost for imported foods.

Farmers are less dependent on industrial monetary and trade policies, and foreign markets.

The local economy reaps the benefit of increased dollars generated. For every dollar of agricultural product that is kept in the local area, the multiplier effect creates additional benefits, as money circulates through the local economy. This can be a significant boost to an economy. And these dollars mean new jobs.

Retailers, food processors, and preparers benefit from having fresher foods for those they serve.

Consumers benefit from tastier, more nutritious, and ultimately less expensive food.

All indications are that farmers are interested in diversifying. A 1985 Iowa Department of Agriculture study found that 52% of 7,000 farmers surveyed were interested in diversifying. When asked what they needed to make some changes, the biggest proportion (80% of respondents) said they needed marketing outlets. Also needed were educational information (77%), capital (61%), and equipment (46%) (1985 Ag Diversification—Farmers' Survey).

This AgMarket Search is a first step toward diversification. The Minnesota Project decided to look first to the markets close to home, focusing on the bulk buyers, and looking at the entire array of commodities which actually can be grown in our climate and soils even though many are not grown at this time. Farmers need this market information to begin profitable diversification of their operations.

The summary report, entitled "AgMarket Search for Southeast Minnesota", contains a full description of research and recommendations, and is available, for \$5.00. The detailed printout of buyers and commodities costs \$15.00. Request copies from The Minnesota Project Southeast Office, Box 4, Preston, MN 55965.

THE CREDIT CRISIS AND THE CREDIT UNION ALTERNATIVE

(By Charlie Hopkins) *

COULD CREDIT UNIONS FILL THE FINANCIAL GAP IN RURAL AMERICA?

With the recent move of major chain banks pulling out of rural areas it is felt that a good portion of these lost lending institutions services could be filled by and or enhanced with the credit union alternative. Even though there is a great vacuum between those that have financial resources to invest and those that do not. There is still a need for monies to capitalize argri-related businesses. Those that have capital are, in this day and age, looking for alternatives that will pay high returns on their investments, but are sound investments. Credit Unions are insured up to \$100,000.00 per account by National Credit Union Insurance Fund (NCUA), a federal regulated insurance agency much like FDIC and FSLIC. The whole point of starting a credit union is, to in a self-help manner, get the local dollars reinvested into the community in an effort to help both depositor and borrower to grow with the community. The Credit union, because of its very nature of being a nonprofit member owned cooperative, fills that gap and hopefully as the saying goes "they all lived happily ever after."

WHAT IS A CREDIT UNION?

"A Credit Union is a cooperative society, incorporated for the two-fold purpose of promoting thrift among its members and creating a source of credit for them at legitimate rates of interest for provident purposes." (According to Minnesota Statute M.S. 52.01.)

A Credit Union can be formed by seven people with \$5.00 each. Each member owns one share (usually \$5-10.00) and has one vote. A Board of Directors, Credit Committee, and Supervisory Committee are elected from the membership. All members serve on a volunteer basis. A volunteer agrees to serve as a manager and the space office equipment is donated. These volunteer committee members duties are normally spelled out as follows:

(A) Board of Directors—the board sets operating policy, interest rates and dividend rates.

(B) Credit Committee—is comprised of five members. They will make decisions on granting loans to their neighbors based on Character, Provident Purpose, and Networth.

(C) Supervisory Committee—their function is to serve as a watchdog to oversee the operation, to ensure that the credit union principals and operation are sound, and in compliance with all standards.

Principals of a Credit Union.

* Founder, Fulda Credit Union, Fulda, Minnesota.

- (1) Voluntarism;
- (2) Self-help;
- (3) One member—one vote;
- (4) A "Common Bond"—An association or geographic area that has a common need;
- (5) Consideration of a persons character as well as net worth.

WHY WOULD A CREDIT UNION WORK IN RURAL MINNESOTA?

Historical application of credit unions

In 1846, Germany was in the midst of the "Great Famine". Rural residents had lost everything. A new beginning was impossible because the traditional credit sources was not available. The farmers and towns people were not able to meet the conventional standards of "credit worthiness", the only alternative was loan sharks. The formation of credit societies was introduced into the rural environment. Wealthy patrons from the cities tried to help out by sending funds to capitalize the rural credit groups in an effort to offer a new beginning. The result was a complete failure. The individuals borrowed the funds, but felt there was no need to repay the wealthy patrons. In 1848, the credit societies reorganized and this time, the idea was simple: by pooling our OWN funds and making loans to neighbors and co-workers, people could achieve a better standard of living for themselves and the community. Loan approval was decided by a credit committee comprised of peers. Approval criteria was based on character and the ability of the borrower to turn the loan proceeds into a productive enterprise that would be mutually beneficial. Net worth and collateral were minor aspects of loan approval as they were not applicable to the situation. Commitment to repay was present, the fund borrowed belonged to friends and neighbors. It was a success and by 1864, the idea of credit unions became widespread in the European farm areas.

The credit union idea spread to Canada in the form of Peoples Bank and today every Canadian town has a "Peoples Bank". In 1909, the first credit union was organized in the United States. Growth in the U.S. was not rapid until 1929 and the onslaught of the "Great Depression". Credit Union numbers grew dramatically in the 1930's and in 1934, the Federal Credit Union Act was passed—the regulator was "Farm Credit Administration". In the early 1950's, (Post WWII), credit unions experienced another growth period and doubled in numbers. Again we had a recessed economy and people returning from war without the conventional credit history to satisfy conventional credit sources.

In the last ten years only five credit unions have been chartered in Minnesota. Only one is still a viable institution. This lends credibility to the fact that credit unions only begin successfully in a depressed economic environment, when need becomes overpowering and traditional loan sources are not available.

Fulda, a parallel to the past

As with the other historic periods of economic instability, such as Germany's economic collapse caused by the great famine, the many European economic upheavals, American and Canadian depressions and recession, and recently the recession of the 1980's in the

United States. Fulda and the surrounding communities, found itself caught in a economic upheaval paralleled only to, some say, the "Great Depression" of the 1930's. This economic upheaval has been devastating to the local economy, in the cost of lost farm and business through bankruptcies and foreclosures. This type of economic failure, which is so wide spread, cuts into the very fabric of all social structures and strata in rural America. To which, it leaves only destruction and despair of personal life and the belief in a rural systems ability to support itself both socially and economically.

In order to look at ways to help rural people out of their problems, one must look at the people you wish to help. Rural people whether farmer, businessperson, or labor, are a fiercely independent lot; and look at help from the outside as something to be shunned. For they have been brought up on the notion that "a man worth a plug nickle can make his own way in life no matter what they throw at you". On top of this, the path to self reliance should be done with a minimum of help from the people in your own circle, and to ask for much help is considered a sign of weakness. This attitude is cause for considerable stress among rural people. For at this time, a major portion of the population is in need of some sort of financial, mental and physical support.

By examining some of these ideas, you can see that finding accepted solutions to a way out of this economic caous is at best difficult. For the ideas that come to mind as logical and forthright solution are not normally accepted. This is especially true if the solutions look at all like a hand out, or if they look as though you are going to tell these people how they could better run lives and businesses.

As the Farm crisis began to set in, during 1982-83 it became clear that Washington neither understood the problem nor did it care. To make matters worse the dogma of the last 15 years made an indelible impression upon all who were involved in the farming industry. The touted notion of becoming bigger in an effort to producing more and more farm products finally reached a critical mass, with seemingly no one to stop it. Government, industry, and lending institution all urged the farmer to grow and become that cut above the rest, for there was no tomorrow and land was at an all time price high. Becoming big, bigger, the biggest became, for some farmers, an obsession. To reach this point of prestige among fellow farmers became the ultimate and businesses and government catered to the biggest using them as an example of what could be accomplished.

Therefore, Government could become in the eyes of the agricultural industries, both a God sent friendly provider and a Godless money grubing enemy all in the same breath. The latest election of local, state and federal positions shows the distrust and displeasure in what government has or has not done in the past few years to help out in rural areas.

When the crush of the "Farm Crisis" finally came, people were left in a numb state of shock. for many months they refused to believe it had come and was here to stay. Even lending institutions were not certain that what was happening, could actually happen. For bankers it was scary, because in the rural areas a sizeable por-

tion of their lending portfolios were invested in the agricultural industries.

The closing of the Fulda State Bank brought the realities of the "Farm Crisis" into full focus to all in rural and greater America. For here was a graphic illustration of how far down the path to economic destruction we all had gone. The timing of the closing of the Fulda State Bank in many ways was the hardest toxin of all to swallow. For it happened in the end of February, the time of year when many farmers and businessmen obtain their annual spring start up and planting loan for the coming season. With the closing of the Fulda State Bank, a lending panic started among area bankers, subsequently credit dried up overnight. On top of this, the Federal Depositors Insurance Co. (FDIC) was working to close down and recoup its losses on those loans it was left with after the selling of the old bank and the subsequent change over to the new bank owners.

All in all, the year of 1985 was not one the resident of Fulda would soon forget. But it marked a new beginning and a willingness of the towns and country people to fight to retain their way of life.

WHO WOULD BE INVOLVED IN THIS CREDIT UNION?

This and many other questions were put forth by a small group of Fulda area residents to Debby Ellingwood and Tom Nord of the Minnesota Association of Credit Union (MACU). Debby Ellingwood, the major architect of this project, after watching Dan Rathers "Trouble On the Land" news documentary, felt the credit union philosophy of self help could be the answer to these rural oriented credit problems. Ellingwood, Executive Director of MACU, contacted Commissioner of Commerce, Mike Hatch, and explained her idea about starting a rural credit union pilot project. Sighting the fact that, a need for an alternative credit system was needed now more than ever for these people. Commissioner Hatch was very receptive to the idea and put Rochell Bergen his agricultural specialist on the assignment.

THE FULDA CONNECTION IS MADE

While this communication was going on between the Department of Commerce and the MACU, several Fulda residents were also looking for ways of again opening credit for the Fulda Area. Ted Winter and Larry Green had made several trips to Mike Hatches office in MPLS looking for ways to get the credit situation in Fulda elevated. Commerce Commissioner Hatch had turned them over to Rochelle Bergen explaining she was more familiar with Fulda's situation. Bergen was very familiar with the circumstances surrounding Fulda's credit problems, being one of the examiners that worked on the Fulda State Bank closing and subsequent FDIC house cleaning. Rochelle explained the situation with Fulda's current lending situation and then made the suggestion of looking into Debby Ellingwoods proposition concerning a credit union. The connection was made, a meeting was arranged in Fulda with officials from local government, private business, and farmers. After hearing Ellingwood proposal and asking many question about the

nature and design of a credit union the welcoming committee decided to go for it.

This began a series of meeting that was aimed at talking with area people interested in the possibilities of starting a credit union. Informing the public as to what a credit union could do for them and their community. A Steering Committee was established, which in turn developed into the basis for the credit unions first Board of Directors, Credit Committee, and Supervisory Committee.

This process incorporated, 6 months of very intensive work by, a highly dedicated group of Fulda area residents, MACU personnel and members, local government personnel, the Governor and his office, Department of Commerce, federal and state legislators, and the National Credit Union Insurance Fund.

The Fulda Area Credit Union is still a fledgling credit union and has, from its inception, hurdeled many a pit fall and has been working hard on its way to becoming a complete success.

WHEN WOULD THIS CREDIT UNION BE ABLE TO HELP?

The Fulda Area Credit Union has already begun the task of helping the rural economy rebound from the "Farm Crisis". To date, it has a very active lending portfolio, pays a higher interest on deposits, offers free checking with no minimum deposit and pays interest on checking accoutns with over \$300.00 in deposits, and many other innovative lending practices. The credit unions financial structure is growing right on target in relationship to the projections set up prior to credit unions opening. By next spring the credit union will be able to handle agriculture loans, offering for the first time, usage of an innovative computer software lending package. It is hoped this software, which couples lending practices, production models and artificial intelligence, will help steer the lender and borrower away from the problems recently experienced by other lending institutions involved in the agriculture industry.

Harvesting Hometown Jobs



a
**small-town guide
to local economic
development**

NANCY T. STARK
STAFF ASSOCIATE
FOR ECONOMIC DEVELOPMENT

National Association
of Towns and Townships

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chapter 1
economic
needs
and
strategies

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why economic development?

Economic development—it sounds fancy and complicated. To some people, the words create pictures of polluted communities and urban sprawl. But, when carried out properly, economic development can be straightforward and unobtrusive.

This chapter introduces economic development, using concepts that make sense to the leaders of small communities. It starts with a definition and six reasons for doing economic development. Then it proposes five useful economic development options for small communities. The chapter sets the stage for future economic development discussions.

what's economic development?

What is economic development? Basically, it is an activity local governments undertake in cooperation with business and industry. There are two goals of economic development: to increase local revenues and to retain and/or create local, permanent jobs.

What does economic development mean for your small town? Development might mean attracting a major industry or promoting real estate investment. Yet, what is far more likely is a kind of economic development that is especially compatible with the needs and resources of small communities. Perhaps your version of economic development will produce a few new or expanded commercial businesses or a light industry which employs 15 workers.

You say that economic development isn't needed or wanted in your community? Maybe you're right, if the town is raising sufficient revenues and providing enough jobs for its citizens.

But maybe you're wrong. Sometimes town officials reject economic development too quickly. They think that the activity is only suitable for large cities with a professional staff and attractive tax subsidies to attract firms.

six sensible reasons

Travelling through the nation's small communities, NATAT has uncovered six sensible reasons why small towns should be concerned about economic development. Let's review these reasons and see how they apply to your community.

- The young people are leaving our town. Graduates can't stay to raise families because there are no jobs. We need more employment opportunities for our young people.

Creating permanent, local jobs for high school graduates is a major incentive for local development. In South Hill, Va. (pop. 4,400), local officials undertook a 10-year business expansion and job training program precisely for that reason. The town joined with the local chamber of commerce, nearby community college, local planning and development commission and two state agencies to create about 500 jobs during the past decade.

In the small farming community of Canova, S.D. (pop. 150), 26 high school students placed an unusual ad in several Midwestern newspapers. The students offered to work one month free for any company employing at least 25 people, if the business would relocate to their area. One student explained, "We're the future, and we have to save our hometown."

- The economic recovery hasn't arrived in our town. Several businesses have closed or cut back. Some of us are skilled in manufacturing jobs that no longer exist. We need new business activity.

In the late 1960s, the unemployment rate hovered around 3 percent. It hasn't fallen below 7 percent since 1980.

Rural unemployment is a particularly sticky problem. In the Northeast, rural unemployment rates have surpassed urban rates since 1976. Small communities in Illinois, Ohio, Pennsylvania and especially Michigan continue to experience joblessness of eight to 11 percent.

Particularly harmed is the small town that has relied upon one or two industries—especially manufacturing—for citizens' employment. For years, Ely, Nev. (pop. 4,800) depended on the copper industry for its primary support. Since the mine, mill and smelter closed, the town's economy and population have declined steadily. Ely's leaders formed a local improvement development committee to begin to diversify the local economy.

Underemployment is also a problem. Trained workers are accepting menial jobs because their



skills are no longer demanded by area employers.

- Our community is principally agricultural. But farming alone can no longer substantially support the town. We need to vary our local economy and offer more off-farm employment opportunities.

According to the U.S. Department of Agriculture, over 50 percent of total farm family income nationwide is derived from off-farm sources. Farm family members are seeking employment off the farm, in area businesses. But often the jobs are not there or are limited.

What rural communities need is a balanced local economy. "Farmers in many areas are dependent on a diversified rural economy. Decline in off-farm employment opportunities or a failure to grow is detrimental to small farms," explains University of Illinois economist David Chicoine. So the goal is not to classify towns as agricultural or non-agricultural, but to create blended economies.

- Our town needs to raise additional revenue, but increasing residential property taxes is not an option. We need an alternative strategy for expanding the local tax base.

Small communities need revenues to support expanded local services and facilities. Economic development is a means of raising funds, usually without raising local property taxes.

The town of Granby, Conn. (pop. 7,958), has a plan to increase its local tax base through development. First Selectman David Russell and a team of private volunteers are working to attract multi-family housing and business prospects to Granby. Taxes paid by these new commercial and residential occupants will supplement revenues, without overburdening owners of single-family homes.

- The quality of life in our community is special. We want to preserve it. And it's an important asset in encouraging business growth.

Quality of life is a key ingredient for successful economic development, and it is abundant in many small communities. Oxford Township, Kan. (pop. 2,500), is using its country flavor to create, it hopes, a series of rural specialty shops serving local people and visiting tourists. Small-scale retail trade and tourism would preserve the town's rural quality, while adding to its economic base.

- The county is drumming up some plans for development in our town. If we don't plan our own economic future, it may be planned for us—maybe not to our liking.

Without a well-thought-out economic development strategy, small towns are subject to decisions made outside the community. Sometimes, the

economic interests of the town conflict with the interests of the region.

An economic development strategy is a statement of what is to be accomplished, how it is to be accomplished and when certain things are to happen. It need not be long. A few written pages are fine. An economic plan for the future could help save the town from distasteful annexation decisions and environmental changes. □



Farmers Home Administration

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increasing economic activity: five options

No single economic development program can cure a town's stagnating economy.

Glen Pulver, agricultural economist at the University of Wisconsin at Madison, proposes five options for economic development. A comprehensive local development strategy for your town will comprise all five approaches.

Improve the community's ability to capture existing income.

Dollars flow in and out of the local economy. A healthy economy limits the economic out-flows, or leakage, from the community. Leakages result when local residents make purchases at regional shopping centers, vacation away from home, invest in out-of-town businesses and real estate or pay wages to commuting workers. Obviously, no community can keep all of the dollars that flow into the local economy. But local leaders can work to plug some of the leakages.

Surveys and assessment tools help officials to find the holes and develop strategies for retaining income. Such strategies may emphasize downtown revitalization, job skill training, special community events, housing development or other development techniques.

Improve the efficiency of existing firms; help small businesses to expand, creating additional local jobs.

Research conducted by the Massachusetts Institute of Technology and the Brookings Institution shows that 40-60 percent of job growth comes from the expansion of small businesses.

Local leaders often overlook the businesses already in their communities. Forward-thinking leaders visit with local firms, listen to their concerns and learn of their plans for the future. By knowing where to locate business assistance specialists and how to encourage bank-sponsored loans, officials can make their local economies more competitive and productive.

Encourage the formation of new businesses.

There are more entrepreneurial energies in small communities than you might think. New businesses are continually needed to meet changing needs. Young firms can capture some of the

dollars currently leaking to other communities and offer new local job opportunities.

New home-based businesses are particularly compatible with the small town landscape. In its 1984 study of home-grown enterprises, The Minnesota Project reports that new home-based firms are flourishing in rural areas.

Business formations need three things: capital (resources and financing), labor (hopefully, specially skilled) and technology (computer connections are now possible in even remote, rural areas). Community surveys, inventories, business training sessions, help from experienced retirees and bank-sponsored loan programs can help local leaders to inspire new business growth.

Attract basic employees.

Although business recruitment has received more attention than it deserved, it is a viable development option. Basic employees sell goods or services outside the community, which generates income to be dispersed among local citizens. Then this income is spent on other goods and services consumed locally, creating still more income and employment.

Today's new jobs are coming from service-producing industries, not large manufacturing operations. Among the new basic employers are insurance companies, research and development laboratories, wholesale businesses, transportation firms, business services, recreation and tourism, colleges and universities, hospitals, military establishments and non-local government offices.

Increase financial aid received from senior governments.

It is to the economic advantage of communities to retrieve some of the money taxed away by county, state and federal governments. There are two forms of financial aid: individual transfers received by citizens (social security, public assistance and pensions) and community-level transfers, such as grants, loans and contracts.

Senior government grants awarded to communities for streets, water and sewer, health programs, education, parks and recreation, and housing provide the necessary infrastructure for business development. And often, the funds received from individual transfers are spent on local goods and services, contributing to the community's economic health.

The first four strategies are discussed, in depth, in the following chapters. One aspect of the fifth strategy—increasing community-level transfers—is cited briefly in the final guidebook chapter. □

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chapter 2
getting
organized

community-wide participation

Individual excellence breeds Olympic marathon medals. But it takes first-rate teamwork to produce a World Series win—or to achieve community-wide economic development successes.

On the ball field or in the town hall, the goal is the same: to win through the combined talent of a diverse group of players.

This chapter is about organizing for economic development—why, when and how to organize the players successfully. Efforts to create local jobs or increase revenues often fail because no organization is in place to carry out the community's agenda. It's like constructing a skyscraper without setting the concrete foundation.

Organizing may sound easy, but it isn't. It takes time, planning and lots of hard work. Yet building an organization—be it a formal local development corporation or an informal citizens committee—is the first, and maybe the most crucial, step officials can take to inspire local economic development.

leadership through teamwork

"Most effective action is accomplished by teams working toward common goals. There are captains, of course, but achievement requires the talents of more than a single individual," says Kettering Foundation scholar Bruce Adams. One of the major reasons for forming an organization is to capitalize on the unique abilities and power positions of several community leaders.

A second reason for organizing is to create a legitimate forum for discussing important community issues. Organization members can work to reach a consensus on questions like: is economic growth desirable? if so, what kind of growth is compatible with the community? what financial benefits will be gained from new growth? how can we ensure that the financial benefits outweigh the costs?

Successful organizations produce products, not just discussions. The third reason for organizing is to make many people accountable to achieving something real.

The first product might be a community economics session or a local survey of commercial desires or labor skills. It really doesn't matter. What's important is that the group outlines an agenda, makes a commitment to action and—within a short time—produces an achievement.

The greater the number of organization participants, the better. Of course, not everyone needs to be a key member; hopefully, there are task force and subcommittee opportunities.

identify participants

So citizen participation is important—but how does one foster it? Getting 50 bodies in a room is a beginning—but only a beginning.

There are at least four ways to identify would-be leaders and build a reputable, diverse organization. Try each method individually or combine them.

Iowa State University sociologists cultivated four methods. In the traditional method, community leaders are identified by listing all people who hold formal authority positions in the community. It is assumed that such people have the power to make key decisions and regularly use it.

Influential positions are held by local elected officials, appointed officials, small merchants and large business leaders, chamber of commerce directors, community bankers, local service agency staffs, utility company personnel, regional or state government staffs, school board members, religious leaders, media representatives and others. Directories of officers are helpful in finding candidates for an organization.

A second, and less formal, way to solicit citizen participation is to consider people who are well respected in the community, but who may not hold positions of authority. In this method, the social interconnections matter.

Often, influential leaders work behind the scenes to affect community decisions. To identify this kind of leader, ask people holding formal positions (listed above) to offer their suggestions. It's not important that the position holders know their candidates personally.

A third way to build citizen organizations is to invite the key participants in previous community decisions to join. Important community decisions were made when the health clinic was established, a new industry moved in, a school board referendum or bond issue was passed, a community library opened and so on. By studying these dif-



ferent decisions, influential—perhaps untapped people—resources can be gathered into the process.

Soliciting participation from local voluntary associations is the fourth way to organize citizens. The assumption is that power to affect community decisions is gained through participation and holding offices in local voluntary associations. Surely, many economic development achievements grew out of the town's Lions Club.

A list of possible voluntary associations is almost endless. There are numerous associations falling under the broad headings of health, economics/business, politics, religion, education, service/recreation, agriculture and fraternal/patriotic.

Economist John Fernstrom says that selecting groups of people to be involved in an organization is not enough. It is equally important to consider the qualities of individuals.

According to Fernstrom, the most helpful organization members are individuals who: are personally interested in economic development; are or will be affected by development activities; have knowledge about the problem; will communicate with others in the community during their time of service; are committed to serving on the organization; are willing to change, if change is necessary; have a positive attitude and enthusiasm; and are able to work well with others.

forgetting anyone?

Enormous community successes have been achieved through the leadership of women, youth and retirees. When building an economic development organization, don't forget these groups.

Rock County, Wisc., Extension Service Agent Alfred Finger says that women are a dynamic force in getting community goals achieved. "Women speak out and form local pressure groups. Twenty women might march into a city council meeting to plead for improvements to the small downtown area," Finger explains.

Young people are a second bountiful source of community improvement energy. Phil Scharre, regional planner at the Tennessee Valley Authority (TVA), believes soundly in youth leadership for economic development. "Because young people are deeply concerned about local jobs, they are particularly motivated to work to enhance the community's economy," says Scharre.

The TVA planner recommends involving students early in the process. "Young people can serve on survey planning committees, write com-

petitive essays describing ways to create additional employment and much more."

University of Wisconsin rural sociologist Gene Summers is enthusiastic about the talents of retired people. "Retirees are often overlooked when forming community organizations. Yet they offer a multitude of skills, experience, connections as well as income."

Scott Gerloff, director of the National Main Street Center, offers a second reason for involving retired citizens. "Elderly voters don't want their taxes raised. Often they oppose bond issues for economic development. Yet, if they are involved from the start, there is less of an incentive on their part to oppose development-related expenditures."

should the organization be informal or formal?

Organizations vary tremendously. The state-chartered local development corporation may sound nothing like the Lions Club's economic development committee. Yet the two organizations' priorities and activities could run parallel. Often, organizations for economic development begin as informal groups and later grow, as needed, to become formal structures.

Formal organizations are sometimes preferred because they lend more authority and credibility to the development agenda. Also, formal corporations and commissions often have the legal standing required to conduct certain activities that are beyond the scope of local government and voluntary associations.

local or regional?

Economic development organizations aimed at business attraction may target their activities locally or regionally.

Constructing a local organization is often the easiest, but regional approaches have at least two advantages over local strategies. Many small communities lack the money and expertise needed to direct their own development programs. And business owners select locations primarily on the basis of regional characteristics, not local attributes. Yet, if the organization's goal is to help existing small businesses to remain and expand, a local strategy should work well.

select a structure

There are numerous structural options to consider when building an economic development organization. NATA has uncovered five organization types; of course, the list is not limited to five. Reflect upon a town's needs and resources before selecting a structure for an economic development organization.

Non-Profit Local Development Corporations (LDCs) and Economic Development Corporations (EDCs). Concerned citizens form these private, tax-exempt development organizations, and charter them under state corporation laws. Non-profit LDCs and EDCs—they sometimes go by other names—are eligible for certain federal, state or private grants and loans.

For-Profit Local Development Corporations and Economic Development Corporations. Concerned citizens also form these private, but not tax-exempt development organizations, and charter them under state corporation laws. For-profit LDCs and EDCs—also called by other names—are able to raise capital quickly by selling shares of stock to interested investors.

Local Government-Appointed Committees. These are, usually, informal economic development committees appointed by the town's elected leaders and restricted to the activities permitted of local governments. Such committees are easy to form, but sometimes difficult to sustain. Elected officials must provide committees with clear directions and timetables, if the organizations are to succeed.

Subcommittees of the Local Chamber of Commerce. Committees are often developed under the leadership of the chamber. McManis Associates (a Washington consulting firm which studied chamber activity for several years) reports that chambers are increasingly involved in active business recruitment and expansion activities. These committees work best when local government is a solid participant.

Special Committees of Voluntary Associations. Civic groups such as the Lions Club, Rotary Club, etc., sometimes spearhead special groups. In Jud, N.D. (pop. 118), the Lions Club was the key initiator of local development activities. Later, the Jud Area Betterment Corporation, a for-profit local development corporation, was formed to sponsor the town's investment projects. These committees are especially useful in starting the ball rolling in small communities.

next step: get educated

The economic development organization is formed and anxious to move forward. Now, which way is forward?

Unless elected officials are trained in economic development, the answer may not arrive spontaneously. No problem: get an economic development education.

Luckily, enormous numbers of resources are available to help design a community's economic development activity. Most training opportunities are practical and highly motivating. Receiving guidance along with other local-government officials is far more inspiring than digging through development textbooks.

Economic development training sessions are regularly conducted by the state's development agency, department of community affairs, cooperative extension offices and town or city government associations. The American Development Council, based in Schiller Park, Ill. runs accreditation programs in several states, usually in cooperation with the extension service.

Martha Greenwald, director of The Minnesota Project, a non-profit, community development organization, suggests that, after gaining some background, officials invite all likely economic development resource providers to a town meeting and let each one give a pitch. "The smorgasbord approach worked well in Babbitt, Minn. (pop. 2,400)," says Greenwald. "The city is now using a host of resources to help create small businesses, tourism and industrial promotion."

Another educational strategy is to put five local leaders into a station wagon and haul them to a neighboring community where economic development has produced results. There's a great deal to be learned through examples. Neighboring officials are all too pleased to show off their successes and explain how new jobs and revenues were created.

Don't forget the nearby county cooperative extension resource agents; their skills well exceed commercial production. Many specialists can offer guidance on economic development planning, community surveys, trade analyses and industrial attraction strategies. And, resource agents are knowledgeable about resources and private consultants. □



two small towns produce results

If you think of local development corporations (LDCs) as big-city-type economic development tools, think again. And, read what's going on in two small, rural towns of North Dakota.

Jud's experience

In the summer of 1980, the citizens of Jud complimented themselves on a successful 75th celebration of the town's founding and turned their attention to the next project.

Some folks sensed local dissatisfaction with the amount and the kind of items available for purchase in town. As the small community of basic, local businesses showed signs of deterioration, Jud households seemed to be spending more and more of their dollars in cities 20 to 30 miles away. There was a fear that Jud might become an isolated ghost town.

To find out if such concerns were justified, local leaders and civic organizations surveyed communi-

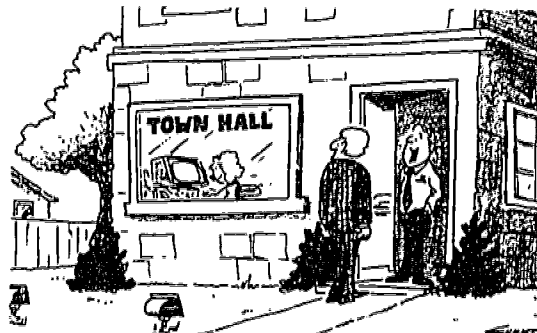
ty attitudes, with help from the North Dakota Cooperative Extension Service. Survey results, compiled in the fall of 1980, highlighted specific gaps. The 88 percent of residents responding to the survey said that Jud needed a larger grocery store, a beauty shop and a local bank.

Hearing these findings, the Jud Lions Club stepped up its involvement. Club leaders invited Cooperative Extension staff to conduct three community development seminars, mapping out a concrete plan for rebuilding Jud's business sector.

At the final seminar, the 50 Jud participants voted unanimously to create a new vehicle for raising local capital: an LDC named the Jud Area Betterment Corporation.

A mini mall became the first project of the corporation. Four development teams mounted a funding campaign by selling 160 shares at \$200 a piece, thus borrowing \$32,000 from Jud-area investors. Supplemented by donations and profits from local fund-raisers and property sales, the corporation raised over \$52,000 to finance its mini mall.

Today, Jud boasts a well-stocked grocery store, a new beauty shop, an enlarged cafe (staffed by local volunteers) and the community's first branch of the Central Dakota Bank, all in the new mini-mall building. Community leaders say that the activity spirited by the LDC has rejuvenated local investment and has created at least six new jobs.



Here there are rough. But XYZ Corp. loaned us the computer, 4-Wire did the landscaping, a local electrician gave us the lights . . .

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Wimbledon's story

A rough shot in the arm forced the small community of Wimbledon, N.D., to rethink its economic future. In the winter of 1976, a heavy snowstorm caused a *Wall Street Journal* reporter to be stopped in his tracks in rural North Dakota. To pass the time, the reporter photographed Wimbledon's snow-covered, deserted downtown and wrote a story about this inactive, isolated city.

When the story hit the newstands, the townspeople were outraged. According to community leader Mike Schlecht, Wimbledon citizens decided then that it was time to stick their necks out if they wanted the town to be around for another 20 years and beyond.

Like Jud, Wimbledon started by conducting a community attitudes survey and utilized an LDC which had been created several years earlier: the Wimbledon Community Improvement Corporation. Since 1969, the LDC has helped build a small, FHA-financed housing complex, reconstruct a grain elevator which was damaged by fire, retain a needed lumberyard in Wimbledon's downtown, open a satellite health clinic, and more. With its non-profit status, the corporation receives donations, benefits from fund-raisers and has 60 dues-paying members.

lessons for all

- Don't expect miracles overnight. It takes time, careful planning and some risk-taking to stimulate local economic activity.
- Don't expect that outside financial assistance will be readily available to launch a project. Some LDCs have been successful in getting starter funds from such sources as the "small cities" Community Development Block Grant program. But, it's usually better to count on local support for capitalizing.
- Some LDCs fail miserably, many times because a community collects a pot of dollars and then wavers over what to do with its fund. It is important that LDCs be formed for a particular purpose and be committed to achieving certain results.
- Don't underestimate the community's ability to show true altruism. In Jud, 160 shareholders have invested \$32,000 in the LDC, without the promise of personal financial gains or tax write-offs. To these citizens, such contributions are a worthwhile investment in a hopeful, productive future. □

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chapter 3
**collecting
and assessing
community data**

gathering information

"In the nation's economy this month, industrial production rose 0.6 percent, the GNP remained steady and consumer prices jumped 0.2 percent. The local economic picture is um, um...."

Often the nation's best economic statistics tell local leaders little about their communities' economic health—the potential for creating new jobs and generating additional revenues. To produce road maps to guide the community's betterment goals, information about the local economy must be extracted from available data or gathered firsthand and evaluated. Sound overwhelming? It doesn't need to be.

This chapter describes how information that a community assembles through a basic economic evaluation can steer its economic-development activities. It also offers specific guidance for designing evaluation tools—community development checklists, resource inventories and citizen surveys.

the right questions

Questions abound when local economic-development organizations get serious about bringing new jobs to town. Community leaders wonder about such things as: what parts of the local economy are growing or declining—agriculture, manufacturing, etc.; what services are citizens purchasing 30 miles away, and which might be offered in town; how many people are unemployed, and what are their skills; what are the community's options for improving its economic health, and which option should be pursued first?

Through various checklists and citizen surveys, community economic evaluation answers these questions and focuses the town's economic development agenda. An evaluation gives local leaders an opportunity to place the community under a microscope and see how it functions, in terms of its economic base.

Of course, evaluating a community's economic condition does not manufacture immediate solutions. It generates the information required to make important decisions. For this reason, local elected officials have a unique, essential role to play in transforming data into community decisions. They

should be involved early, to learn how to interpret the information, identify the town's strengths and weaknesses, and construct an achievable economic-development workplan. Only elected officials can use the information to initiate needed zoning changes, seek public or private grants and loans, exercise the local government's financing powers and more.

information guides action

Data assembled on the local economy should be used, practically, in order to move the town beyond the subjective wishful-thinking stage of economic-development planning. Often small town expansion efforts are based more on hopeful thoughts—"we need a shoe store"—and community pride—"this is a good place to raise a family"—than on an objective assessment of a particular business' profit potential in the community. By observing the community's economic mechanics, local leaders can gain a more objective view.

Consensus for the community's economic development strategies can be built, most realistically, through well-planned citizen surveys and other public forums. Most residents feel that they're making an active contribution to the town's economic future when their views are solicited and aired. In time, job-producing activities are being sponsored not by a trio of Lions Club volunteers, but by the town as a whole.

three goals

Reduce retail leakage. Sites where dollars leak out of the local economy can be isolated, and later plugged, through local surveys of consumer buying habits. Retail leakage occurs when a small town's limited merchandise selection encourages local residents to shop elsewhere for basic goods and services. As residents travel out of town to purchase an item that is not available locally, they tend to buy other goods that they otherwise would have bought at home. The result is a blow to all local businesses.

With few leaks, dollars can circulate in the community, maintaining and generating jobs and revenues. Think of the local economy as a house, with money and goods like air, circulating in and out through doors and windows. It is expected that a certain amount of dollars, or air, will leak out. But, if too many dollars pour out, through drafty

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retail gaps, the economic activity flowing in will have little effect. It's like heating a home with the windows open! Yet, if some of the leaks are plugged—by expanding the town's basic merchandise selection—more local dollars will remain in the local economy to circulate continuously.

Local leaders can use the community economic evaluation to construct an effective campaign to reduce retail leakage. The result might be a new medical clinic, hardware store, community bank or an enlarged grocery store, any of which could be supported by the local economy.

Guide and recruit business. Observations about the community's economy can be useful guideposts for existing business. Citizen demand for a service that is only available 30 miles from town might help justify a bank loan to expand a local business.

Surveys of citizens' attitudes toward business offerings could give existing firms the confidence to alter or diversify their products. As local businesses become more competitive, they are more viable and able to generate new job opportunities.

Business recruitment activities rely heavily on a good understanding of the town's economic and physical resources. A community inventory will help evaluate the town's resources against the demands of potential newcomers.

Many business attraction campaigns fail because the plans' architects were unrealistic. Maybe the community wanted only light, clean industry. Yet it didn't have the required labor, transportation or capital to make a deal profitable for the firm.

Improve decision-making. A realistic picture of the community's economics can be a tremendous asset to local elected officials. Planning for a host of public decisions will be improved through a clearer understanding of the local economy.

Nearly all public and private grant and loan programs require accurate documentation of community characteristics like population, average personal income and labor force participation. Some competitions ask for listings of available industrial sites, skills of unemployed or underemployed workers and evidence of citizen support for business development activities. This information must be extracted from available data sources or—more often—gathered firsthand. □

where to begin and how to continue

Don't start by constructing a road that's already been paved. At least part of the community's information profile will be available from local, state or national level data sources. Find out where and what information exists before launching local surveys.

public information

Most cooperative extension offices, county planning departments, regional planning and development districts, public libraries, state departments and other agencies have—or can obtain—useful publications from the U.S. Bureau of the Census. The census samples households in the nation and offers a detailed summary of the data by the community.

Business planners may be interested in three census population items: total population, number of households and average family size. Census estimates of personal income can project the potential purchasing power of people within the community's trade area—the geographic area from which the community draws the majority of its retail trade customers.

Labor force statistics are powerful indicators for any economic-development activity. The census and the U.S. Bureau of Labor Statistics provide two indicators of the availability of labor within the community: the unemployment rate and the female labor force participation rate. If the town's unemployment rate is considerably higher than the county and state averages, the community has a better chance to qualify for state and federal economic-development assistance.

when existing data isn't helpful

Unfortunately, information compiled by ready sources doesn't always fit the bill, for a variety of reasons. Often community-level data is not available for small jurisdictions. And there may be

so much data in the original source that extracting from it would take too much time.

Similarly, the information may be too old to use. The census is only conducted every 10 years, with some periodic updates.

Technical problems may inhibit a community from using published data. Some information systems require computers or other facilities to process the statistics. (Towns might circumvent this problem by using the facilities of a nearby university, school system, county or similar office, to format the information.)

For all of these reasons, communities are wise to initiate their own data collection systems. Does this mean that the local elected official travels door-to-door, gathering figures for weeks on end? No. Data collection can be shared among the members of a broadly-based organization (see Chapter 2), and any number of local, regional or state agencies can offer technical support.

Of course, not all communities will have the stamina to direct every one of these exercises. The rule of thumb is: do what the community can do. □

surveys, catalogs, inventories

Town meetings rarely tell local leaders enough about citizens' attitudes toward business development. Three vocal residents might declare that the community needs a medical clinic. But do the townspeople in general agree?

Surveying citizens' attitudes toward existing and prospective businesses can answer this question. Well-planned and executed surveys draw the community, as a whole, into economic-development activities. They are an opportunity to reach beyond the hard-core volunteers of local organizations and tap the quiet person's views.

Surveys might ask residents to rate the general appearance of the community's small downtown, the adequacy of shopper parking and the availability of particular retail items—clothing, medicine, hardware, groceries, etc. How well local retail prices compare with other communities in the area can be evaluated. Citizens can offer their views on the availability of financial services, the condition of the streets, the quality of recreation facilities and programs, and more.

Information compiled from the survey will determine priorities for the community's economic-development efforts.

catalog local labor skills

Businesses considering relocation or expansion will want to know the skill levels of the local labor market. Often, this information is not available in full from the state department of employment. A survey of local labor skills can fill the information gap.

The industrial development board of Slater, Mo. (pop. 2,630), recently conducted a confidential survey of area labor skills. The assessment was part of a 10-year effort to bring new jobs to Slater. The questionnaire asked all residents over the age of 16 to complete the survey.

Citizen surveys might ask about the individual's present work status, educational level, technical training, and type and level of job skills. Potential

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Survey methodology

Developing, administering and interpreting community checklists and surveys can be tricky business. There is no need for local leaders to conduct a community economic evaluation on their own when numerous experienced assistants are a simple phone away.

On the local level, staff of the nearby cooperative extension office, county planning office and regional planning and development district organizations are usually trained in survey methodology and business development techniques. Most agencies will help design and interpret community evaluations at little or no cost. They may want to receive in return data to support community development block grants and other federal programs.

economic/community development staff major data collectors. A state-level economic development staff may also help design community information-collection systems or refer town leaders to appropriate local resources. In several states, organizations of professional economic development practitioners (e.g., the economic development council) will perform objective community evaluations for a nominal fee.

Researchers will say there is an art to survey construction. Although local leaders are not professional researchers, they should keep in mind a few survey design techniques to yield meaningful results.

Make the questionnaire as personal as possible.

Maybe attach it to a cover letter signed by members of the local economic development organization. Write citizens in their own

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workers could indicate the lowest pay they would accept and whether they are willing to undertake specialized training for a new job.

In publicizing the survey to residents, stress that the questionnaires are not applications for employment. Otherwise, unemployed and underemployed citizens may be sorely disappointed.

inventory facilities

Does the community have ready industrial sites, recreation facilities, and an adequate water and sewer system? Businesses thinking of moving to or expanding in a town will want to know. By inventorying the town's resources and facilities, a community profile or an attractive brochure can be developed, systematically listing the town's assets.

Many county planning commissions and state departments of community/economic development have created standard community profile forms for town leaders to complete. Often, the information is computerized and easily reviewed by business prospects.

certified communities

Specific guidance in gathering and promoting community data is available from state-sponsored certified cities or community preparedness programs. About 17 states have established these programs to promote statewide development and to ready the towns' leaders for negotiations with business prospects. In trade for carrying the community through a series of development preparatory steps, the state dispatches likely business candidates to town.

For example, to receive the Minnesota Star Cities designation, a community must: form a local development corporation; inventory and assemble local data in a comprehensive community profile; develop a five-year-plan for economic development and complete a one year work program; create a video presentation to market the community to prospective businesses; collect local labor statistics; construct a five year capital improvement plan; prepare a community fact book; direct an annual visitation survey; and, entertain a complicated, mock industrial inquiry. □

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chapter 4
**cultivating
backyard
development**

improve and expand existing business

Realistic marriage-seekers set their sights on hometown sweethearts, not on the world's Marilyn Monroes and Clark Gables.

The realism that creates nuptials also pays off in generating local jobs. Economists report that a large majority of a town's new employment comes from the growth generated within local firms, not from the relocation of new businesses. Rule one for picking up businesses: cozy up to those hometown opportunities before casting a glance at big-city industry.

"Backyard development" is the business retention/expansion term coined by Dr. Larry Ledebur, economic development expert and principal of Aelan Associates, a research and technical assistance organization. According to Ledebur, communities can generate jobs in their own backyards, by fostering entrepreneurial activity and encouraging existing firms to invest in new capital equipment. This chapter proposes why and how small towns can identify and cultivate development opportunities in their own backyards.

myth of business relocation

Surely, many local leaders would like nothing better than to take credit for the successful relocation of a business. Best yet, the new firm should hire 100 unemployed workers, use little water, need minimal sewer service, emit no noxious fumes and remain in the community forever.

But these wish-list industries are few and far between. Small Business Administration (SBA) Senior Economist Bruce Phillips reports that there is little in- and out-migration of businesses, especially the small firms. "Most businessowners are tied to their towns and often will not move, unless they are offered an exceptionally attractive opportunity." According to Phillips, the bigger threat to communities is business closure.

Through its research, SBA has learned that companies do not relocate without a good reason. "Most migrations are due to transfers in ownership or mergers," says Phillips. Unfortunately, community leaders are rarely able to influence these factors.

There is another reason why businesses do not move willy-nilly. Most suppliers of business financing offer firms few incentives to relocate within their home state's boundaries or to resettle in a new region without expanding their labor force. Often, a requirement for receiving a loan is the net production of new jobs.

nurturing small firms

These arguments have persuaded numerous small towns to invest their limited economic-development resources in encouraging businesses to start-up, remain, and expand at home. The SBA says almost three-fourths of the nation's businesses are very small firms—fewer than 20 employees. Wise community leaders have taken note of this fact and incorporated small-business development into their overall economic development scheme.

business visitation

Sensing the risk and expense of exclusive industrial attraction campaigns, many small communities are adopting a balanced approach to job creation. Small business/industrial visitation programs offer towns an opportunity to maintain and expand the local economic base, without taking big chances.

In a business visitation program, local-government leaders visit small and large businesses in the area to collect up-to-date, confidential data on their needs, problems, concerns and plans. This information is then expanded into a comprehensive strategy for retaining and expanding local jobs and revenue opportunities. During the process, the local government considers how to create an environment that encourages home-grown firms to prosper and expand.

more than public relations

The primary aim of business visitation programs is to improve the efficiency of existing enterprises. "The more efficient local firms are, the more competitive they can be in the regional, state and national markets," explains Ohio State University Extension Economist George Morse. "And the more net income businesses will return to the local economy."



In a recent survey of 33 active business visitation efforts in Ohio, the state's extension service learned about additional goals and accomplishments of community programs. Small and large towns alike said that a visitation program is particularly effective in showcasing the community's pro-business attitude. Also, satisfied local firms can be the town's best advertisement in attracting new business.

Identifying and resolving problems requiring local-government action was the second most important objective. Local leaders reported that regular business visitations permit them to help existing firms locate sites or buildings for expansion, remedy zoning conflicts, alter traffic patterns, arrange for improved safety services, acquire public funds for business development and more.

Useful as well is the visitation program's ability to offer insights into the obstacles that local firms are likely to face during the next five years. Technological innovations, foreign competition and consumer taste changes are external threats felt by many hometown businesses. "Whether there is an attempt to save a plant through an employee stock option plan or a decision to find a new business to replace the old one, leaders need time to prepare an effective reaction," comments visitation expert Morse.

A fourth priority of Ohio's community programs is to alert local firms about financing and technical assistance available from a variety of state, federal and private sources. "Roughly half of the local success stories are the result of visitation programs linking small firms to useful state or federal programs," reports Morse.

organizing for visitation

The first step is to recruit volunteers for the business visitation team. Ohio Extension Agent Sam Crawford stresses that team members should be the town's "movers and shakers," who show enthusiasm, patience and commitment. Likely team participants are respected businessowners and managers (active or retired), elected officials, community bankers, chamber of commerce leaders, vocational education specialists, county extension agents, regional planning agency staff members, area university/college faculty, school board members, and private industry council members.

Ideally, the program should establish at least three teams of two members each. The Ohio visitation teams found that acceptance of the program by local firms is improved by pairing a public sector representative with a local business leader. Also, visits are more likely to stimulate follow-up

assistance and to reap tangible results if at least a few team members are paid staff (e.g., of extension, regional planning, etc.).

Teams are often organized and sponsored by the town or county chamber of commerce. But some teams are creatures of the local government or of a non-profit, community improvement corporation.

getting a business education

Becoming street-wise about state and federal business assistance programs is the second team activity. "Visitation members should know enough about available resources to feel comfortable in distributing fact sheets and encouraging the firm's owner to explore the programs," says George Morse. "But volunteers cannot become program experts. It's perfectly acceptable to say to the firm's owner, 'I'm not certain how to answer your question, but I'll be sure that our visitation coordinator gets back to you ASAP.'"

How do team members get so smart? Visitation experts recommend that local coordinators regularly invite representatives of key state and federal agencies to conduct a show-and-tell and distribute program fact sheets.

selecting, visiting firms

"When scheduling visits, don't ignore the smallest firms," warns Ohio Extension Agent Crawford. "Frequently, small, locally owned businesses are the ones most in need of assistance and the [ones that have the] greatest potential for future growth." Crawford also recommends giving priority to those firms which sell their products or services outside the community, bringing income back into the local economy.

Eventually, the program should reach all local businesses, scheduling visits with one or two firms per month per team. But care must be taken in assigning visits to team volunteers. "No member should interview a business competitor, political rival or even a key client," cautions Crawford.

reviewing industry trends

Which of the community's industries are likely to expand their employment during the next five years? Which businesses are likely to reduce employment or close? What marketing develop-

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ments, population changes and technological innovations are creating new opportunities—or applying new pressures—to local firms? These questions can be answered, in part, by reviewing the *U.S. Industrial Outlook*, an annual guide to current and future industry trends.

By describing trends in many business sectors, the *U.S. Industrial Outlook* helps team members to understand the business they are visiting. Such a grounding is a key to structuring a productive interview. As Morse explains, "Asking the right questions is essential to getting the right answers."

The 1986 *U.S. Industrial Outlook* is available by sending \$21 check or money order to the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Indicate stock number 003-008-00107-1.

tips on business visits

The team arrives, following a brief letter of introduction, and at a time selected by the businessowner/manager. In a low-key fashion, the team should accomplish four goals during this first visit: (1) learn as much as possible about the products or services of the firm; (2) listen for clues about the business' short- and long-term plans; (3) stress that the team's services are confidential; and (4) avoid making any commitments that cannot be fulfilled.

In Ohio, a three-page questionnaire is used to guide the dialogue. "But the interviewers should not fill in the information during the appointment," stresses Crawford. "That would inhibit an informal, relaxed meeting."

As soon as the interview is over, perhaps in the car, the team members should complete the questionnaire. Then an informal report can be compiled, noting the interviewers' personal observations and describing any problems identified during the discussion.

The team has an obligation to carry any unresolved concerns to potential problem-solvers quickly. "No matter what's involved in correcting the problem, keep the firm informed of your work on its behalf," recommends Crawford.

If visits are conducted regularly—at least once per year—respect for the business retention and expansion program builds. And the community which once was shocked by a plant closing or oblivious to a small business expansion possibility, gains essential insight into its economic future. □

create new firms within the town

Entrepreneurial may be the urban buzzword of the 1980s, but the concept behind the term is rooted in rural American traditions.

Competent, creative rural people have developed and sustained small firms for decades. Even today, small businesses are the lifeblood of many rural towns. In certain regions, small business is the only business in town. According to the Maine State Planning Office, firms with fewer than 10 employees account for 92 percent of the businesses in that overwhelmingly rural state.

the struggle before success

The typical small business struggles long and hard before it crosses the success line. Many firms don't succeed at all. The failures may be particularly common among rural small businesses.

Data analyzed by the U.S. Department of Agriculture's Economic Research Service indicate that entrepreneurial activity is more difficult to sustain in rural areas than in urban areas. Researchers found that between 1970 and 1980, the rates of growth among firms employing fewer than 20 workers were 30 percent in metropolitan counties, but only 16.5 percent in non-metropolitan counties.

Apparently, the stumbling blocks for small businesses located anywhere are especially obstructive for small business in rural areas. Naging problems like inadequate capital financing and undeveloped management skills may be more difficult for new firms to overcome in rural communities than in metropolitan communities. In a 1980 survey of 134 small businesses in Wisconsin, rural economists found that half of the firms surveyed had or expected to have difficulty in acquiring capital.

M. Kelly Lombardi, a member of the Maine Governor's Rural Development Committee, says that firms with small capital needs of \$5,000 to \$50,000 have a tough time borrowing funds. Private lenders rarely finance entrepreneurial projects.

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lifelines for small firms

As awareness of the management and financial struggles of small firms has grown, new assistance programs have sprouted up. Local-government officials can promote sustained small business development by linking local entrepreneurs with helpful resources. The goal is not to become a business growth expert, but to be an ambassador of the public sector.

The Small Business Development Center (SBDC) program, sponsored by the U.S. Small Business Administration (SBA), is a cooperative effort of universities, the federal government, state and local governments, and the private sector. SBDCs offer specialized management counselling, training, and technical assistance to small firms in 38 states. Contact the nearest SBA office listed in the telephone directory under U.S. Government.

The Corporation of Enterprise Development (CED) of Washington, D.C. and the Entrepreneurship Institute of Columbus, Ohio are two non-profit organizations dedicated to community-based entrepreneurial development. CED publishes a monthly review of enterprise development strategies, often highlighting innovative rural projects. The Institute sponsors two-day educational forums for community leaders and is the headquarters for a national network of entrepreneurs. Both organizations engage in other training and assistance projects to stimulate and stabilize new firms.

Area-wide community development corporations (CDCs) can also offer management, educational and investment services to small enterprises. One example is Impact Seven, Inc., a seven-county CDC that has helped rural firms in northwestern Wisconsin since 1970. This CDC offers high-risk loans to low-capital industries, finances speculative building (in cooperation with local leaders), runs seminars for rural bankers on entrepreneurial financing, and more. □

rural business starts at home

Cabbage Patch dolls and Apple computers have something in common: both originated as products of home-based businesses and soon became lucrative industries. It is not unusual for personal motivation, ingenuity and innovation to flourish at home. Whether the business venture grows to employ many workers or remains as a one- or two-person shop, economic development happens.

The 1980 census figures indicate that almost three percent of all employed Americans are now conducting business from their residences. The National Alliance of Homebased Businesswomen (NAHB), based in Norwood, New Jersey, says that the actual number of home-based enterprises may be well above that figure.

In a survey of rural, home-based businesses, development consultant Ingrid Bauer found an enormous variety of occupations. Bauer uncovered enterprises such as free-lance writing, folk-art painting, home food processing, teaching, mail order fulfilling, houseplant doctoring, weaving, building musical instruments and many more.

home work on the rise

The home-based work movement is increasing, especially in rural areas. There are five reasons for this growing trend.

- Home work offers flexible work schedules; no more 9 to 5.
- Home-based occupations permit workers to combine child-rearing responsibilities with the job. With the large increase in two-parent working families, home work is an attractive option.
- Tax write-offs are permitted for home workers. Many entrepreneurs deduct a healthy portion of their utility and rent or mortgage payments, as well as other specific expenses of the business.
- The opportunity to eliminate commuting time and costs is a major draw to home-based work. Transportation arrangements can be particularly troublesome and expensive in rural areas.
- Popular home computers and easy electronic data transmission are adding traditional, professional occupations to the list of home-based businesses. Although we are a far cry from the era of electronic cottages, home-based computer work is on the rise. The impact of new technologies can be felt even in remote, rural areas.

examine zoning laws

Wise town or township officials publicly support local economic development and can identify the key sources of business financing. But in the case of home-based business growth, local leaders need to take one more step. According to the American Planning Association (APA), many local zoning ordinances are inadequate to deal with the current multitude of home-based occupations. A fresh examination of these ordinances is warranted.

The NAHB and the APA recommend that ordinances enforce performance standards rather than permitting or prohibiting specific occupations. For example, a home business that the resident operates as an accessory use of the dwelling would be permitted if it met such standards as no visible alteration to the residential character of the dwelling; no objectionable noise, noticeable vibration

or noxious odor at the property lines; no interference with radio or TV reception in the vicinity; no display visible from the street, except signs as allowed by regulation; employment of no more than two people who are not residents of the premises; sufficient off-street parking for residential and business use as defined in local regulations; etc.

Minnetrista, Minn. (pop. 3,236) recently updated its home occupation regulations to accommodate limited commercial activity in a non-commercial zone. The city permits the accessory use of a residence as a place for the operation of a business or profession, provided the occupation is clearly secondary to the principal use of the home as a residence. The home must continue to look and function as a residence, and cannot compromise the character of the surrounding neighborhood, be it urban or rural. □



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chapter 5

**new basic
employers**

attracting outside firms

Magnets would sell for a pretty penny, if they could successfully attract new, basic employers to small towns.

Charming new businesses can be a trying, sometimes fruitless endeavor. Hundreds of communities are failing in their recruitment campaigns because they're taking the wrong paths—neglecting to sort out which types of businesses are suitable for the town, failing to prepare for a long-run investment and anticipating a big-bang solution that rarely arrives.

This chapter offers guidelines for designing and running effective business attraction projects as part of an overall economic development strategy.

why outside firms?

Sometimes retaining and expanding existing firms and initiating new businesses alone will not produce the volume of revenues and jobs needed. Floyd Snyder, town supervisor of Lockport, N.Y. (pop. 13,000) feels there's a need in his community to attract jobs from outside sources. "For several years," he said, "our town has been experiencing increasing expenses and decreasing population. You can't ask fewer and fewer people to pay more and more taxes. Economic development is Lockport's way to increase the local tax base while creating new employment opportunities."

Research recently completed by the U.S. Department of Agriculture's Economic Development Division reinforces the reason why rural development leaders should try to attract basic employers. "More than half of the new jobs in rural areas are created by branch plants of large corporations and by large, independent firms," notes Rural Business Section Economist James Miller. Miller recommends that a retention and expansion strategy be combined with luring branch plants of major corporations.

a long-term, assets strategy

As much as business attraction is a valuable scheme for small towns, the competition for new firms is exceedingly tough. Today's recruitment game is much more competitive than that of the

1960s and '70s. The world economy has changed—from manufacturing to service industries—and has slowed.

What's a small town to do, then? "Sort out which businesses are suitable for the community, be prepared for a long-run investment and realize that the days of the big-bang solution are over," advises Ron Shaffer, University of Wisconsin community development economist.

A targeted plan for marketing a town to business prospects arises from identifying and capitalizing on the community's unique assets. "That uniqueness may be the presence of a valuable natural resource, a strategic location in serving a given population (e.g., elderly citizens), a scenic beauty, pleasant climate or pleasing architecture, or a combination of these and other values," according to a publication of the Western Rural Development Center, a regional center for social science and community development.

rally areawide involvement

To see and capitalize on the connections between firms—for example, the business that might move in because its chief customer is anchored nearby—the entire community must be involved. An effective local development organization seeks frequent leads and suggestions.

"Our offer of a \$1,000 award to the person who successfully refers a new employer to Brookfield, Mo. (pop. 5,500) hasn't yet produced a commitment," reports Brookfield Industrial Development Authority member Jerry Elson. "But we've stirred up a lot of activity. Everyone is taking part. Already, we've made presentations to several good prospects."

"There used to be a lot of opposition to the idea of our town banding together with nearby communities to recruit new employers," continues Elson. "But opposition has decreased sharply. Everyone knows that the region needs jobs badly. So Brookfield just joined a 14-county northwest Missouri development group."

Eager and open-minded town leaders are pursuing a cooperative approach to job growth, for three major reasons. First, by banding together, scarce staff and abundant volunteer resources can be used productively. Second, businesses usually select a location based on regional, not local, characteristics. Finally, the rural labor force is highly mobile; if jobs can be brought to the region, most workers are willing to commute. □



presenting a town to new industry

Industry targeting has been called the rifle (one shot), rather than the shotgun (multi-shot), approach to economic development. The idea is to go after what you are likely to get. That's the recommendation of Phillip D. Phillips of the Fantus Company, an industrial site selection firm.

Phillips is not alone in urging local leaders to target business attraction ventures. A blanketing-the-region-with-brochures approach rarely bears fruit and quickly exhausts a small town's resources. A more sensible strategy involves surveying what the community offers (see Chapter 3), boosting up its attractive qualities and marketing the town's assets to likely business contenders.

Industrial site location experts say that most businesses examine five factors when making an investment decision. All five factors are critically important; the relative weight of each depends upon the needs and resources of individual firms.

access to markets

Market proximity is a major business location factor. A superior location is close or accessible to the business' production centers, major wholesalers and retailers, and a thriving consumer market. Few communities or regions can offer all three ingredients. Yet, one influential market characteristic often can be identified and capitalized.

"The trick is to watch for interconnections," says economist Shaffer. "For example, an industry that saw a growing market in the Southwest for its paper products recently relocated from Wisconsin to the Dallas-Ft. Worth area." Perhaps a Dallas economic developer anticipated and took advantage of the connection.

industrial sites

"An updated inventory of available sites and buildings is a cornerstone of marketing the community to potential employers," says industrial developer Paul Hedden of Cartologue, an industrial site assistance consulting firm.

Experts stress that attractive sites are properly

zoned, preferably under local-government control and priced definitely and competitively. "If the government cannot or will not purchase the property, the towns should take a long-term option on the land," Phillips of the Fantus Co. suggests. "That's a legally binding agreement that the property can be purchased at X price, by Y date."

Economic development consultant Kenneth C. Wagner cautions local leaders against pricing property too high. "The community's profit comes not from the sale of the land, but from the jobs, payrolls and tax revenues that result from that sale." And the property must be available at an established sales price, not contingent upon Farmer Jones' will or good humor.

Zoning is not a dirty word to responsible industries. "Most quality industries feel that proper zoning affords them protection. Businesses want their immediate neighbors to be clean and consistent," says Phillips. By zoning land for industrial use only or by establishing an industrial park, local leaders create clear buffers between business and residential neighbors.

local facilities

Community infrastructure is the 1980s term for local services and facilities, roads, schools, recreation and cultural programs. Ready and usable facilities are demanded by most businesses, although some firms will share the cost of providing necessary infrastructure.

Slater, Mo., made the most of its quality infrastructure in attracting Escue Company. "Because Slater is located along a good state highway, offered developable land adjacent to the Illinois Central Gulf Railroad and was willing to push other governmental matters aside temporarily to make room for the Escue Company, we landed the firm," says former City Manager Kenzenkovic. In return, the small city gained 15 to 30 year-round jobs.

"Rural communities should be able to fully prepare an industrial site for \$15,000 to \$18,000 per acre," says Phillips. "That includes water and sewer up to the property line. The business can foot the tap-on fees."

Research conducted by Public Technology, Inc., (a practical research organization for cities and counties) shows that businesses are strongly attracted by a community's overall livability—or quality of life—such as attractive surroundings, a good school system, recreation and cultural facilities, and a low crime rate. These attributes are found in many rural towns, and local governments

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can take active roles in strengthening them.

Knowing what type of infrastructure is needed by which industries is helpful, especially in targeting job opportunities. "It is important for non-metropolitan localities to decide what form of job growth is most attractive and attainable before making development-oriented infrastructure investments," comments University of Missouri research Daryl Hobbs.

For example, some firms—even low technology businesses—are enticed by the community's communications infrastructure. Cable television, discounted long-distance telephone service, and one-day package delivery service are attractive infrastructure offerings to certain businesses.

labor skills

"Positive labor force characteristics are a major incentive for relocating firms," says Larry Colaw, industrial development specialist at the Tennessee Valley Authority. Data on the individual community's available labor skills can be gathered through local, confidential surveys (see Chapter 3) and marketed to business prospects.

Sometimes targeted job training is the linchpin in a location decision. Publicly supported employee training—like state-sponsored customized job training programs—can substantially reduce a firm's crucial start-up costs and short-circuit the time required to bring the operation up to full capacity.

Targeted training initiatives vary among the states, but most programs have the following traits: training is conducted prior to employment, so trainees are unpaid; the company facility, or a nearby community college, serves as the training site; state government picks up 50 to 100 percent of the training costs; and, manufacturing industries are favored for training subsidies.

financing

According to a recent *USA Today* article, money is the primary lure cities dangle to attract business prospects. Money translates into low-interest loans, tax-exempt bonds and outright grants.

Low-cost financing for business start-ups and expansions is often vital. (A revolving loan capitalised jointly with a Community Development Block Grant and local bank funds is an example of such

financing.) But local tax breaks may be risky and ineffective, especially for small communities.

In a study of 230 companies, the Massachusetts Institute of Technology found that plant location decisions are based on factors such as labor cost and climate, proximity to markets and the availability of services—not tax breaks.

"And the problem with granting tax incentives at the local level," says Shanna Ratner, a Vermont-based economist, "is that the locality is left with much less to spend on the very services and infrastructure many businesses find most attractive."

Yet financing can turn the tides in some cases. "If two equally qualified towns are competing for the same firm, tax incentives can be very influential," asserts Phillips of the Fantus Co. "Numerous small towns in Wisconsin have used tax-increment financing effectively. It's a controllable factor for the local government."

What's far less risky and equally controllable, however, is for local leaders—from government, business and banking—to become general ambassadors for business financing opportunities in the region and state. Staff at these lending and granting authorities have the precise financial expertise that most local officials lack. □

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chapter 6

**fundraising:
be ingenious**

leveraging

Remember when Grandpa would donate 25 cents toward the purchase of a new toy if you earned two dollars on your newspaper route? Grandpa was practicing a principle that in the '80s is called **leveraging**—attracting additional funds for a program or project by making an initial investment.

No matter what economic development-related activity a community might embark on today, leveraging will be a crucial financial strategy. In addition, since fewer and fewer funders are willing to finance entire projects, fundraising must be aimed at more than one potential source. A package that indicates broad-scale community involvement—one that includes a variety of financial supporters—carries with it the credibility that may attract additional financial support.

This chapter offers a number of fund raising techniques—community fund raising, corporate and foundation gifts, local bank financing, and state development aid—that together can help leverage funds to establish a local development corporation, capitalize a revolving loan pool, finance community infrastructure improvements, and more. The examples given are merely a guide; the key in any fundraising approach is to be ingenious.

community fundraising

When the chips are down in the local economy you might expect that fundraising would be a lost cause. Not so, at least in the case of numerous small, rural communities.

Special events, such as the sale of shares in local development organizations have produced bountiful fruit. In the declining agricultural community of Wauzeka, Wis. (pop. 580) 2,800 shares at \$50 each were sold to establish the Wauzeka Industrial Development Corporation. Since 1981, the \$140,000 pool has been used to finance construction of an industrial park, open a restaurant, and expand five existing local firms.

Kemper County, Mississippi has a low per capita income, but an elevated motivation to produce local jobs. When the Tennessee Valley Authority offered the County a \$5,000 challenge grant, development enthusiasts went to work. In one day, on the county courthouse steps, \$25,000 in area donations was raised to establish a county economic development authority. Since the fall of 1984, the authority has hired a retired corporate ex-

ecutive to lead the way. In addition, two new businesses were recruited into the local industrial park.

money-making events

Fund Raising Management, a monthly magazine of Hope Communications, Inc., stresses that careful planning is a must in managing special events. The activity should be enjoyable and compatible with the community. It's wise not to organize events that compete with other organizations' donation drives. Also, a cadre of dependable individuals should be recruited to assign reasonable work assignments and maintain accurate records of individual areas of responsibility.

The list of events by which a community might raise local revenues is limited only by time and space. Among the tried and true methods are such old stand-bys as bake sales, booster sales, community auctions, concession stands, fashion shows, fishing derbys, flea markets, golf tournaments, etc. If something has worked before in your community and continues to remain popular among citizens there's no reason not to try it again. The converse is also true: don't let the cause steer you toward an event that may be, or has been, unpopular among the people whose support you need. Above all: plan first, and don't be afraid to be imaginative.

corporate and foundation gifts

The rush to include private sector participation in public projects is "all the rage" these days.

Corporations are giving communities grants to purchase equipment, seed money for starting programs, in-kind contributions such as "loaning" a skilled person to a project, and joining in partnerships with several givers to fund a high-cost activity through a "package" arrangement.

In Babbitt, Minn. (pop. 2,400) grants from the McKnight and Blandin foundations capitalized a new revolving loan fund, to aid local, small business expansions. The Mott Foundation provided seed money for a local development commission in Dungannon, Va. (pop. 1,700), which is spearheading economic revitalization. And a new fire hall was built in Deer Park, Wis. (pop. 232), thanks to a contribution from the Bremer Foundation.



Local governments have some important tools to use in their search for private funding—but the rules of the game are somewhat different from the ones a public entity usually plays by when seeking funds through tax levies, state aid formulas, or federal programs. Compared to public funders, must private givers encourage creative proposals, offer few regulations or guidelines, and may not use a standard application form. But, the absence of red tape does not mean that the applicant is on easy street. A well-thought-out, needed, financially feasible and accomplishable project is essential.

designing the project

To start, the applicant must know what it wants to do. Once it is clear that there is a project and a need, a group of staff members or volunteers within the local community should research and collect information to show that the project can be carried out, will be accounted for properly, and has the support of the community. To do these things, the community should set about the following tasks.

Document the need.

If the project is truly important, it should not be hard to find data or other information to demonstrate the need. (See Chapter 3 for data collection ideas and resources.)

Document a track record of good management.

Private givers don't have unlimited money and they want to minimize the chances of investing in projects which might fail.

Therefore, it is a good idea to gather information about how well the local government has managed someone else's money. Audit reports, or evaluations of the operation of a state or federal grant program, among other things, can make an impressive case.

Document community involvement.

Many local government projects seeking private sector support lend themselves to building community participation and demonstrating concrete contributions by townspeople.

Depending on the exact nature of the project, try to involve in the planning, funding, and operation as many of the people who really want the service, equipment, or building for which money is being sought as possible.

Relate the project to overall planning.

To the greatest extent possible, the project should be a part of the community's on-going, well thought out plans for the future. A successful project will be one which does not appear to be someone's dream or fantasy.

Budget carefully.

It is essential to know *realistically* what the project will cost. Do not pad the budget; private funders know how to determine project costs, too!

If the project is one which will incur operating or maintenance costs in future years, it is essential that the applicant know and *indicate* how these costs will be funded. It's no good to ask for a swimming pool, if you can't show how you will be able to maintain the facility!

understand the funder's priorities

The project which somehow caters to the corporation's particular needs could grab that all-important attention of the decision-maker. Your town may desperately need a community center, but if social/recreational facilities are not appealing to the funder, why waste your time? Check the funder's contribution literature or the library's foundation directories before proceeding.

local bank financing, expertise

There are approximately 14,000 commercial banks located throughout the United States, ranging in size from those with less than \$1 million in assets to those with assets exceeding \$90 billion. According to the American Bankers Association, approximately 90 percent of U.S. banks are small or medium businesses, with assets less than \$150 million. Small banks, with less than \$25 million, blanket rural areas.

Community bankers can lend valuable expertise.

As development supporters, community bankers can contribute to local economic development activities. In innovative small towns elected leaders have formed partnerships with community bankers: inviting the banker to serve on the local development corporation board; encouraging the banker to alert local business owners about public financing opportunities, through the Small Business Administration, etc.; and by combining public dollars with conventional bank loans, to promote the formation and expansion of local firms.

When community bankers are supportive of development strategies they can help in providing two vital job-creating resources: money, in the form

of a variety of loan arrangements; and knowledge of appropriate packaging of financial assistance. Yet it often takes an assertive development proponent—perhaps an elected official—to nudge the local banker into an active position. Limitation on credit, a non-entrepreneurial attitude, and inexperience with non-agricultural firms are often disincentives for some rural bankers to take a leadership role in economic development.

Bank involvement pays off.

Research conducted at the University of Wisconsin has shown that local bank lending affects community income and that, in turn, increased local income adds to bank deposit growth. Using 1969-1973 data, the researchers found that a 10 percent increase in average loan volume increased the rate of change in per capita income by four percent. A strong, mutually beneficial relationship between bank lending and local economic health is a persuasive argument for forging partnerships with community bankers.

In Alliance, Neb. (pop. 9,000) community bank financing was coupled with a Community Development Block Grant (CDBG) award to promote downtown revitalization. Three local banks jointly offered low-interest loans to downtown retail shops. With a 50 percent matching grant from the CDBG the businesses' loan rates did not exceed 9½ percent, while the market rate was 11½ percent.

Bank leadership created similar loan pools in 15 small Texas towns, with help from the Texas Main Street Project, a program of the National Trust for Historic Preservation. Since 1975, hundreds of downtown merchants have welcomed loans of up to \$10,000, with interest rates of six to nine percent and a 60-month pay-back period.

You may think of your local bank as the institution for checking and savings accounts or as the source of farm loans. But, these examples show how the local bank can also be the centerpiece for community development activities.

state development partners

The nation's governors have moved economic development to the top of their agendas. Most states now boast elaborate programs of financial assistance, tax incentives, and other efforts to construct a favorable business climate.

States are development partners in two ways: in subsidizing the local financing of community facilities for economic development—roads, bridges, water, sewers—and in extending direct financial assistance to new, expanding and/or

relocating firms. Smart local officials are becoming familiar enough with current state initiatives to see the utility in their own towns.

Contact your state department of economic development/commerce for details on these development assistance programs.

Infrastructure financing. Roads, bridges, water and sewer projects—these are the infrastructure building blocks for economic development. At least 19 states now offer grants, loans, and state bond banks to help local governments finance local infrastructure repair and construction. Few small communities can shoulder these costs independently.

Examples of state support are the Illinois Infrastructure Assistance Program, the Pennsylvania Business Infrastructure Development Program, and a wastewater treatment facilities matching program in North Carolina. Six states have formed bond banks to help local governments hold down financing expenses. State bond banks reduce costs by jointly marketing a number of small issues as one large issue, and by lowering interest costs because the state bond is rated higher (by investment services) than if separate bonds were issued locally.

Financial aid for new firms. States are adding new twists to their business assistance programs. Along with industrial development bonds, tax incentives and other enticements, states are lending a helping hand to entrepreneurial ventures—new business starts.

Entrepreneurs most frequently need seed money, risk-oriented equity investment and long-term bank debts. Innovative state programs are helping to establish quasi-public or non-profit agencies to help meet these capital demands. For example, Pennsylvania voters recently approved a \$190 million bond issue to capitalize the state's new Economic Revitalization Fund. The fund authorized 11 pieces of legislation, including a program of challenge grants for seed capital.

Seeing the trend among states toward increased support for entrepreneurial ventures, local officials have an opportunity to assist business start-ups, by keeping abreast of new state initiatives. □

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appendix

selected annotated
bibliography

Small Town Strategy, a series of eight booklets on small-town development. Western Rural Development Center, Oregon State University, Corvallis, OR 97331. (503) 754-3821. \$4.00 for set.

Setting Community Economic Goals and Strategies for Economic Development, a set of two community development flyers. David L. Darling, Jr., Kansas State University Cooperative Extension Service, Umberger Hall, Manhattan, KS 66506. (913) 532-5840. Free.

Organizing a Small-Town Development Corporation (Circular 491), a booklet about organizing LDCs in New Mexico, which is generically useful. Robert O. Coppedge, Department of Agricultural Information, New Mexico State University, Box 3AI, Las Cruces, NM 88003. (505) 646-3228. Free.

Community Economic Analysis, a manual for analyzing a community's economy. Hustedde, Shaffer and Pulver, North Central Regional Center for Rural Development, Iowa State University, 218 East Hall, Ames, IA 50011. (515) 294-8322. Single copies are free.

Retention and Expansion Business Visits: A Guide for an Effective Economic Development Program, a compilation of step-by-step instructions, low-cost suggestions and other "how-to" information. George Morse, John Rohrer and Sam Crawford, Ohio State University Cooperative Extension Service, 2120 Fyffe Road, Columbus, OH 43210. (614) 422-7822. \$5.00; *Indicate Bulletin* 728.

Model Zoning Ordinances for Homebased Businesses, a set of information sheets. National Alliance of Homebased Businesswomen, P.O. Box 306, Midland Park, NJ 07432. (201) 423-9131, after 2 p.m. \$2.00.

Home Enterprise in Minnesota, a report on Minnesota's homebased and cottage industries. The Minnesota Project, 2222 Elm Street, S.E., Minneapolis, MN 55414. (612) 378-2142. \$5.00.

Local Economic Development: A Strategic Approach, a self-instruction training package, in-

cluding a handbook, user's guide, sample survey instruments and data collection sheets, and guide to leading training sessions. International City Management Association, 1120 G Street, N.W., Washington, D.C. 20005. (202) 620-4627. \$60.00

Industrial Incentives: Public Promotion of Private Enterprise, a guide to local and state development financing techniques. Hamilton, Ledebur and Matz, Aslan Press, 6731 Curran St., McLean, VA 22101. (703) 442-0880. \$25 prepaid; \$29 invoiced.

See the NAT&T publications list for additional development related publications. Also, contact your state department of community development or economic development/commerce for state-specific resource materials.

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NATaT and the National Center for Small Communities

The purpose of the National Association of Towns and Townships (NATaT) is to strengthen the effectiveness of towns, townships and small communities and promote their interests in the public and private sectors.

NATaT is a non-profit membership organization offering technical assistance, educational services and public policy support to local government officials from more than 13,000 towns, townships and other small communities across the country.

developing effective federal policy

Through its National Center for Small Communities, the association conducts research and develops public policy recommendations which are scaled to the unique needs and nature of rural governments and small towns. By analyzing federal and state initiatives, and disseminating information about them, NATaT and the national center keep local officials abreast of decisions and actions of national import, so they can better manage change in their communities.

education and information

NATaT's educational conferences, training, workshops, and specialized publications help small-town officials cope with change in their communities—and improve the quality of life for rural people. The association's annual conference for small-town officials is the largest town meeting in the nation. It focuses on federal programs and policies affecting small communities. NATaT publishes a monthly news journal, the *National Community Reporter*, which is the only national source of intergovernmental policy news and "how-to" information written exclusively for small-town officials. The journal's topics range from community and economic development funding to tested small-town management and planning techniques. □

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DEREGULATION AND RURAL COMMUNITIES: WHAT DOES THE FUTURE HOLD?

(By Senator Larry Pressler)

Good morning. Our panel discussion today focuses on the impact of deregulation on rural communities and what is in store in the future. To set the stage for the comments of our panelists I would like to briefly review the result of deregulation efforts in transportation and banking, and the potential impact of deregulation of the telecommunications industry.

Over the past eight years, I have witnessed the deregulation of all of our transportation modes. I opposed each of those initiatives because of the effect I feared they would have on the small towns and rural communities in my state. And as I predicted, South Dakota and other rural states have not fared well.

For example, within the last year almost forty South Dakota communities have lost part or all of their intercity bus service. An ICC study of this issue, attached to my remarks, indicates that communities with populations under 10,000 have suffered a disproportionate share of service cutbacks nationwide. Of the 3800 towns which totally lost bus service since 1982, 80 percent were towns under 10,000. This trend will probably continue as the two national bus companies eliminate scores of routes and the smaller carriers struggle to survive.

Air transportation is yet another area where rural communities have taken it on the chin. Since 1978, the major commercial airlines have suspended service to over 130 cities. The current wave of mergers in the airline industry eventually will result in six or eight mega-carriers controlling air travel. This will mean higher fares for consumers and further reductions in service to smaller markets.

The rail industry is one area where we have been able to limit the damage of deregulation. By encouraging carriers, shippers, and communities to work together we have been able to develop a long-term solution to the problem of marginal light density lines. The major railroads have now begun to sell sections of track which they would have otherwise abandoned. The companies acquiring these lines are in many cases small operators with one or two engines running over 50 or 100 miles of track. In addition, some larger operators are purchasing large sections of track to turn into regional railroads.

Banking deregulation has been something of a mixed blessing for rural residents. Depositors have benefited from higher interest rates and increased availability of international banking services.

However, the increase in interstate regional banking has added to the loan approval process a layer of people who are not familiar with the needs of rural residents and, therefore, less likely to ap-

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prove rural loans. I am also concerned about the potential effect nonbank banks may have on the availability of credit. These out-of-state entities certainly will attract depositors away from local institutions, but may not be as willing to make loans to local borrowers.

The break-up of AT&T has raised new concerns about universal service because of the potential for reallocating more of the total telephone network costs to high cost rural areas. I'm afraid that if the FCC has its way, telephone service will be much more expensive in rural areas as the industry moves toward deregulation.

Also, with the increasing technological breakthroughs in communications, there are a host of new applications available in urban centers that are not available to rural areas.

I think Congress has to get much more involved in telecommunications issues than it has been in the past two decades. We have to redefine the priority position of universal service in rural America, which has taken a back seat to competition in recent years. We need to develop a policy to ensure that affordable, universal telecommunications service is readily available in both rural and urban areas so everyone can benefit from technological innovations in the industry. We need to expand the concept of universal service to ensure that rural and small town America keeps abreast of the technological advances of the Information Age. Otherwise, we are in danger of creating an "information elite" in urban-dominated areas of the country.

Overall, I agree deregulation has had many positive benefits on a national scale. But I think we have to weigh more carefully its impact on rural communities as we proceed. Too often, rural concerns are overlooked in the push towards what I have called "blind deregulation."

INTERSTATE COMMERCE COMMISSION,
Washington, DC, September 8, 1986.

Senator LARRY PRESSLER,
U.S. Senate,
Washington, DC.

DEAR SENATOR PRESSLER: During the Senate Commerce Committee's Bus Act oversight hearing and in a subsequent letter dated October 24, 1985, you requested that the Commission conduct a study of entry and exit in the regular route bus industry. Your letter specifically asks how many communities have lost or gained service since enactment of the "Bus Regulatory Reform Act" in November, 1982.

Given the time available for completing the study and Commission resources available, our Office of Transportation Analysis decided to use a readily available source, the *Russell's Motor Coach Guide* (Guide), to obtain the statistics requested. Service points in the Index to Bus Stations in the November, 1982 Guide were compared to those in the Index to the January, 1986 edition. In that manner, points were identified for total loss of service, reduction or increase in the number of carriers providing service, service by a replacement carrier and service being provided for the first time since November 1982.

There are several factors inherent in *Russell's Guide* that affect the accuracy of the information generated from this methodology.

First, while the Guide contains the majority of points in the United States served by the regular route industry, there are many smaller bus companies that are not included since carriers must pay a fee to be in the Guide. Communities receiving service from these carriers are not reflected in the data. This would overstate points losing service and understate points gaining service.

Second, in some instances the same point had slightly different names in the 1982 and 1986 Guides. For example, in the 1982 Guide Genessee, Wisconsin is listed as receiving bus service. However, in the 1986 Guide Genessee Depot, Wisconsin appears in the index while Genessee does not.

A check of the detailed bus schedules in the Guide revealed that these were the same point being served by the same carrier, i.e., no change in service. Discrepancies such as this were, to the extent possible, identified and the proper adjustments made.

A third, and, more troublesome problem occurs when totally different names are used to identify the same point. For example, in the 1982 Guide Compton, California appears in the index but does not appear in the 1986 index. Staff initially concluded, therefore, that this point had lost all bus service. However, as part of a spot checking process it was discovered that the bus schedules in both the 1982 and 1986 Guides identified the point receiving service as Lynwood/Compton. Therefore, staff ultimately concluded that there was no change in service for this point. Because of time and staff limitations, it was not possible to check every point for this type of error. Further, due to the lack of similarity of names it was difficult to identify these points. Based upon a limited number of spot checks, however, this does not appear to be a significant problem.

A similar problem arose because of the inconsistent treatment of airports, colleges and military installations. For example, the 1982 Guide lists Logan Airport (Boston), Massachusetts while the 1986 Guide identifies it as Boston Airport Logan, Massachusetts. Similarly, the 1982 Guide lists the University of Michigan while the 1986 Guide shows Michigan University.

Another potential type of error occurred for points where service was dropped prior to November 1982 but still appeared in the index of the 1982 Guide. In particular, a number of points listed in the index of the 1982 Guide were not included in the schedule because the carrier had either stopped serving that point, gone out of business, or no longer subscribed to the Guide. Here again, these could only be identified by checking the actual schedule for that point. Checks that were done for this type of error indicated that this was the most prevalent problem in the Guide. The effect of this error in the Guide is to overstate the number of points losing bus service after the November, 1982 Bus Act.

A final problem dealt with the treatment of urban and suburban areas. For example, Scituate, Massachusetts is listed in the index of the 1982 Guide but not in the 1986 Guide. Although it appears in the detailed schedule in both guides, Scituate shows no departure or arrival times in the schedule. Rather, there are several points indented and listed below Scituate. This seems to indicate that these points are part of the general area known as Scituate. Areas such as Scituate are sometimes listed in the index although sometimes they are not. As far as staff was able to determine this problem occurred primarily in the States of California and Massachusetts. Several points in these States were checked and, to the extent possible, errors created by this problem were corrected.

A strong effort was made to identify as many of the errors as possible and to make the appropriate correction. While some errors remain in the data base, the information presented appears to be substantially correct and to reflect general trends in the number of bus service points since the Bus Regulatory Reform Act. An indication of this is the fact that the Motor Carrier Ratemaking Study Commission (with more resources available to eliminate errors) found that 2,154 points lost service in the first year following the Bus Act. The numbers presented here are generally consistent with their finding.

The Rand McNally Commercial Atlas was used to determine populations for the points with service changes. While most points are communities with specific populations, other points such as airports, prisons, military bases, local developments, restaurants, and road junctions are not usually assigned populations. Of the 5,710 points affected by service changes, 683 have "no assigned population." These were excluded from the totals of points having populations of 10,000 or less. Also, when points were designated as part of a larger city or town, the service changes experienced by the small point are considered to be service changes made to the larger town or city.

The following statistics are presented in the same order as requested in your letter. Each service point total is accompanied by a brief explanation.

(1) The total number of communities that have lost regular route intercity bus service since enactment of the Bus Regulatory Reform Act of 1982 BRRR—4,514.¹

(2) The total number of communities that have gained regular route intercity bus service since enactment of the (BRRR)—896.²

¹ Includes communities and service points which totally lost service (3,763); and those which still have service but experienced a reduction in the number of carriers (751).

² Includes communities and service points which had no service in November 1982 but obtained new service by January 1986 (401) and which experienced an increase in the number of carriers providing service (495).

(3) The total number of communities with a population of 10,000 or less that have lost regular route intercity bus service since enactment of the BRRRA—3,432.³

(4) The total number of communities with a population of 10,000 or less that have gained regular route intercity bus service since enactment of the BRRRA—485.⁴

(5) The total number of communities and service points that lost their last regular route intercity service since enactment of the BRRRA—3,763.

(6) The total number of communities with a population of 10,000 or less that have lost their last regular route intercity service since enactment of the BRRRA—3,006.⁵

(7) The total number of communities that have gained regular route intercity service for the first time since enactment of the BRRRA—401.⁶

(8) The total number of communities with a population of 10,000 or less that gained regular route intercity service for the first time since enactment of the BRRRA—222.⁷

(9) The total number of communities that have gained replacement regular route intercity service for service that was lost since enactment of the BRRRA—363.⁸

(10) The total number of communities with a population of 10,000 or less that have gained replacement regular route intercity service that was lost since enactment of the 230.⁹

In addition to these figures, tables are enclosed which provide a breakdown of the points with service changes according to state and service point population. I trust this information will be of interest and help to you. If I can be of any further assistance, please feel free to contact me.

Sincerely yours,

HEATHER J. GRADISON, *Chairman.*

Enclosures.

COMMUNITIES AND BUS SERVICE POINTS WHICH HAVE LOST INTERCITY BUS SERVICE BETWEEN
NOVEMBER 1982 AND JANUARY 1986 ¹

State	Population			Total
	1 to 10,000	Over 10,000	No assigned population	
Alaska.....	4	0	3	7
Alabama.....	71	7	3	81
Arkansas.....	96	8	11	115
Arizona.....	28	2	7	37
California.....	78	31	49	158
Colorado.....	63	4	15	82
Connecticut.....	16	8	1	25
District of Columbia.....	0	1	0	1
Delaware.....	3	1	0	4
Florida.....	44	28	8	80
Georgia.....	64	9	5	78
Iowa.....	104	11	4	119
Idaho.....	50	2	7	59

³ Includes communities with a population of 10,000 or less which have totally lost service (3,006) and which still have service but experienced a reduction in the number of carriers (426). Points with no assigned population are excluded.

⁴ Includes communities with a population of 10,000 or less which had no service in November 1982 but obtained new service by January 1986 (222) and which experienced an increase in the number of carriers providing service (263). Points with no assigned population are excluded.

⁵ Points with no assigned population are excluded.

⁶ Communities and service points which had no service in November 1982 but obtained new service by January 1986.

⁷ Communities with a population of 10,000 or less which had no service in November 1982 but obtained new service by January 1986. Points with no assigned population are excluded.

⁸ Includes communities and service points where a carrier discontinuing service is replaced by another carrier (290); or an increase in the number of carriers is experienced in addition to replacement of service (34); there is replacement of service but an overall service loss because more carriers are discontinuing service than there are replacements for them (39).

⁹ Includes communities with a population of 10,000 or less where a carrier discontinuing service is replaced by another carrier (201); or an increase in the number of carriers is experienced in addition to replacement of service (9); there is replacement of service but an overall service loss because more carriers are discontinuing service than there are replacements for them (20). Points with no assigned population are excluded.

**COMMUNITIES AND BUS SERVICE POINTS WHICH HAVE LOST INTERCITY BUS SERVICE BETWEEN
NOVEMBER 1982 AND JANUARY 1986¹—Continued**

State	Population			Total
	1 to 10,000	Over 10,000	No assigned population	
Illinois.....	166	54	12	232
Indiana.....	119	32	11	162
Kansas.....	94	6	15	115
Kentucky.....	78	12	12	102
Louisiana.....	67	5	7	79
Massachusetts.....	22	12	2	36
Maryland.....	27	9	5	41
Maine.....	52	6	1	59
Michigan.....	182	30	23	235
Minnesota.....	133	6	14	153
Missouri.....	162	17	37	216
Mississippi.....	50	6	2	58
Montana.....	53	1	7	61
North Carolina.....	113	6	21	140
North Dakota.....	39	3	2	44
Nebraska.....	37	7	1	45
New Hampshire.....	13	3	4	20
New Jersey.....	80	62	6	148
New Mexico.....	36	4	7	47
Nevada.....	21	3	7	31
New York.....	79	11	12	102
Ohio.....	141	45	15	201
Oklahoma.....	143	8	10	161
Oregon.....	47	4	14	65
Pennsylvania.....	129	19	19	167
Rhode Island.....	3	5	4	12
South Carolina.....	56	7	4	67
South Dakota.....	16	1	4	21
Tennessee.....	75	10	11	96
Texas.....	163	31	28	222
Utah.....	28	6	5	39
Virginia.....	119	12	31	162
Vermont.....	6	0	2	8
Washington.....	45	3	7	55
Wisconsin.....	122	14	11	147
West Virginia.....	74	6	7	87
Wyoming.....	26	2	11	39
Total.....	3,437	580	504	4,521

¹ Includes points which totally lost service and those which still have service but experienced a reduction in the number of carriers.

**COMMUNITIES AND BUS SERVICE POINTS WHICH HAVE LOST THEIR LAST INTERCITY BUS SERVICE
BETWEEN NOVEMBER 1982 AND JANUARY 1986**

State	Population			Total
	1 to 10,000	Over 10,000	No assigned population	
Alaska.....	4	0	3	7
Alabama.....	60	0	2	62
Arkansas.....	76	1	10	87
Arizona.....	18	1	7	26
California.....	66	11	46	123
Colorado.....	58	4	15	77
Connecticut.....	14	4	1	19
Delaware.....	3	1	0	4
Florida.....	30	10	5	45

COMMUNITIES AND BUS SERVICE POINTS WHICH HAVE LOST THEIR LAST INTERCITY BUS SERVICE
BETWEEN NOVEMBER 1982 AND JANUARY 1986—Continued

State	Population			Total
	1 to 10,000	Over 10,000	No assigned population	
Georgia.....	61	3	5	69
Iowa.....	96	2	4	102
Idaho.....	40	0	7	47
Illinois.....	151	34	11	196
Indiana.....	108	12	11	131
Kansas.....	80	2	15	97
Kentucky.....	72	5	12	89
Louisiana.....	65	2	7	74
Massachusetts.....	17	6	2	25
Maryland.....	23	7	5	35
Maine.....	49	3	1	53
Michigan.....	156	17	22	195
Minnesota.....	122	4	13	139
Missouri.....	147	10	36	193
Mississippi.....	43	2	2	47
Montana.....	42	0	6	48
North Carolina.....	94	3	21	118
North Dakota.....	38	0	2	40
Nebraska.....	24	0	1	25
New Hampshire.....	11	3	4	18
New Jersey.....	73	48	6	127
New Mexico.....	32	0	7	39
Nevada.....	18	0	7	25
New York.....	63	3	11	77
Ohio.....	129	30	14	183
Oklahoma.....	124	0	10	134
Oregon.....	42	1	14	57
Pennsylvania.....	105	9	18	132
Rhode Island.....	3	3	4	10
South Carolina.....	51	3	4	58
South Dakota.....	13	0	4	17
Tennessee.....	66	5	11	82
Texas.....	131	8	26	165
Utah.....	27	2	5	34
Virginia.....	108	5	30	143
Vermont.....	5	0	2	7
Washington.....	36	2	7	45
Wisconsin.....	104	4	10	118
West Virginia.....	74	3	7	84
Wyoming.....	24	0	11	35
Total.....	3,006	273	484	3,763

COMMUNITIES AND BUS SERVICE POINTS WHICH HAVE GAINED INTERCITY BUS SERVICE BETWEEN
NOVEMBER 1982 AND JANUARY 1986 ¹

State	Population			Total
	1 to 10,000	Over 10,000	No assigned population	
Alaska.....	3	0	0	3
Alabama.....	12	4	3	19
Arkansas.....	0	4	0	4
Arizona.....	7	4	8	19
California.....	13	16	7	36
Colorado.....	10	4	1	15
Connecticut.....	6	4	1	11

COMMUNITIES AND BUS SERVICE POINTS WHICH HAVE GAINED INTERCITY BUS SERVICE BETWEEN
NOVEMBER 1982 AND JANUARY 1986 ¹—Continued

State	Population			Total
	1 to 10,000	Over 10,000	No assigned population	
Delaware.....	0	0	1	1
Florida.....	9	1	5	15
Georgia.....	9	3	1	13
Iowa.....	10	4	0	14
Idaho.....	20	0	2	22
Illinois.....	6	7	3	16
Indiana.....	6	3	2	11
Kansas.....	7	3	1	11
Kentucky.....	1	0	0	1
Louisiana.....	29	12	10	51
Massachusetts.....	12	9	7	28
Maryland.....	0	1	4	5
Maine.....	2	2	5	9
Michigan.....	18	11	9	38
Minnesota.....	12	7	4	23
Missouri.....	4	3	1	8
Mississippi.....	7	4	1	12
Montana.....	4	0	4	8
North Carolina.....	5	9	2	16
Nebraska.....	6	0	2	8
New Hampshire.....	5	3	0	8
New Jersey.....	7	7	2	16
New Mexico.....	0	1	4	5
Nevada.....	10	0	9	19
New York.....	42	28	14	84
Ohio.....	5	9	5	19
Oklahoma.....	5	4	1	10
Oregon.....	34	4	6	44
Pennsylvania.....	13	10	7	30
South Carolina.....	5	2	3	10
South Dakota.....	3	1	0	4
Tennessee.....	7	8	0	15
Texas.....	77	34	6	117
Utah.....	3	0	0	3
Virginia.....	6	6	5	17
Vermont.....	10	1	1	12
Washington.....	15	6	6	27
Wisconsin.....	16	7	8	31
West Virginia.....	3	1	2	6
Wyoming.....	2	1	2	5
Total.....	486	248	165	899

¹ Includes points which had no service in November 1982 but obtained new service by January 1986 and which experienced an increase in the number of carriers providing service.

COMMUNITIES AND BUS SERVICE POINTS WHICH HAVE GAINED THEIR FIRST INTERCITY BUS SERVICE
BETWEEN NOVEMBER 1982 AND JANUARY 1986

State	Population			Total
	1 to 10,000	Over 10,000	No assigned population	
Alaska.....	3	0	0	3
Alabama.....	8	0	3	11
Arkansas.....	0	1	0	1
Arizona.....	3	0	4	7
California.....	3	2	4	9

COMMUNITIES AND BUS SERVICE POINTS WHICH HAVE GAINED THEIR FIRST INTERCITY BUS SERVICE
BETWEEN NOVEMBER 1982 AND JANUARY 1986—Continued

State	Population			Total
	1 to 10,000	Over 10,000	No assigned population	
Colorado.....	1	2	0	3
Connecticut.....	5	0	1	6
Florida.....	8	0	5	13
Georgia.....	4	1	0	5
Iowa.....	6	0	0	6
Idaho.....	3	0	2	5
Illinois.....	4	2	3	9
Indiana.....	5	1	2	8
Kansas.....	4	0	1	5
Louisiana.....	21	2	9	32
Massachusetts.....	9	5	7	21
Maryland.....	0	0	3	3
Maine.....	2	1	5	8
Michigan.....	4	1	7	12
Minnesota.....	2	2	4	8
Missouri.....	1	1	0	2
Mississippi.....	1	1	1	3
Montana.....	4	0	4	8
North Carolina.....	1	1	1	3
Nebraska.....	6	0	2	8
New Hampshire.....	3	0	0	3
New Jersey.....	5	3	1	9
New Mexico.....	0	0	3	3
Nevada.....	8	0	9	17
New York.....	26	9	12	47
Ohio.....	4	3	5	12
Oklahoma.....	5	0	1	6
Oregon.....	16	0	6	22
Pennsylvania.....	7	3	5	15
South Carolina.....	1	0	3	4
South Dakota.....	3	0	0	3
Tennessee.....	4	0	0	4
Texas.....	6	1	4	11
Virginia.....	3	1	4	8
Vermont.....	4	1	1	6
Washington.....	7	1	3	11
Wisconsin.....	10	0	6	16
West Virginia.....	1	0	2	3
Wyoming.....	1	0	1	2
Total.....	222	45	134	401

COMMUNITIES AND BUS SERVICE POINTS WHICH HAVE GAINED REPLACEMENT SERVICE FOR
INTERCITY BUS SERVICE THAT WAS LOST BETWEEN NOVEMBER 1982 AND JANUARY 1986 ¹

State	Population			Total
	1 to 10,000	Over 10,000	No, assigned population	
Alaska.....	1	1	0	2
Alabama.....	2	3	0	5
Arkansas.....	5	2	1	8
Arizona.....	3	1	1	5
California.....	3	3	0	6
Colorado.....	1	2	0	3
Connecticut.....	0	1	0	1
Florida.....	1	0	1	2

COMMUNITIES AND BUS SERVICE POINTS WHICH HAVE GAINED REPLACEMENT SERVICE FOR
INTERCITY BUS SERVICE THAT WAS LOST BETWEEN NOVEMBER 1982 AND JANUARY 1986 ¹—
Continued

State	Population			Total
	1 to 10,000	Over 10,000	No. assigned population	
Georgia.....	1	2	1	4
Iowa.....	8	5	0	13
Idaho.....	2	0	1	3
Illinois.....	0	3	2	5
Indiana.....	4	6	2	12
Kansas.....	9	2	0	11
Kentucky.....	2	1	0	3
Louisiana.....	5	2	0	7
Massachusetts.....	2	4	0	6
Maine.....	6	1	0	7
Michigan.....	5	5	0	10
Minnesota.....	4	6	0	10
Missouri.....	2	2	0	4
Mississippi.....	4	0	0	4
Montana.....	7	1	0	8
North Carolina.....	9	2	0	11
North Dakota.....	0	1	0	1
Nebraska.....	1	0	0	1
New Mexico.....	5	2	1	8
Nevada.....	4	0	0	4
New York.....	14	15	5	34
Ohio.....	0	6	0	6
Oklahoma.....	9	4	0	13
Oregon.....	9	2	0	11
Pennsylvania.....	10	10	0	20
South Carolina.....	3	3	1	7
South Dakota.....	1	1	0	2
Tennessee.....	5	2	0	7
Texas.....	74	15	1	90
Virginia.....	1	1	0	2
Washington.....	2	3	0	5
Wisconsin.....	6	0	0	6
West Virginia.....	0	1	0	1
Wyoming.....	0	0	1	1
Total.....	230	121	18	369

¹ Includes points where a carrier discontinuing service is replaced by another carrier.

AIRLINE DEREGULATION: COPING WITH CHANGE IN RURAL AMERICA

(By William R. Nesbit)*

I like the title of this conference because it is quite appropriate for the airline industry as well as rural America. Just because the Airline Deregulation Act was passed eight years ago doesn't mean the ball game is over. Moreover, the present and future quality and cost of airline service in rural America can't be credited to—or blamed upon—deregulation only. Quality air service is essential to economic activity and it is appropriate that we regularly check its status for particular sectors of the economy at conferences such as this. When I say "quality of air service" I specifically mean: (1) Its cost, (2) safety and reliability, and (3) its convenience in linking the customer with his destination. Keep these three factors in mind—cost, safety and convenience—as I proceed and bear in mind that there are always some tradeoffs among them to be considered.

First, a little history. Why were the airlines deregulated? The pressure didn't come from the grass roots—either rural or urban. And it didn't start with the airlines or with politicians. The roots can be found among a few academic economists who criticized the system set up back in 1938. They pointed out the lack of price competition, the wastefulness of "service competition" and the low efficiency as airplanes were usually only half full. They also noted that within California and Texas where CAB regulation of interstate service did not apply, fares were much lower than on regulated routes of comparable distance such as Washington, New York, and Boston. A number of politicians began to pick up on this, especially those from Boston and New York.

The airlines were not totally happy with the regulatory system either. They complained about "regulatory lag" which slowed corrective action when they were in trouble—usually a fare increase. Big airlines like United were nearly frozen out of significant new routes because the CAB kept trying to help the smaller lines to "balance" the system. Profits for most airlines were lousy; the industry ranked close to the bottom in return on investment. The chief of one big carrier with a particularly bad profit record complained that the airline business was nothing more than an eleemosynary institution for the benefit of labor unions. Indeed, airline wages were good—and very good for the pilots. The airline executive who best understood the system was probably Northwest's Donald Nyrop—perhaps because he once ran the CAB. Since fares were set on the basis of average costs for all the carriers, his tight-fisted management style kept Northwest's costs below the average and, consequently, its profits well above average. He liked the system just fine.

* Vice President, Daniel Morgan and Co., Park Ridge, IL.

The public was generally apathetic on the issue. There had been no world class scandals in the airline business to excite the media. The airline business was exotic, modern and respected. Airline pilots were still heroic and stewardesses were beauty queens of the skies who had not yet become flight attendants. But the lure of promised lower fares eventually stirred up broad public support for deregulation.

The process began in earnest under the Ford administration. His CAB Chairman and Transportation Secretary espoused "regulatory reform." But in the oddly non-partisan character of the movement, it was the liberal Senator Ted Kennedy who really sparked some action. He chaired committee hearings in 1975 that started the legislative ball rolling. One of his key staff members was a young lawyer named Phil Bakes who went on to become one of Frank Lorenzo's top people, the president of Continental and now of Eastern. How ironic that a Kennedy staffer is now allied with this alleged great foe of organized labor.

The Airline Deregulation Act was passed with broad bipartisan support in October, 1978. Even before then, President Carter's CAB Chairman Alfred Kahn—the leading academic expert on economic regulation—had taken bold steps to dismantle traditional regulation of the industry. Under the act, economic regulation was to be gradually phased out over six years. Routes were opened to new entrants, carriers could pull out of money losing routes without penalty, controls on domestic routes were ultimately dropped altogether. Fare controls were relaxed and finally completely freed; tariffs are no longer filed with the Government. New carriers who could show themselves to be fit were allowed to enter the business without first proving a public need for new service. Anti-trust regulation was retained by the CAB until it died—and then was transferred to the Department of Transportation rather than to Justice as for other industries. This issue is still open. The airline mutual aid pact under which operating airlines shared revenues with carriers on strike was abolished—about the only good thing that happened for the labor unions.

Of most interest to small town America was the replacement of the local airline subsidy system with a system of grants to guarantee "essential air service" on low density routes which were not economically self sufficient. The old system bordered on the absurd. Big trunk carriers such as Northwest and United were not eligible for subsidy but were locked in to serving small cities by the CAB even if they lost money, thus providing an internal cross subsidy. Local service airlines such as Republic and its several predecessors were paid a subsidy to serve such low density routes. The mandated fare structure also had a built in cross subsidy to favor short haul routes at the expense of long haul passengers—much like the long distance subsidy of local telephone service before deregulation. The essential air service grant system is more rational; it recognizes that the subsidy is truly to the receiver of the service, not the provider. Of necessity, a Government system of subsidies involves sensitive political consideration in addition to economic based decision criteria.

The new system may be more rational but that doesn't guarantee all the people will be happier with the results. What has hap-

pened in practice is that low density route service is now provided by smaller feeder or "commuter" airlines using smaller airplanes but giving more frequent service. Under regulation, service to small town America had been shrinking steadily. Service by big airline jets was not economically appropriate for towns where there were only 10 or 20 passengers a day. Now service patterns have stabilized and many studies show that in most cases the quality of air service—cost, safety, and convenience—is equal to or better than before deregulation. I am sure that there are some in the audience who feel otherwise.

Let me touch briefly on two important, related matters. First safety is still under the authority of the Federal Aviation Administration and National Transportation Safety Board. There is a lot of flak in this area—but the overall, long term airline safety record has been significantly better in the last eight years—and there has been especially good improvement in the last 3 to 4 years in the safety record of the commuter airlines who serve rural America. Airplane accidents are horrible events which get lots of publicity but the statistics speak for themselves—flying in America is extremely safe.

Second, I'd like to point out that in the manufacturing area of the United States does not support the production of commercial aircraft in the way that foreign governments do. One of the oldest problems in serving rural America was the lack of suitable airplanes for the routes. We kept looking for a good DC-3 replacement but it never came from U.S. airplane builders. Today the small turboprops flown by regional airlines—good airplanes—come predominately from Northern Ireland, Holland, Canada, France, Spain, Britain, Sweden, and Brazil. Meanwhile, the big three U.S. builders of smaller aircraft have all been gobbled up by giant defense industry conglomerates where the future existence could be in peril. Cessna is part of General Dynamics, Beech under Raytheon, and Piper under Lear-Siegler. U.S. light aircraft manufacturers used to regularly build over 15,000 planes a year but now they're down to under 3,000. The depression for Piper, Beech, Cessna et al. is every bit as severe as it is for John Deere, J.I. Case and the late, lamented International Harvester. Our free market philosophy doesn't allow U.S. companies to compete fairly against the inroads of state supported foreign manufacturers.

Summing up, what are the results to date of deregulation? No doubt, fares are significantly lower than they would have been under regulation. There is a greater variety of price and service offerings. Airline efficiency is higher—greater utilization of airplanes and crews and higher load factors. The market has been expanded by lower fares and aggressive marketing; over 31 percent of Americans took at least one air trip last year. Cross subsidies are gone to the delight of the economics professors. Airlines route systems are rational and efficient. Fare simplification has not occurred as some expected but few free markets have simple price structures. And airline wages are no longer grossly out of line with the rest of the economy.

The big new development is the rapid consolidation of the industry and the rise of so-called "mega-carriers." These new giants are building huge hub and spoke route systems which blanket the

country. They also have a hens and chicks system of affiliated feeder lines to support their hubs by funneling in traffic from small towns. At a few hubs such as Minneapolis the resident mega carrier has as much as 75 percent of the flights—a matter of some concern.

The rapid growth of the market plus hub development is starting to strain the capacity of the entire airport/airway system. The Federal Government plans to spend over \$11 billion to improve the air-space system but that will barely keep pace with demand. Access to the critical big airports is becoming the bottleneck in the air transportation system; small cities are possibly in danger of being squeezed out if limited landing and takeoff slots are sold to the highest bidder. How to apportion these scarce resources is a hot potato.

It is not clear how or when these problems will be resolved but let me close by offering a six point prediction of what is likely to occur:

(1) Free market competition among the mega carriers will spur market growth; a way must be found to expand the airport/airway system capacity to handle the business.

(2) Airlines will help solve the problem by using larger airplanes to increase the capacity of each slot. New big airplanes must also be much quieter or local communities will not permit expansion of airports.

(3) Service from small cities and on low density routes to big hub airports will eventually need to be provided on new quiet aircraft which can use separate, short runways with microwave landing systems which don't interfere with the big jets and the long runways.

(4) Privatization in some form of the airway system—not the safety function of FAA—as proposed by the airlines would be a big help in speeding up the expansion. Action in the next Congress is possible and desirable.

(5) In order to afford the big, quiet jets and new technology small aircraft and the expansion of the airports and airways, the commercial aviation industry must become financially stronger and much more profitable than in the past. The private sector must provide the investment capital.

(6) The recent consolidation of the industry—and the future additional consolidation which seems certain—on balance is highly desirable. This is a necessary precursor to the improved financial stability needed to attract investment capital.

REGIONAL EDUCATION SERVICES: A SERVICE ALTERNATIVE FOR RURAL SCHOOL DISTRICTS

(By Glen Shaw) *

The Southwest and West Central Educational Cooperative Service Units were established 21 years ago by the schools themselves to provide programs and services to member schools that can be provided more efficiently and effectively on a cooperative basis than by individual schools.

The SW & WC ECSU serves 104 schools, 54,000 students, 3,616 teachers and administrators in an 18 county 12,500 square mile area of southwest and west central Minnesota.

The ECSU provides programs and services in four major areas:

(1) Administrative Services

Primary service—Management Information Services 100 reporting units receive financial services via mainframe computer. 58 schools receive payroll services via mainframe and micro.

(2) Media Services

Primary services—81 schools receive film and video services from a 14,500 piece materials library via van delivery. Cooperative Purchasing—member schools, computers and peripherals, food purchase paper and school supplies, athlete supplies, custodial supplies, school equipment, etc. A.V. Equipment, Computer and Typewriter Repair. Printshop. Drivers Education Simulation.

(3) Planning and Educational Services

Primary service area: Teacher Center; Instructional Technology; Educational Effectiveness; Telemedia Planning, Implementation and Support; and School Planning.

(4) Special Education

Special Education Cooperatives—Four Service Centers with offices in Montevideo, Pipestone, Willmar and Windom serve 74 schools. Examples of services are:

Child Study Coordination; Speech Therapy; Psychological Services; and Coordination of Learning Disabilities, Educationally Mentally Handicapped, Trainable Mentally Handicapped and Speech.

Regional Special Education services—examples of services are:

Occupational Therapy; Hearing Impaired; Visually Handicapped; Audiological; Severe, Profound, Multiply Handicapped; Emotional/Behavior Disorders; Micro Computer Development and Support; and Staff Development.

* Executive Director, Southwest/West Central Educational Cooperative Service Unit.

ALTERNATIVE DELIVERY SYSTEMS

Example 1: Cooperative Purchasing

All schools pay the same for goods and equipment purchased through Cooperative Purchasing. For example: Hills/Beaver Creek pays the same for one case of 20# paper delivered as Montevideo pays per case for 20# paper for 1,000 cases delivered.

Example 2: Special Education

All school districts, large or small, pay the same per day for special education services provided by itinerant staff. Examples are:

School psychological services—Heron Lake/Okabena pays \$200/day for 47 days; and Willmar pays \$200/day for 461 days.

Speech therapy—Ruthton pays \$164/day for 22.5 days; and Ellsworth pays \$164/day for 30 days.

Example 3: Tele-media

Nine school districts (Minnesota Valley Tele-Network) are currently providing 14 courses to 300 students by way of two-way interactive television (audio and visual).

Ten school districts (Southwest Minnesota Telecommunications) are in the test phase of a two-way interactive television system that will be operational in January, 1987. Both secondary and post-secondary courses will be provided to their students during the remainder of the 1986-87 school year.

Twelve school districts (Des Moines River Valley Tele-media) will begin construction of a two-way interactive television system during the summer of 1987.

Forty-seven school districts in five other clusters are at various stages of planning, including engineering and educational studies for two-way interactive television.

ALTERNATIVE HUMAN SERVICE DELIVERY: HOW CAN IT HELP RURAL COMMUNITIES?

(By Thomas Keaveny) *

I am honored to be asked to join this panel.

I should first share that my remarks are substantially tempered by my own rural experiences. I grew up on a 4th generation family farm in Renville County near Morton, Minnesota. My wife, Janet, and I also had the opportunity to experience our own family farming effort in Stearns County near Albany, Minnesota from 1979 until 1982.

I have been asked to participate in this forum representing two perspectives.

One perspective is based on the experiences which I shared as the director of the Renville County Human Service and Welfare Department from July 1984 until I became the executive director of the Southwest Minnesota Initiative Fund in August of 1986.

Obviously, the other perspective is based on the recent experiences I now share as a staff person involved with the Southwest Minnesota Initiative Fund. This community based, non profit, charitable organization is one of six Initiative Funds created by a two-year, \$15 million dollar grant from the McKnight Foundation. Each Initiative Fund has been created to serve a specific region in out-state or (as many of us would prefer) "greater" Minnesota. The primary focus of the Initiative Fund programs are to create and improve innovative human service delivery alternatives. Additionally, each Fund is proposing to strengthen the diversity of the "greater" Minnesota economy through the implementation of various economic development alternatives.

If there is a case to be made for the need to create alternative human service delivery mechanisms in rural areas, some attention must first be given to the radical demographic changes which are at hand in most of Minnesota's predominate agricultural counties. Many southwestern Minnesota counties have experienced population declines which exceed 5% in single decades. These declines have far exceeded the state demographers projections established for these same areas through the year 2000. Smaller communities were already dying during the 1970's when the agricultural economy was at its apparent prime. As the agricultural economy has failed, nearly every community in southwestern Minnesota with a population under 10,000 is experiencing an alarming population decline. Simultaneously, farms are larger, farm families are smaller, and the median age of the region's farmers is increasing at a very significant rate.

* Executive Director, Southwest Minnesota Initiative Fund.

At the same time, the proportion of elderly in the area's total population exceeds Minnesota's averages by a factor of approximately 1.7. Nearly twice the proportionate number of elderly over age 85 reside in southwestern Minnesota as compared to the state's per capita averages. Nationally, less than 1 of every 7 persons receive an entitlement benefit provided through the Social Security Administration. In the 11 counties served by the Social Security Administration office in Marshall, as many as 1 of every 4 persons receive such a benefit.

Median incomes in a majority of southwestern Minnesota counties exceeded the state averages as recently as 1981. In 1983 the median state income was \$24,714, while Renville County's median income had plummeted to \$18,791. This is a drastic, but not untypical, example of what has happened with the median incomes in many of the households in the region.

Ironically, the regions in southwestern Minnesota continue to represent income maintenance recipient rates on a per capita basis which are among the lowest in Minnesota. At the same time income caseload sizes have increased nearly 50% in some southwestern Minnesota counties since 1984.

How then might local decision makers, health and human service providers, and others concerned with these issues best structure human service delivery to persons in this region?

Several models can be readily identified. Current mental health service delivery in rural Minnesota is often provided through area mental health centers which serve several rural counties through various combinations of block grant funding and unit cost reimbursements provided by the counties which are cooperating to offer these services. Counties with small populations must affiliate with their public health nursing efforts in the development of community health service plans involving population bases over 30,000 in order to receive full formula funding and related state and community health service monies available for local service delivery. Southern Minnesota also represents the only two regional human service/welfare delivery systems enabled under the Minnesota Community Social Services Act of 1980, these being the F/M/W Human Service Board including Faribault, Martin, and Watonwan counties; and the Region VIII North Welfare Board including Lincoln, Lyon, and Murray counties. Each of these models generally represents positive, cost effective service delivery options which cannot be as effectively or as efficiently provided by the individual counties involved in these cooperative regional ventures. At the same time, few can dispute the fact that these cooperative models perpetuate the location of regional service delivery options and the related administrative consolidations that in many respects parallel the agricultural and retail trade centers that have contributed to the economic and population declines of the smaller rural communities in these regions.

A conclusion one can draw would find comprehensive and cost effective regional health and human service delivery involving negative opportunity costs trade offs with respect to local accessibility and diversification of the economies in the smaller communities of the regions being served. These trade offs can also be considered in relation to other ideas which rural communities and outstate coun-

ties presently must consider. Many of these local units of government are required to plan for the consolidation of other required functions of local government. Recent directives of the State Supreme Court have required regional consolidation of court services and traditional court participation which was traditionally rendered at a local county level. County assessment, county investment activities, and related functions traditionally performed by local units of government may face similar projects in a not too distant future if the rural population continues to decline.

In considering my remarks, I realize that I have not stressed an especially positive view about alternatives which involve the regionalization of service delivery. Without a doubt, many greater Minnesotans recognize that these consolidations and related regional service delivery models will necessarily continue to develop. The challenge is to seek the best alternatives, with appropriate local input and participation whenever these plans are considered or implemented.

Many individuals have contributed to the remarks that I am sharing. One other important issue surfaces in nearly every conversation regarding the delivery of education, health, and human service programs that people in greater Minnesota are involved with. The issue is: property tax financing of the programs which provide services to the people of Minnesota must be restructured. The 87 county boundaries that were created more than a century ago, do not render themselves to the property tax funding requirements inherent with the state and federal programs that are mandated for delivery and administration at the local level. These funding problems are significantly aggravated by the current property tax base decline that has occurred in greater Minnesota. The precipitous drop in farm land values and related housing and business real estate evaluation in southwestern Minnesota has elevated the issue to a point of needing immediate attention. Everyone here today is familiar with the examples that appear in the state's news publications on a weekly basis. There are many situations in greater Minnesota which finds retirees or farm families who have planned on retiring with income from property or planned to take care of remaining debt with income generated from those properties. At this time, these incomes in many cases will not sufficiently cover the costs of the local taxes assessed on the properties involved.

In summary, services to people will need to be more fully funded by income tax financing. Funds that are made available on a per capita basis through income tax redistribution, will best enable the provision of present services. Additionally, formula funding based on target population needs will best enable alternative service delivery models to develop at the most appropriate level, whether this be in a concentrated locality or in a sparsely populated area requiring regional cooperation and programming.

In summary, I would like to share that I am enthusiastic about the potential for alternative service delivery development the McKnight Foundation has afforded greater Minnesota through the Initiative Funds. These monies will be used in partnership with other private and public monies to fund nontraditional, regionally focused projects which address current human distress needs. Grassroots participation was a principle the McKnight Foundation

incorporated in its efforts to identify needs in greater Minnesota. Grassroots participation was also involved in the development of each Initiative Funds' program plan. Grassroots participation is also incorporated in the decision-making processes through which each Initiative Fund will award grants and make loans available to the regions that being served. The same grassroots participation is also essential to the success of any regional service delivery alternative which might be considered in an effort to help strengthen the communities in greater rural Minnesota. Obviously, the Initiative Fund concept is a very contemporary and perhaps nationally unique example of the move towards "privatization". Hopefully, greater Minnesota will be in a position to take advantage of these options through projects which blend private funds, public funds, and the efforts of other nonprofit or church related organizations in order to deliver a specific program in a region or in a broader sense to strengthen rural Minnesota.

Again, I appreciate the opportunity to share these thoughts and observations with you today. Let me stress again that these comments are based on conversations that I have had the opportunity to have with a variety of persons concerned about the future of southwestern Minnesota. I will be happy to further elaborate on any of the three human service delivery models that I have identified in conjunction with the comments which might follow the presentations of the other panelists I have the honor to be seated with.

ALTERNATIVE SERVICE DELIVERY FOR RURAL GOVERNMENTS: SOME QUESTIONS AND PROBLEMS

(By C.J. Hein) *

When we speak of alternative service delivery in rural areas we are usually seeking a way to have the service provided by some organization or person other than the existing local government: examples are contracting out, co-production, and the use of volunteers instead of local government employees. It might be said that the essential definition of alternative service is that it is not done the traditional way. It is not done by letting the local government hire employees and purchase equipment and then provide the service using those employees and that equipment. So the essence of alternative service delivery seems to be a diminished local government, one that provides fewer services for its citizens.

But we should note at this point that there is one major exception: the alternative service provided by the state government. Minnesota is well known as a pioneer in alternative service delivery in metropolitan areas by the state government in the case of the Twin Cities Metropolitan Council. The Council is an agency established by the state government to provide additional services in the metropolitan area, primarily the services of planning and coordination that local governments had been unable to provide for their residents.

Another example of alternative service provision by the state government and one which is principally visible in rural areas is the state highway patrol. The patrol provides law enforcement services on highways designated by the state government in both urban and rural areas. I expect that most of us would agree that the Patrol provided a high level of service on the rural highways that it patrols, and that this is an additional service provided by the state which benefits residents in local government areas in rural portions of the state. It should be noted the alternative service delivery by a larger unit of government such as the state or national government seems to be more successful when it is providing a service the local government was unable to provide. An example is the country agricultural extension service, a federal-state-local joint effort that provided services not otherwise available from existing local government or private enterprise. Other federal services such as the farm credit programs or the REA have been more controversial because the boundary between them and existing private sector services were unclear.

I have spent this time on some of the implications of our definition of alternative service delivery because it leads me to what I think should be the principal criterion by which we judge alterna-

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tive service delivery proposals, namely does the proposed service delivery add to the well being of the citizens of the rural local government, whether it be a county or a township or a village. If it doesn't leave the rural resident better off both in the short run and in the long run, the alternative service delivery system offers should not be adopted.

Now that probably sounds to you like a truism—everybody knows that, so why am I talking about it? But the fact is that we accept a lot of proposals without looking carefully at some of the underlying assumptions.

So I want to ask you to think for a few moments about the various kinds of alternative delivery systems and about what values underly the advantages claimed for them. What is it that contracting out, increased use of service charges, co-production. Use of volunteers, and other alternative delivery systems do for the local citizen? Essentially, they make the citizen do more work or pay more money to receive the same level of service that has been provided in the past by his local government. And, in addition, most of the time he does not receive the same level of service that would have been provided by his local government. So one might ask in what way does it improve the life of the rural resident to require him or her to do more work and shoulder a greater share of the costs of the service? We can talk more about that later if you want to discuss that point. But I conclude more work for the local resident is not usually an improvement in his life, although for some it may be.

If you look at the claimed advantages of many alternative service delivery systems, you find they generally fall under two headings: (1) economy and efficiency, and (2) centralization. Both of those are important values in American life, and applied sparingly they have often led to improvements in our lives. But they are not among our primary American values; at both the local and national levels our community values are such things as life, liberty and the pursuit of happiness, justice, equality, freedom. At the personal and family level the primary values are caring and giving of our care and time and effort to those we care about. Centralization and economy and efficiency are very secondary values at both the community and the personal level. The reductionist nature of these latter values prevents them from ranking as high as the other values.

So in determining how to deliver local government services in rural areas we need to base our criterion of a better life for rural residents on those values most important to those residents.

THE PROVISION OF GOVERNMENTAL SERVICES IN RURAL AREAS

Most services provided by government are undertaken because private enterprise cannot make a profit providing the service. If private enterprise can package the service and sell it at a profit, there is seldom any demand for government to provide that service. Examples are the services provided by plumbers, appliance repairmen and auto mechanics. But there is also an element of how important the service is to us. Some things are so important that we don't trust them to private enterprise, for example law enforcement.

Looking first at the quality and cost of the services provided by the private sector, I wonder how many of you are satisfied that the services you have received in the past five years or so from plumbers, appliance repairmen, and auto mechanics have been well done and done at minimum cost? Or if you're not the person at your house who deals with these providers of services, have you heard anything but complaints from the person who does deal with them? I think we can safely conclude that there is plenty of room for improvement in the services provided to us by the private sector.

In comparison, what is your impression of the services provided by firemen, emergency rescue units, and policemen? Most of you don't really know, because you haven't called for one of those servicemen in the past five years. If you received the service, it was probably the unwelcome one of a speeding ticket or a parking ticket. But people who have called for a fireman or a policeman or an emergency rescue unit say they generally are pleased by the service. Sometimes we think they should have arrived sooner, but there is no comparison between their response time and that of the plumber or appliance repairman.

So it is not at all self evident that services provided by the private sector are as good as those provided by local government employees. When citizens are asked about public services, they generally rate them as prompt, courteous, and efficient. In those rare instances when policemen and firemen are not prompt and courteous, there is a big hue and cry in the media. Probably our lives would be better if we could get as much hue and cry about discourtesy and delay in the private sector. And most people do not feel after wasting half a day trying to get the private sector to repair something that it is an advantage that in a free market he can always go to some other repairman.

Nor is it clear that the private sector is more efficient and economical than local governments, although this is often assumed by proponents of alternative delivery systems such as contracting out.

Let's look at the service for which we have the longest experience with contracting out, the construction of public streets and highways by private contractors. This practice has usually provided us with an excellent system of streets and highways, but there is some doubt about how economical it is. Complaints of the high public cost of highways are heard frequently from other segments of the private transportation sector such as railroads and the water transport industry. In addition, the trucking industry which uses the highways also complains about the taxes they have to pay. We may safely conclude that contracting out provides a good highway system at a relatively high cost to taxpayers.

Over the past few years the new media have provided examples of problems with the system of contracting out for highway construction, namely the numerous cases of bid-rigging in which highway construction firms have either been convicted or pleaded no contest. The millions of dollars of taxpayers money squandered in these bid-rigging situations is further evidence that contracting out is not necessarily economical or efficient as a way of building highways.

So on the score of both quality and cost, there is very little evidence that contracting out to the private sector will provide better service for residents of rural communities.

" CAN WE TRANSFER METROPOLITAN AREA EXPERIENCE TO RURAL
COMMUNITIES

In those relatively few cases where evidence has been presented that private sector performance of public services may be more economical, it is not clear that the savings can also be achieved in rural areas.

For example, the most thoroughly documented achievement of efficiency in governmental services is in the collection of garbage and trash in New York City, although similar results have been cited for Kansas City and some other large cities. By careful monitoring of costs and competitive bidding, cities have forced private contractors collecting refuse to become more competitive, and considerable efficiency in refuse collection has been achieved. Government has provided the cost monitoring and has encouraged competition; the private sector has collected the refuse efficiently and economically.

But the secret of this success has been the concentration of customers for refuse collection within a relatively small area so that by picking up the refuse at each stop faster, costs have been brought down dramatically. In rural areas, where the distance between each collection point is greater. A faster pickup will not affect costs very much since the major cost is in the travel time between pickup points. So the best we can do in rural areas is to introduce a system of coproduction. That means the rural resident puts his garbage and trash on his pickup truck and hauls it to the collection station, where it is put into a large garbage truck which at the end of the day hauls the collected material to the sanitary landfill. What the rural resident contributes is fifteen to thirty minutes of his time and the use of his vehicle for however many miles he travels to and from the transfer station. So far we have no studies showing that efficiencies in the collection procedures make any great difference in the costs of refuse collection in rural areas because the techniques used in metropolitan areas are not really transferable to rural areas. The economies of scale are just not there.

The other example usually cited of improved cost effectiveness from private sector provision of services is private provision of fire protection services in Scottsdale, Arizona. If anyone here knows of a study of cost effectiveness of private provision of fire protection in a place other than Scottsdale, I would appreciate your pointing it out to us, because it is a little embarrassing to be able to point only to one example back in 1973 of any cost savings from using the private sector.

But even in this case, it is not clear that we can transfer the Scottsdale experience to rural communities. The essence of the cost savings in Scottsdale in that highly trained volunteers are used to replace professional full-time firefighters, and since the volunteers are a cost only when they are actually fighting a fire, it is claimed

that considerable savings are made. The volunteers are drawn primarily from the other city employees of the city of Scottsdale.

This experience is difficult to transfer to rural areas where they have always used volunteers because full-time firefighting personnel are too costly. So cutting costs by a further use of volunteers may not be possible. We may be able to train more rural residents in fire fighting techniques and ask them to purchase necessary equipment out of their own funds so they can put out more fires before the volunteer fire department gets there. This may or may not improve the lives of rural residents. But in any case it seems doubtful that the techniques used in Scottsdale can be transferred to rural areas with any cost savings.

One more example of alternative service delivery that seems to have been successful in metropolitan areas is the use of the neighborhood watch system to help law enforcement officers. You have all seen those signs: "Neighborhood Watch Area: We Call the Police." The program gets residents actively involved in watching out for their neighbors and for possible lawbreakers who might come into the area. It provides more surveillance of an area at almost no additional cost to government.

But again, can we transfer this to rural areas? If we can believe the people who write plays and novels and short stories, people in rural areas are already too nosy about their neighbors. Perhaps some of you who come from small towns felt constrained by the neighborhood watchers in your youth. In any case, the secret of the success of the neighborhood watch area is that they have introduced into the big city the good old fashioned rural custom of taking care of your neighbors.

I recently drove along a township road in a sparsely settled part of Minnesota and came across a neighborhood watch area sign attached to a tree in the yard of a rural residence. Down the road about a mile I came across another residence that had the same sign. But it is really not the same as seeing that on every third house as you drive down a city street. The neighborhood watch sign has less crime deterrence power in rural areas, even though it may help some to deter crime.

CONCLUSION

My conclusion from this short look at some of the alternative service delivery systems suggested in the literature is that they have so far shown more promise in urban areas than in rural local government areas. The principal efficiencies that they provide are two: First, getting the citizen to participate by providing part of the service himself, thus cutting the cost to the local government but increasing the cost to the citizen in terms of time spent and work done. Secondly, and much more rarely, the alternative makes the professional providing the service more efficient, thus providing cost savings, this being done so far primarily for the service of refuse collection, where the transfer of the economies to rural areas is very difficult.

I conclude we cannot expect much improvement in the lives of rural residents from either of these efficiencies, because they tend to come at the expense of the time and effort of the rural resident himself.

WHERE HAVE ALL THE DOLLARS GONE?

(By Dr. Lee Kolmer) *

Where have the export dollars gone? Many people have puzzled over that question. Even though we can trace what happened and how it happened, we are still shocked by the fact that it happened so quickly, from about \$41B in 1980 to \$28B in 1986. But it really didn't begin in 1980, it began back in the mid-1970's when investors in nations such as Australia, Canada, Argentina and Brazil began to invest in land, land development, fertilizer and machinery. That is where some of our dollars went; to competing countries whose investors believed, like we did, that a new era had dawned and that the cost-price squeeze had been replaced by a permanent race by producing nations to raise output enough to feed the expanding world population. They also believed that U.S. farm policy, which has placed a floor under world prices for a long time, would continue to do so even though world demand might weaken some for relatively short periods.

The expanding production and sales of other nations accounted for some of the dollars. Another big chunk of dollars went into the coffers of the oil-producing nations. Much of the expanding grain sales of the 1970's were financed by money loaned to third world countries. The 1978-79 oil price shock created a serious dilemma for many developing nations. They did not have sufficient foreign exchange to purchase both oil and grain at the same volume as in preceding years. Grain was the more dispensable commodity in most cases.

Another large bundle of dollars went to the public and private banks. As the interest rates began to climb in 1980, large amounts of dollars were diverted from grain and oilseed purchases to service debt. The Federal Reserve decision in late 1979 to dampen inflation by restricting the money supply led to rapidly increasing interest rates, a dramatic reduction in the inflation rate and a booming dollar. This was accompanied by record government spending and deficits and a continuing inflow of off shore capital to finance U.S. business and government. We have come full circle. In the late 1970's, many Americans were deeply disturbed by our cheap dollar, they felt a weak dollar described a weak economy. The dollar rose to unprecedented heights, so high in fact that we have experienced historically high trade deficits. The dollar has weakened during the past few years but the trade deficits continue at record levels.

The dollar has weakened against the yen and EEC currencies, but it continues to be strong against the Canadian, Australian, Korean, Taiwanese and developing nation currencies, all competitors and/or customers.

* Dean, College of Agriculture, Iowa State University.

The net result:

A 50 percent decline in value in dollar value of U.S. agricultural exports: \$44 billion in 1980; \$26 billion in 1986.

A 45 percent decline in volume of wheat exports: 49 million metric tons in 1981; 26.5 million metric tons in 1986.

A 30 percent decline in volume of feed grain exports: 69 million metric tons in 1980; 48.5 million metric tons in 1986.

A 35 percent decline in volume of soybean exports: 25.5 million metric tons in 1981; 16.5 million metric tons in 1986 and finally.

Falling value of foreign currency per U.S. dollar: Index of 100 in 1980; Index of 148 in 1985; Index of 127 in 1986 and falling.

Except for 1983, the increasing value of the dollar combined with the increasing capacity of competing nations resulted in a continuous decline of gross export dollar value. Our economists predict steady but modest volume increases during the next four years as the dollar continues to decline. However, if these forecasts come to pass, in 1990 we will have a dollar 10 percent more valuable than it was in 1980 and U.S. agricultural export sale value 34 percent lower than in 1980. This does not suggest that the recovery of export market sales is the solution to the U.S. excess capacity problem.

We are all familiar with the impact of these vents upon farmers and bankers but we hear less about the impact upon farm related employment:

The food industry is down; farm machinery is down; fabricated metal is down; and agricultural services are steady.

This tells only part of the story. Most of the remaining workers in farm-related employment are working for lower salaries or wages with the concomitant reduction in living levles that has resulted in reduced retail sales, lower sales and income tax revenues and a lower level of community services.

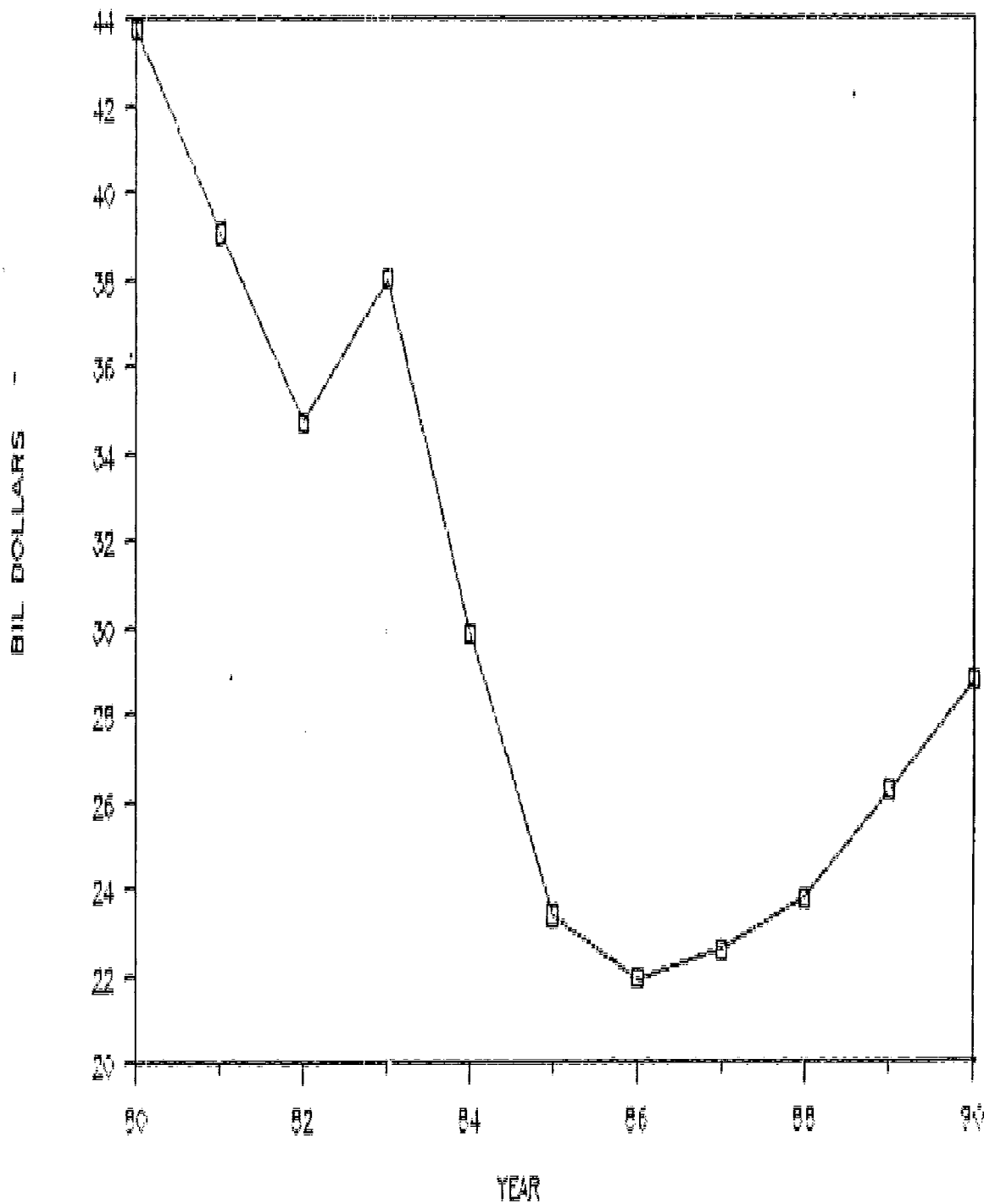
A chart showing number of retail businesses on main street would also show significant decline. For many rural communities without alternative non-agricultural related employment, the impact has been disastrous.

The present trend will continue until or unless our fiscal, agricultural and social policies recognize that rural America is undergoing a traumatic restructuring that is very destructive to the lives of many people and is a long way from over. If anyone doubts this, I suggest a walk down the main street of rural county seat towns in Minnesota, Iowa, Missouri, Nebraska and the Dakotas. Count the vacant stores and talk to the merchants, the bankers and citizens. Then go to the Court House and talk to the county officials. The story is the same, fear, fear for their future as individuals and as a community. Rural America is not the same, idyllic place depicted upon Norman Rockwell posters.

Rather, it is a region in great distress with much pain and fear. Our efforts at revitalization have assumed that farm income enhancement would provide the cure. It hasn't worked that way. The focus is too narrow. We cannot achieve a vital non-metropolitan economy by tinkering with farm income policy, export policy or other strictly agricultural measures.

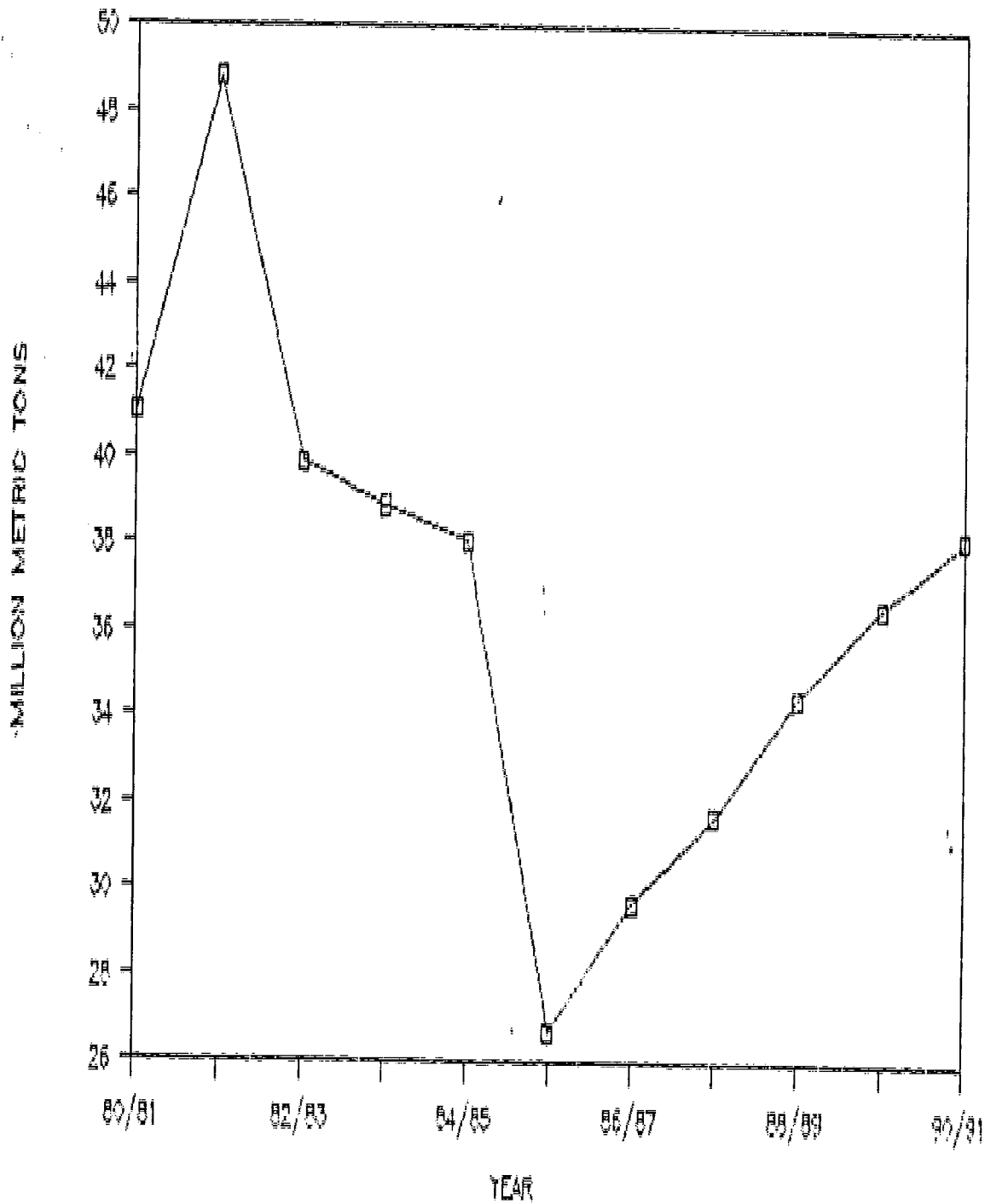
An economic resurgence in rural America that provides economic opportunity and a reasonable quality of life for the people requires a package of farm income, industrial employment and social service policies that are coherent and coordinated. A set of policies that have an overriding objective of increasing economic activity in rural America that will lead to more employment opportunities and a higher quality of life is required.

VALUE OF U.S. AG EXPORTS



160

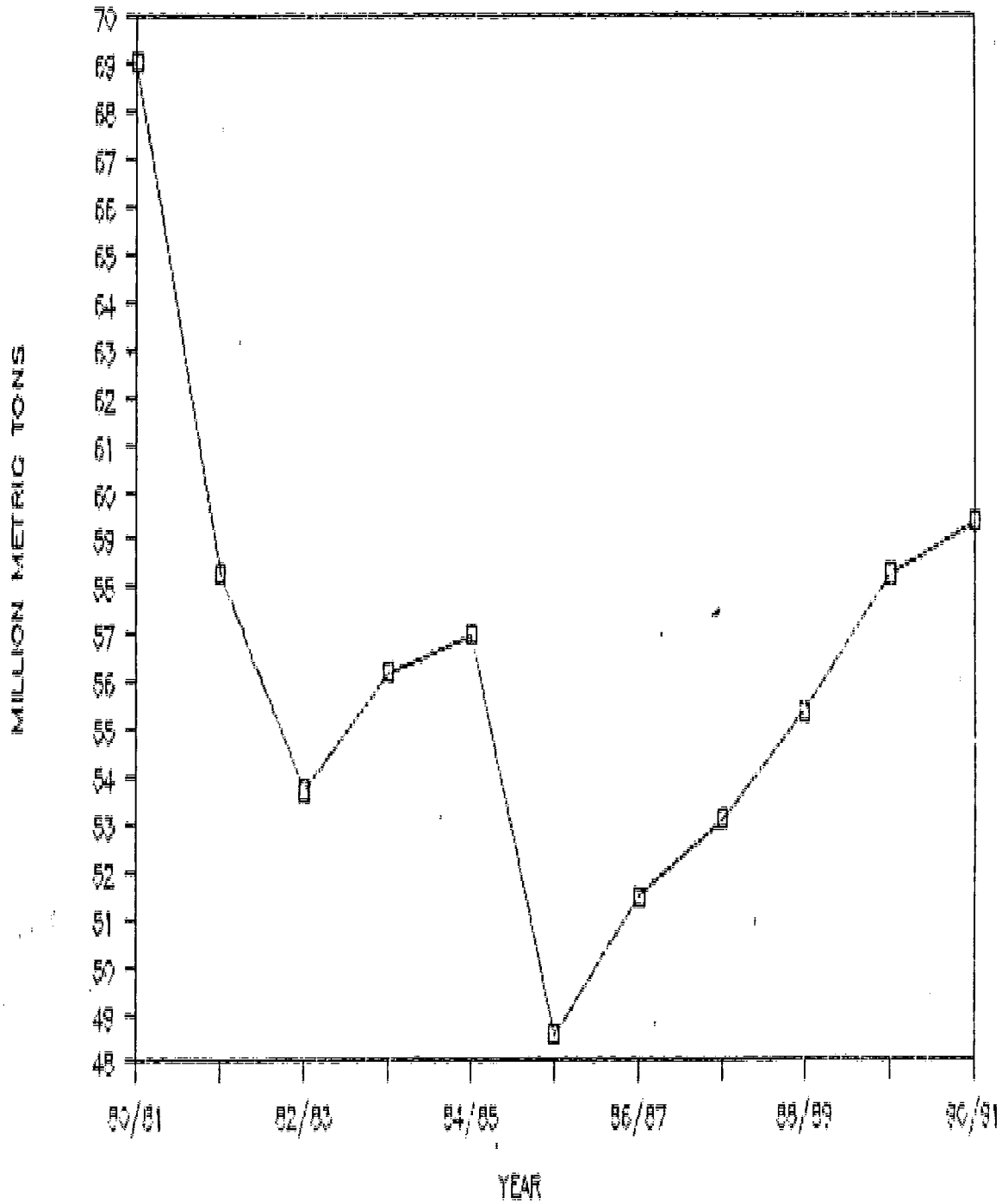
U.S. WHEAT NET EXPORTS



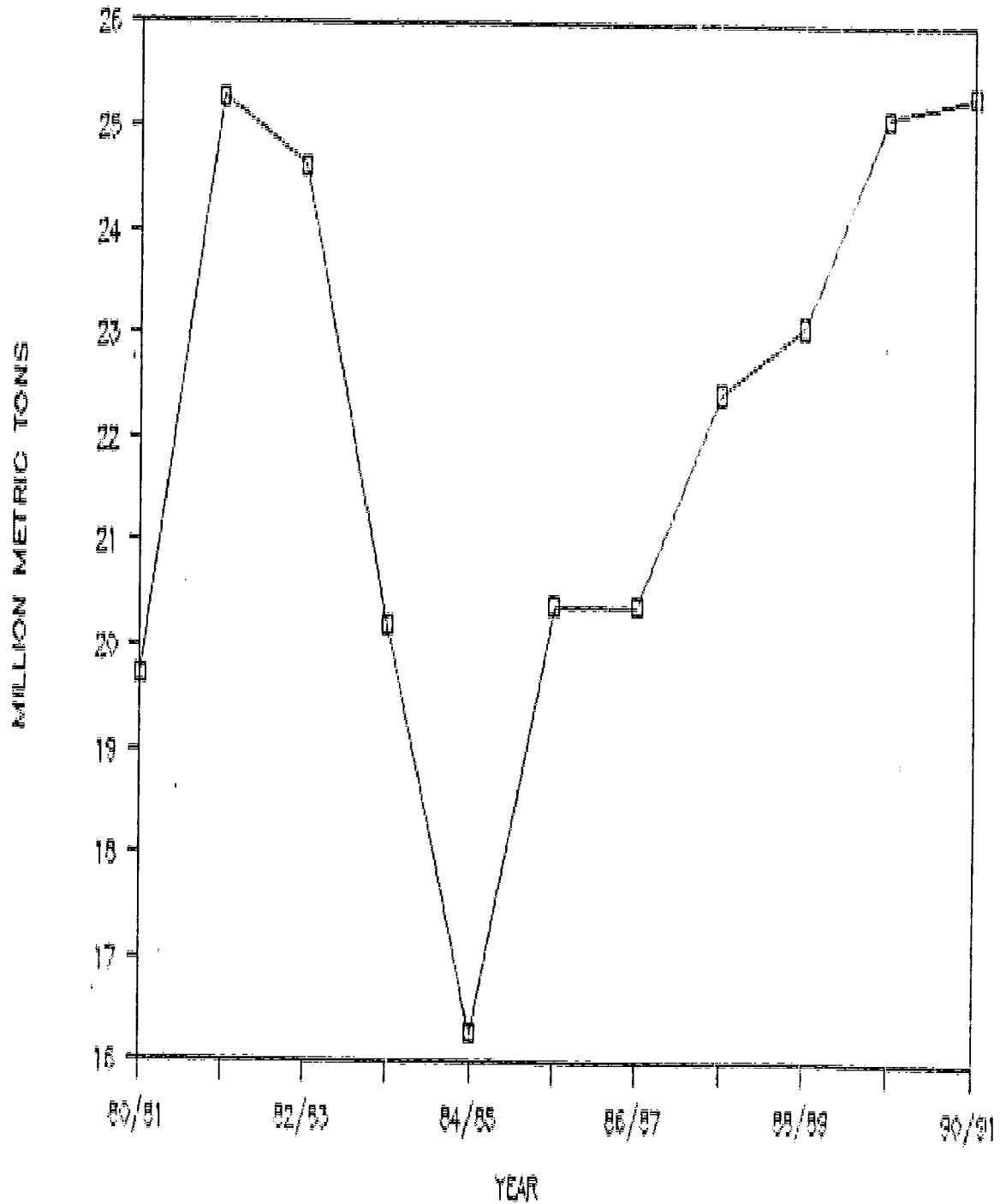
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U.S. FEED GRAINS NET EXPORTS



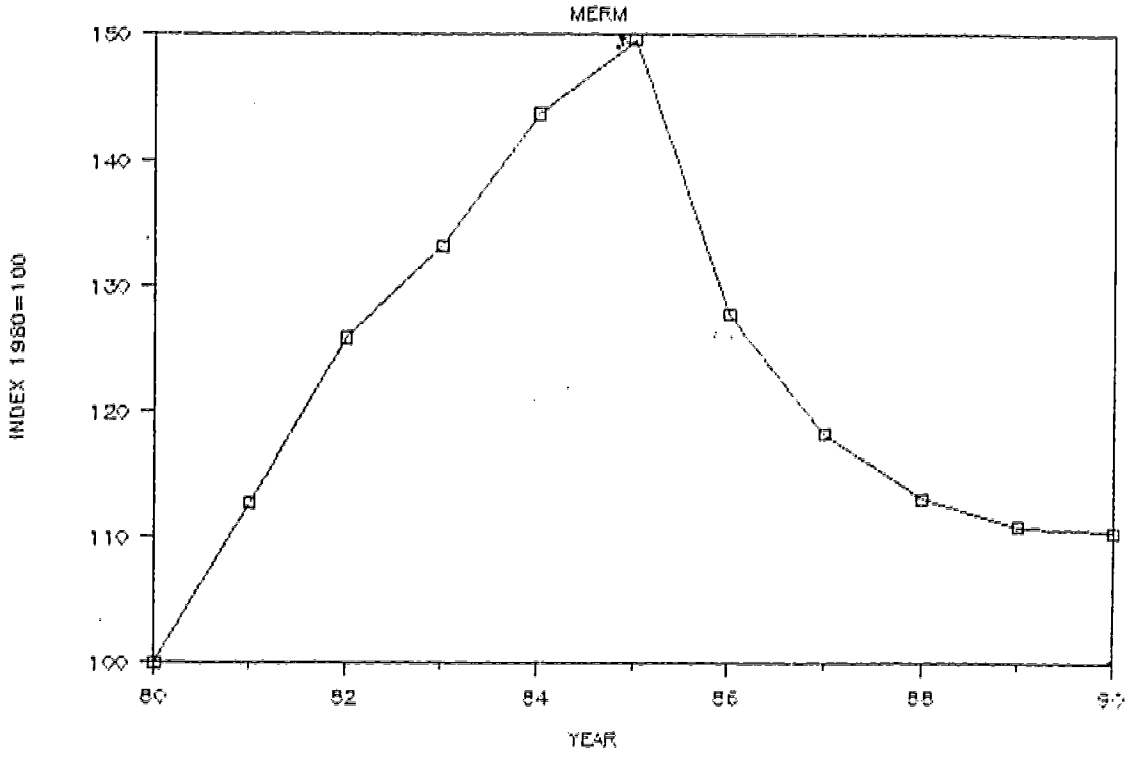
U.S. SOYBEAN NET EXPORTS



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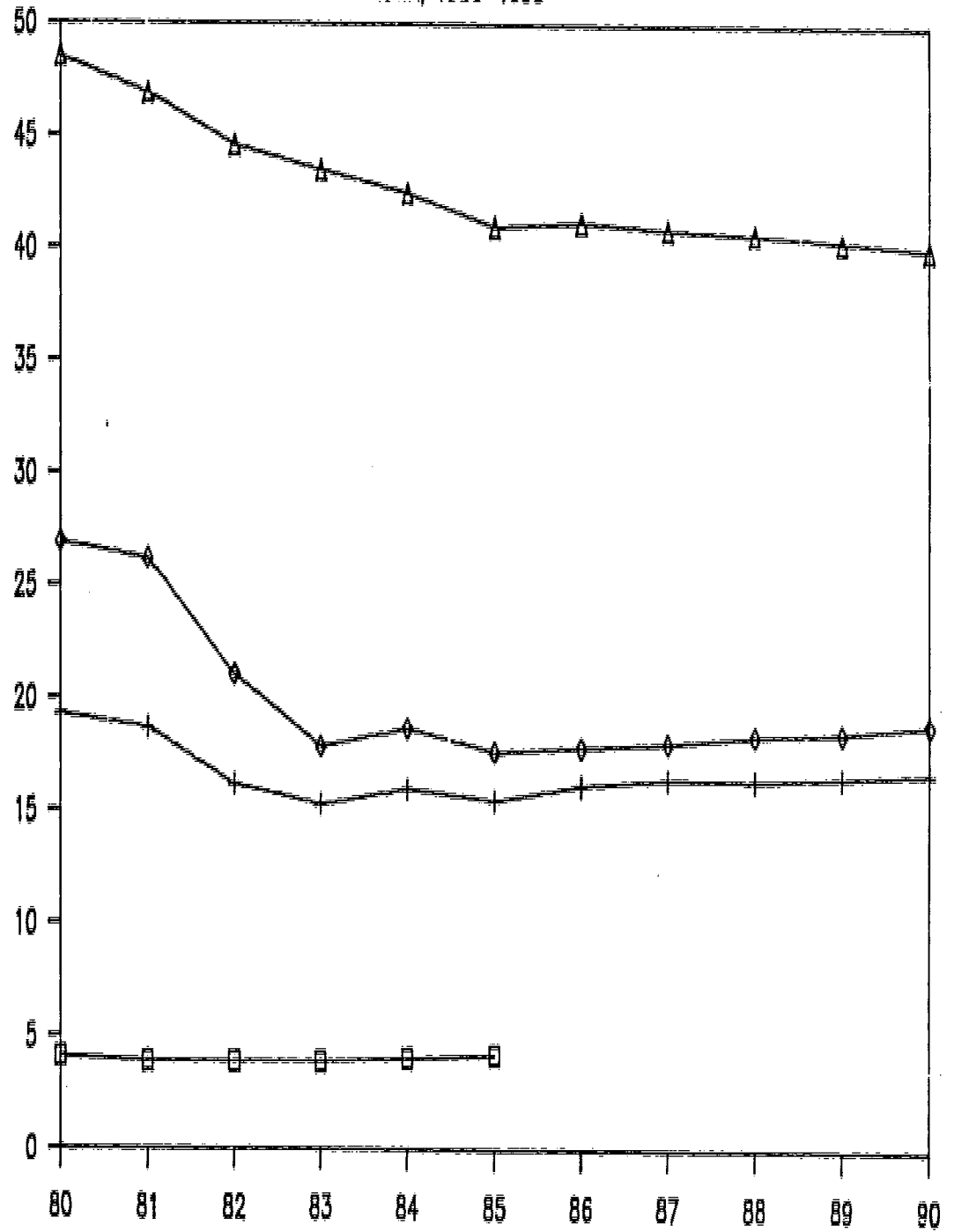
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FOREIGN CURRENCY PER U.S. DOLLAR



FARM RELATED EMPLOYMENT

IOWA, 1980-1990

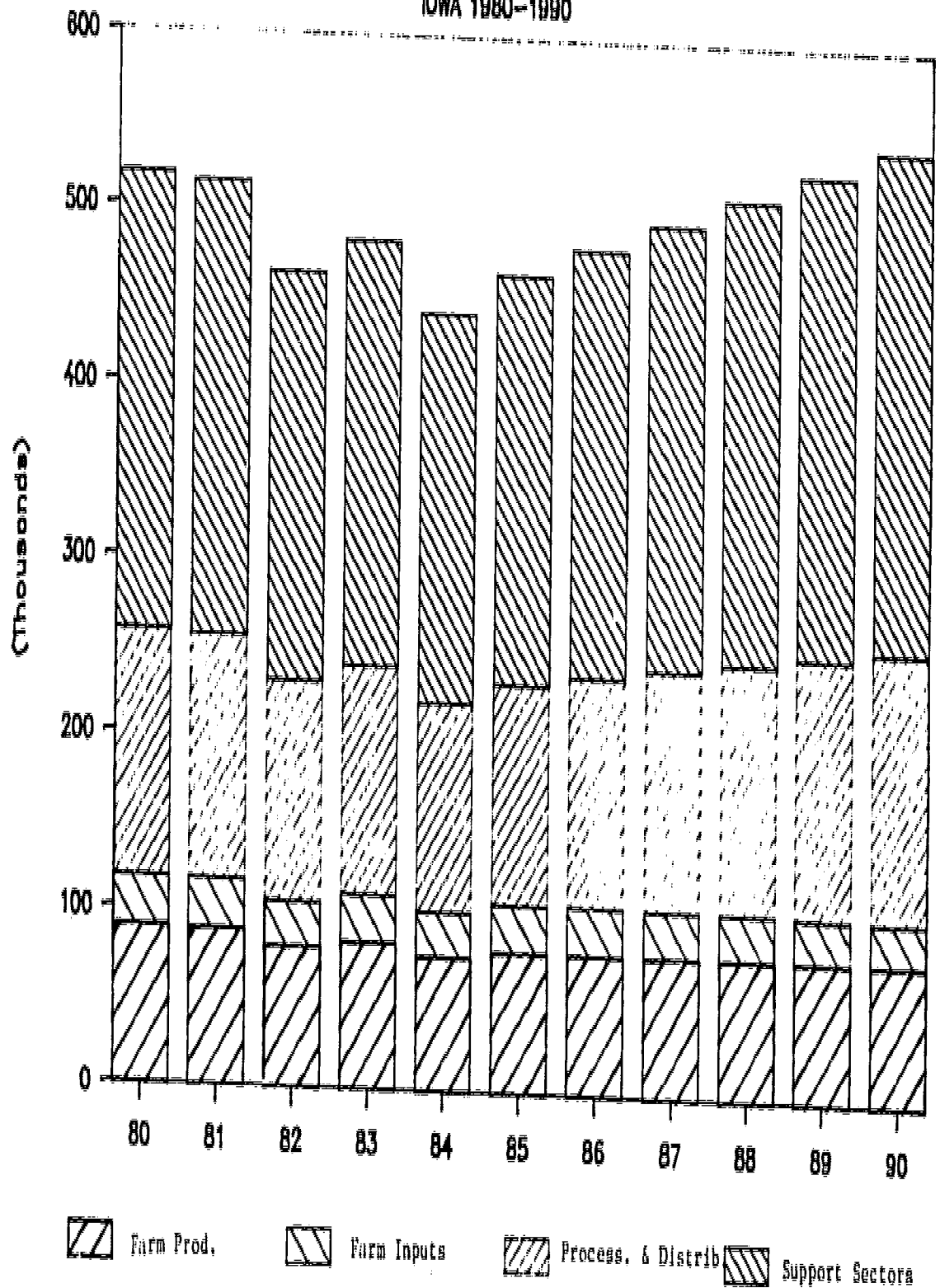


□ AG SER + FAB MET ◇ FARM MACH. △ FOOD

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AG AND RELATED EMPLOYMENT

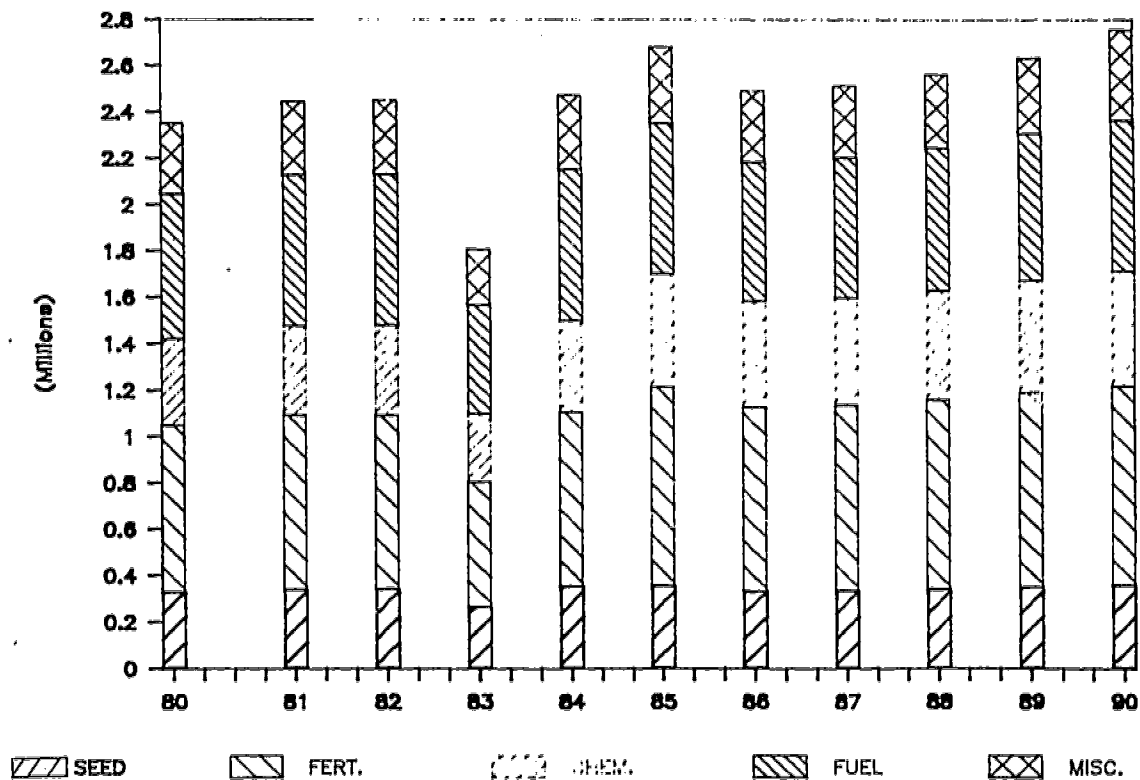
IOWA 1980-1990



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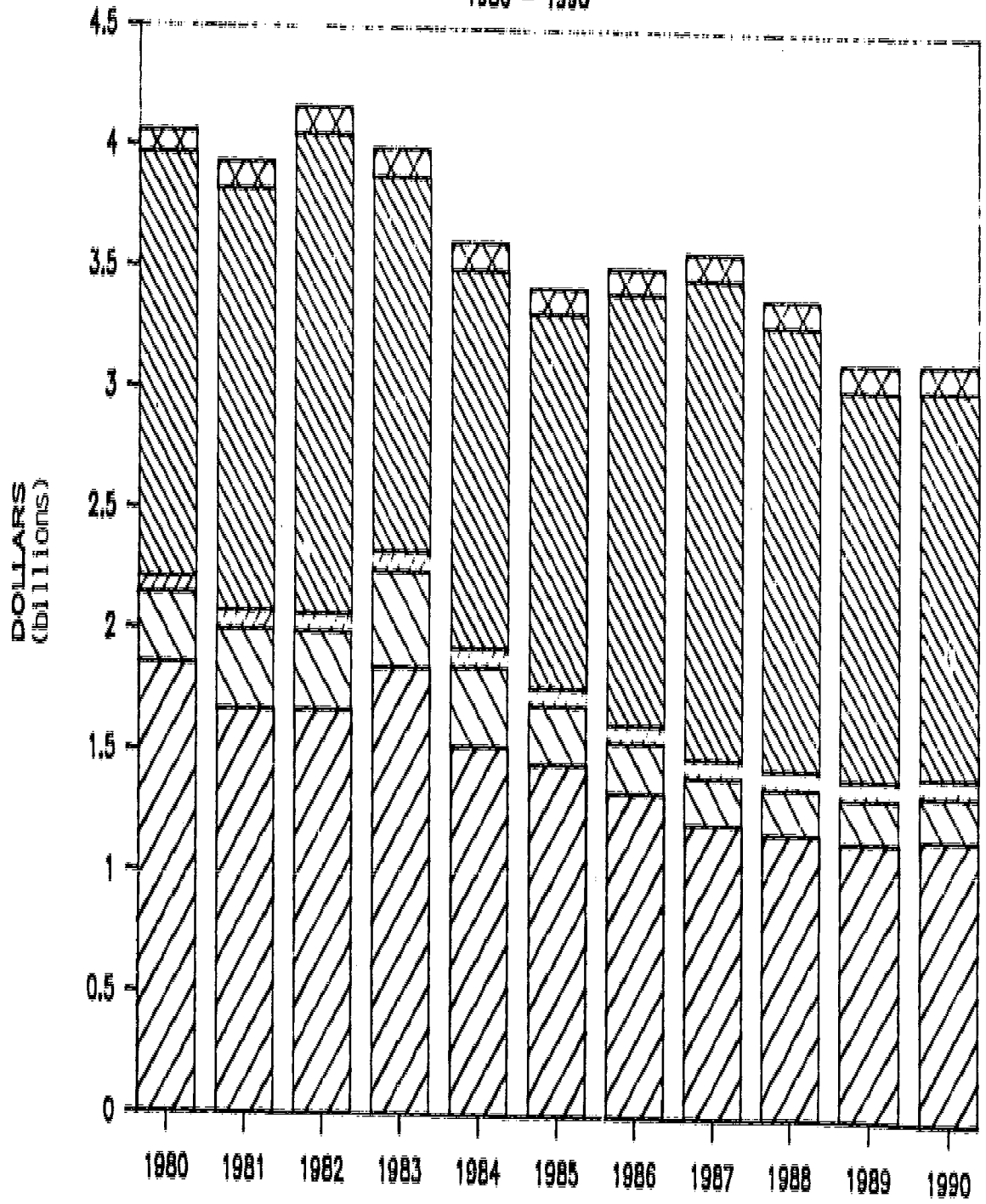
INPUT COSTS OF CROP PRODUCTION IN IOWA



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LIVESTOCK PRODUCTION EXPENSES

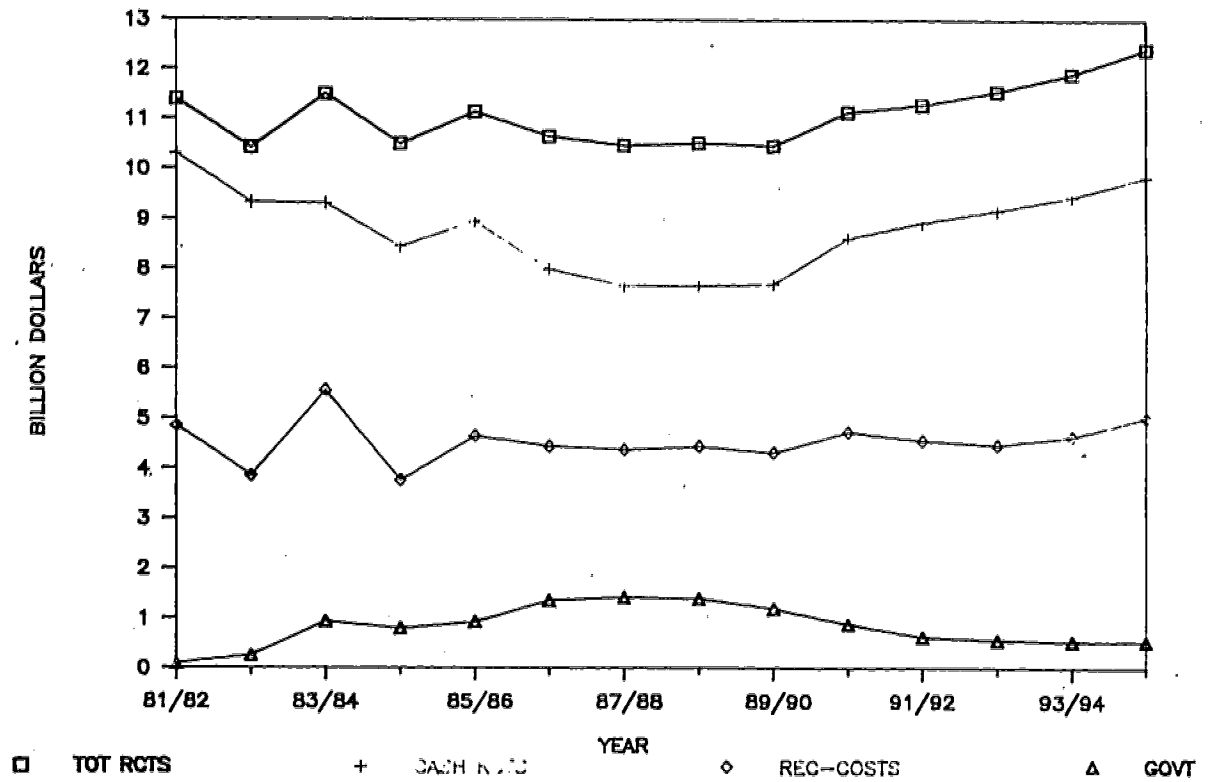
1980 - 1990



Legend: C & SUP (diagonal lines), HAY (diagonal lines), AS SERV (dots), LIVSTK (diagonal lines), MISC (cross-hatch)

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IOWA FARM RECEIPTS



SPECIALTY CROP MARKETING: AN ATTEMPT TO STABILIZE A RURAL ECONOMY

(By Otto Schmid) *

The topic to be discussed in this paper is a description of a project undertaken by the Upper Minnesota Valley Regional Development Commission, a rural planning and development organization serving the five counties of Big Stone, Chippewa, Lac Qui Parle, Swift, and Yellow Medicine in extreme west central Minnesota. The basic objective of the project was to establish a marketing mechanism to serve local growers and grower's associations in identifying and developing markets for specialty and high-valued agricultural commodities. The marketing mechanism would act as the agents for the growers and grower's association directly marketing these specialty products to several identified market areas. The project was begun in the spring of 1985 and subsequently became an integral part of the regional commission's work program for fiscal year 1986 and the present fiscal year 1987.

In preparation for this project, the UMVRDC undertook several studies in 1981 and 1982 that identified several disturbing trends. The Commission noted that although the rural economy appeared to be quite stable, the outmigration of its population continued to be a nagging problem and one that perhaps, was the harbinger of future difficulties in the local economy. In 1983, the Commission identified still another disturbing trend when it began to detect farmers stress associated with high interest rates and falling commodity prices. The Commission went on record early indicating that the future of its rural communities and main street businesses was directly tied to the solvency of its farm families. After identifying these trends and arguing with representatives of the administrations at both the federal and state levels that more attention should be given to the future of the rural economy, the Commission decided that it must take a more proactive stance in addressing the economic crisis at hand. Representatives of the Commission, at approximately the same time, were being introduced to foreign trade opportunities that were being discussed by the U.S. Department of Commerce at several work shops. As a result of these discussions, the regional commission embarked on its program of establishing a marketing mechanism for our area farmers and to encourage the area's agricultural community to give serious consideration to crop diversification.

The Commission reasoned that historically, the farmers are not marketers. The Commission noted that traditionally farmers take most of the risks associated with crop production but have not par-

* Executive director of the Upper Minnesota Valley Regional Development Commission and chief executive officer of PdT International, Appleton, Minnesota.

anticipated in the risk taking associated with marketing the fruits of their labor. The Commission reasoned that as long as the farmers maintained allegiance to production of traditional commodities and those commodities continued to show low or no profitability for the producer, it only made sense to investigate the market place to see what additional opportunities may exist in the area of specialty crop production.

With this in mind, the Commission sought assistance from the U.S. Department of Commerce Economic Development Administration to underwrite the demonstration project leading to specialty crop marketing. In August, 1985, a contract was entered into with the Economic Development Administration whereby the regional commission was awarded a \$50,000 grant which was matched by a \$17,000 local cash contribution. The Commission agreed to investigate the market place to determine whether or not opportunities existed for crop diversification and to also investigate what type of marketing mechanism could be established to serve area growers. As a result, in February of 1986, the marketing entity referred to as PdT International was incorporated in the State of Minnesota. This marketing entity was formed with the sole purpose of acting as marketing agent for farmers who were willing to produce specialty and high-valued agricultural commodities for the market place.

At approximately the same time, the Commission began to investigate the market place. It was a determination of those associated with this project that the Commission should be extremely selective in identifying both domestic and international market areas which may prove profitable to local growers. The Commission set out to identify potential markets by demand and location. In order to do this, the RDC staff approached many organizations ranging from universities to world trade centers to find out what parts of the global market place were purchasing western Minnesota agricultural products. Historically, it was shown that much of the raw commodity grown in the western Minnesota area is shipped to the west coast, then shipped to the East Asian market place. Although the western Minnesota growing region is situated almost in a geographical center of the northern reaches of the continental United States, it is in fact one of the largest major corn producing areas between the Upper Midwest and the Pacific Northwest. The Commission discovered that over 90% of its corn production ends up in the international marketing main stream headed for the Pacific Rim. The transportation linkages between the western Minnesota growing region and the Pacific Northwest ports are excellent. The ocean shipping time between the Pacific Northwest ports and the Pacific Rim save many days in comparison to those provided to the Gulf ports and even those found in California. This historical transportation linkage to this major corn growing region of the north central part of the United States led to the conclusion that the Pacific Rim would be the market of choice.

In further specifying this market, it was determined that the countries of Japan, Taiwan, and Hong Kong would be further investigated. Contacts were then made with governmental representatives of these three mentioned countries. Various trade organizations, world trade centers, and private sector marketing companies

were contacted. Introductions were made to these organizations concerning the nature and scope of the project undertaken by the regional commission. Inquiries were also made as to the advisability and desirability of meeting representatives of these countries as well as marketing associations and private sector marketing companies. As a result, the RDC determined that a trade mission to the countries mentioned previously was desirable for the benefit and future well being of the overall project. In late February and early March, 1986, five individuals from the western Minnesota region journeyed to Japan, Taiwan, and Hong Kong with an agenda that would hopefully lead to the development of marketing relationships with individual trade companies in those locales. The trade mission was also instructed to identify specific specialty crops in demand in these market locales and also seek an understanding as to whether or not there would be interest in developing value-adding activities associated with the proposed crop diversification.

The marketing mission to these countries was quite unique in that all five participants were either growers or individuals identified as experts in crop production and economic development activities. The trade mission participants were mildly surprised that they were able to gain audience with most of the major trade companies in Japan and Taiwan. Governmental representatives in both of these countries indicated they thought this was a most opportune time to introduce the idea of direct marketing to buyers in their respective countries. Hong Kong proved to be another story, in so much as the trade mission discovered that Hong Kong is truly the gateway to the Peoples Republic of China. However, trade mission participants also discovered that the Peoples Republic of China was interested in purchasing technology in order to enhance their own agricultural production activities.

Upon its return, the trade mission participants reported to the general public as well as to the Commission membership in late March and early April. It found the inhabitants of the countryside were somewhat indifferent to the Commission's attempt to identify the non-traditional commodities which held promise for profitability for the local growers. It was concluded that the mood of the individuals associated directly with agricultural production was one of survival and not one of taking additional risks. The Commission concluded, however, that the economic troubles being experienced by the area's farmers is exactly the reason the project should continue and all efforts should be made to completing sales which should convince growers to more closely scrutinize the opportunities associated with the risk taking being proposed. It was determined by the leadership of the Commission what the marketing entity had been formed, markets identified, and relationships established with those organizations in foreign marketing entities that held promise for future sales.

Throughout the summer months, representatives of the UMVRDC continued to promote PdT International as a viable and legitimate marketing entity. Many inquiries were received from persons interested in purchasing specific specialty commodities from the marketing entity. However, no sales were made and doubts began to set in as to whether or not the project's main ob-

jective could really be obtainable. Every time a lead was received by PdT International it was discovered that the price that would lead to profitability for the grower was a price that far exceeded the competitiveness identified in the marketplace.

Shipping costs between the Upper Minnesota Valley Region and the Pacific Rim began to increase at a most inopportune time. It was determined early on that bulk shipping of specialty commodities was not desirable, consequently, the focus was towards containerized shipment from the grower's location. Although containerized shipment guarantees the integrity of the product, it was soon discovered that the cost of positioning containers and the unfamiliarity of loading containers by local elevator operators and other storage facilities presented many obstacles for the marketing mechanism to overcome. However, when all is said and done the bottom line is still price. Unless PdT could be competitive, even though it was marketing quality, it would not be able to make a sale.

The pricing structure for specialty commodities is generally determined by an old law of economics based on what the market will bear. In order to present competitive prices in the market place, the marketing entity began to develop a strategy whereby growers would be consulted concerning their costs of production plus a fair rate of return on their investment. The marketing association identified a 10-15 method which, hopefully, would lead to profitability for the grower coupled with fair competitive market prices. Those associated with this project began an educational program which would hopefully lead to the realization on the part of the producers that specialty crop marketing was not meant to pay off the entire farm debt in one or two sales. The project has been set forth to the grower as a long-term means of developing a market base that would stabilize the ups and downs associated with more traditional commodities.

A program of specialty crop production was undertaken in the summer of 1986. Selected growers were identified to participate in a prototype crop production program underwritten by the State of Minnesota's Department of Agriculture. Although prototype production might indicate that experimental crop production was the major objective rather, specialty crops with a somewhat proven track record were identified. These specialty crops included certain edible beans, triticale, buckwheat, popcorn, lupines, and potatoes. All of the aforementioned commodities were those identified to the trade mission members in the visits to the East Asian market place.

PdT International along with the assistance of the Commission continued to make its contacts both in the U.S. as well as the countries of Japan and Taiwan. These contacts even led to the representatives of PdT International being invited to the reception being given for the Taiwanese Procurement Mission that visited St. Paul, Minnesota in September, 1986. Although this Procurement Mission was purchasing traditional agricultural commodities such as soybeans, wheat and corn, the representatives of PdT thought it a good idea to renew acquaintances with several members of the Procurement Mission whom they had met earlier on their visit to Taiwan. One painful lesson learned by PdT while observing the

opening of the bids of corn purchases was the extremely competitive nature of the bidders but even more painfully the extremely low price paid for the commodity in question. Even though the price of the commodity was almost 30% below the going rate at the local elevator, the Taiwanese indicated that they were somewhat dismayed by the fact that U.S. agricultural products were much higher priced than those provided by other agricultural producing countries. This statement on the part of representatives of the Procurement Mission led PdT and those associated with this project to a conclusion that the original intention of sticking to specialty crop marketing made even more sense. It was reasoned that unless the United States is willing to dump traditional commodities on the market place, in essence freezing out our competitors, there seemed to be no hope for the future as far as producing non-subsidized traditional crops in the market place at an affordable or competitive price.

The marketing efforts continued and it was determined that a subsequent visit back to the Japanese market place was in order. This decision was partially made on the belief that by November, 1986, a sample sale of a commodity would be in the offering. Indeed, when the return visit plans were being made a Japanese trading company indicated to PdT that a quantity of buckwheat was needed. Negotiations began in earnest in mid-October and by early November, contracts were ready to be signed. Elation over this first sale of a non-traditional commodity to a Japanese customer was tempered by the fact that the profits realized from this transaction were nil. Work was begun to complete the sale based on the assumption and hope that the satisfied Japanese customer would be back for even larger quantities of this particular commodity. Quality product delivered to the Japanese market place is very important to Japanese millers. The North American buckwheat is often blended with domestically produced buckwheat. The Japanese believe that buckwheat raised in Japan is second to none. They therefore take exception to receiving poor quality buckwheat from North America and China which leads in their estimation to degradation of the end product through the milling process.

Although this project is in its very early stages, there is optimism that local growers working together can indeed find their niche in the market place. It is realized by all concerned that one minor sale involving a single agricultural commodity does not turn around the rural economy. However, it is the hope of all concerned that Minnesota farmers from this one small corner of the state can indeed show the way to others interested in participating in the risks associated with marketing and profitability. This project is not for all farmers, but then again it was never meant to be. We begin to look to the future with an aggressiveness fostered by a sense of mission.

RURAL DEVELOPMENT: A SUMMARY OF STATE APPROACHES
 (By Ilene Grossman, Director of Corporate Relations and Development, Midwest
 Region, Council of State Governments)

The Council of State Governments - CENTER FOR AGRICULTURE AND RURAL DEVELOPMENT
 TABLE 1 Agencies that have responded to State Rural Development Survey

	GOVERNOR	ECONOMIC DEVELOPMENT	AGRICULTURE	COMMUNITY AFFAIRS	OTHER
ALABAMA		+			
ALASKA	+	+	+	+	
ARIZONA		+			
ARKANSAS		+			
CALIFORNIA		+		+	
COLORADO					
CONNECTICUT			+		
DELAWARE		+			
FLORIDA					Housing Authority
GEORGIA		+		+	
HAWAII	+		+		
IDAHO	+				Dept of Employ.
ILLINOIS	+	+			
INDIANA					
IOWA		+	+		
KANSAS		+			
KENTUCKY	+	+			
LOUISIANA	+			+	
MAINE				+	
MARYLAND					
MASSACHUSETTS					
MICHIGAN	+	+	+		
MINNESOTA	+	+			
MISSISSIPPI	+				
MISSOURI					
MONTANA	+	++		+	
NEBRASKA		+	+		Greater NE Job Training program
NEVADA	+	+			State Council Arts
NEW HAMPSHIRE		+	+		
NEW JERSEY		+	+		
NEW MEXICO		+			
NEW YORK					
NORTH CAROLINA		+			
NORTH DAKOTA		+	+		
OHIO		+			
OKLAHOMA					
OREGON		+			
PENNSYLVANIA		+		+	
RHODE ISLAND		+			
SOUTH CAROLINA	+				
SOUTH DAKOTA			+		
TENNESSEE		++	+	+	
TEXAS		+			
UTAH		++			
VERMONT		+	+	+	
VIRGINIA		+			
WASHINGTON		+		+	VA Tech.
WEST VIRGINIA	++			+	
WISCONSIN		+	+		
WYOMING		+			

LEGEND: + = agency responded
 ++ = one and the same agency.

Based on information received as of 11-18-86

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 (175)

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THE COUNCIL OF STATE GOVERNMENTS - Center for Agriculture and Rural Development

TABLE 2 STATE RURAL DEVELOPMENT PROGRAMS

STATE	TRANSITIONAL TOOLS				ASSIGNMENT-RELATED DEVELOPMENT							
	A-1 Farmer & Agribusiness Financial Programs	A-2 Retraining, Counseling Etc.	A-3 Assessing Competitive Advantages	A-4 Ag & Rural Development Commissions, Agencies Etc.	A-5 OTHER	B-1 Marketing Ag/Rural Products	B-2 Attracting Value-Added Bus.	B-3 Biotechnology & Technology Transfer	B-4 Agricultural Export Devel.	B-5 Beginning Farmer Program	B-6 Crop Diversification	B-7 OTHER
Alabama												
Alaska	*											
Arizona												
Arkansas												
California												
Colorado												
Connecticut												
Delaware												
Florida												
Georgia												
Hawaii	*		*	*	*	*	*	*	*	*	*	*
Idaho	*											
Illinois	**	**	**			*			*	*		
Indiana												
Iowa	**	*	*	*	*	*	*	*	*	*	*	*
Kansas	*	*	*	*	*	*	*	*	*	*	*	*
Kentucky	*	*	*	*	*	*	*	*	*	*	*	*
Louisiana	*	*	*	*	*	*	*	*	*	*	*	*
Maine												
Maryland												
Massachusetts												
Michigan	*	*	*	*	*	*	*	*	*	*	*	*
Minnesota	*	*	*	*	*	*	*	*	*	*	*	*
Mississippi						*	*	*	*	*	*	*
Missouri												
Montana	**	*	**	*	*	*	*	*	*	**	*	*
Nebraska	*	**	*	*	*	*	**	*	*	*	*	*
Nevada												
New Hampshire												
New Jersey	*	*	*	*	*	*	*	*	*	*	*	*
New Mexico						*	*	**	*	*	*	*
New York												
North Carolina												
North Dakota	*	*	*	*	*	*	*	*	*	*	*	*
Ohio	**	*	*	*	*	*	*	*	*	*	*	*
Oklahoma												
Oregon			*	*	*	*	*	*	*	*	*	*
Pennsylvania												
Rhode Island												
South Carolina	*	*	*	*	*	*	*	*	*	*	*	*
South Dakota	*	**	*	*	*	*	*	*	*	*	*	*
Tennessee	*	*	*	*	*	*	*	*	*	*	*	*
Texas												
Utah			*	*	*	*	*	*	*	*	*	*
Vermont			*	*	*	*	*	*	*	*	*	*
Virginia	*	*	*	*	*	**	*	*	*	*	*	*
Washington	*	*	*	*	*	*	*	*	*	*	*	*
West Virginia												
Wisconsin	**	*	*	**	**	*	*	*	*	*	*	*
Wyoming	*	*	*	*	*	*	*	*	*	*	*	*

LEGEND: * = Program exists in state
 * = State provided information on program
 ** = State provided information on (2) or more programs

AS OF 12/1/88

Based on information received as of 11-18-88

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THE COUNCIL OF STATE GOVERNMENTS - Center for Agriculture and Rural Development

TABLE 2 - CONTINUED

STATE	C-1 Economic Development, Comprehensive	C-2 Marketing and Export	C-3 Entrepreneurship, Business Incubators, Etc.	C-4 Financial Assistance	C-5 Job Creation/Training	C-6 Technology Transfer	C-7 Tourism	C-8 Rural Enterprise Zones	C-9 Infrastructure	C-10 Land Use	C-11 Tax Incentives for Private Investments	C-12 Retention & Expansion of Existing Business	C-13 Small Business Assistance	C-14 Location of New Industry	C-15 Military Base Closing	C-16 Culture and Arts	C-17 Parks and Recreation	C-18 Housing	C-19 Quality of Life	C-20 OTHER
Alabama																				
Alaska			*								*	*	*	*	*	*	*	*	*	*
Arizona				*							*	*	*	*	*	*	*	*	*	*
Arkansas								*												
California				*				*												
Colorado																				
Connecticut																				
Delaware	*		*																	*
Florida																				
Georgia																				*
Hawaii							*	*	*	*							*	*	*	*
Idaho								*												*
Illinois	**	**	*		**	*	**	*	**	*	**	*	**	**	**		**	*	*	*
Indiana																			*	*
Iowa	**		**		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Kansas	**		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Kentucky	**		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Louisiana			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Maine																				
Maryland																				
Massachusetts																				
Michigan	*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Minnesota			*	**	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Mississippi	**		**	*	*	*	*	*	*	*	**	**	**	**	**	**	**	**	**	**
Missouri					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Montana	*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Nebraska																				
Nevada			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
New Hampshire					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
New Jersey			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
New Mexico	*		*	*	**	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
New York																				
North Carolina																				
North Dakota			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Ohio																				*
Oklahoma																				
Oregon			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Pennsylvania	**	**	*	**	*	*	*	**	*	*	*	*	*	*	*	*	*	*	*	*
Rhode Island					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
South Carolina	*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
South Dakota	*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Tennessee			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Texas	*		**	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Utah			*	*	**	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Vermont	*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Virginia	**		*	*	**	*	*	**	*	*	*	*	*	*	*	*	*	*	*	*
Washington			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
West Virginia			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Wisconsin			*	*	*	*	*	**	*	*	*	*	*	*	*	*	*	*	*	*
Wyoming			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

LEGEND: ** Program exists in State
 * State provided information on program
 ** State provided information on (2) or more programs

Based on information received as of 11-18-85

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TABLE 3

STATE RURAL DEVELOPMENT SURVEY - Most Important Programs

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
TRANSITIONAL TOOLS																					
A-1 Farmer & Agribusiness Financial Programs																					
A-2 Retraining, Counseling, Etc.																					
A-3 Assessing Competitive Advantages																					
A-4 Ag & Rural Development Commissions, Agencies Etc.																					
A-5 OTHER																					
AGRICULTURE-RELATED DEVELOPMENT																					
B-1 Marketing Ag/Rural Products																					
B-2 Attracting Value-Added Business																					
B-3 Biotechnology & Technology Transfer																					
B-4 Agricultural Export Development																					
B-5 Beginning Farmer Program																					
B-6 Crop Diversification																					
B-7 OTHER																					
NON-FARM RURAL DEVELOPMENT																					
C-1 Economic Development, Comprehensive																					
C-2 Marketing and Export																					
C-3 Entrepreneurship, Business Incubators Etc.																					
C-4 Financial Assistance																					
C-5 Job Creation/Training																					
C-6 Technology Transfer																					
C-7 Tourism																					
C-8 Rural Enterprise Zones																					
C-9 Infrastructure																					
C-10 Land Use																					
C-11 Tax Incentives for Private Investments																					
C-12 Retention & Expansion of Exist. Business																					
C-13 Small Business Assistance																					
C-14 Location of New Industry																					
C-15 Plant/Military Base Closing																					
C-16 Culture and Arts																					
C-17 Parks and Recreation																					
C-18 Housing																					
C-19 Quality of Life																					
C-20 OTHER																					
As of 11-18-86																					
20 States Voting To Date.																					

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ACCESS TO HEALTH CARE IN RURAL AMERICA

(By Kevin M. Fickenscher, M.D.)*

I would like to express my sincere thank you to Senator Durenberger for initiating the conference on transitions in rural America. The transitions are substantial and involve multiple concerns such as the future of the family farm, the impact of deregulation on services in rural America and other topics which have been discussed at this conference. In particular, I believe it is essential that we consider the multiple issues affecting the viability of health care services in rural America. A recognition of the interrelatedness of health services with other aspects of rural America is essential as policies are considered and debated.

Within the health arena there are several issues of general concern which are generating substantial debate in the nation. These issues include the continuing growth in the cost of health care, the aging of our population, which represent a disproportionate percentage of the population in rural areas, increasing problems with levels of uncompensated care, the viability of certain health institutions such as teaching hospitals and rural hospitals, and other concerns. Although there are multiple areas we could address as part of our topic, "Health Care: The Problem of Access in Rural America," I would like to restrict my remarks today to the concern of health manpower. Within the context of the health manpower question there are two areas which I believe require our attention. First, the question of policy related to physician supply and its affect on access to services in rural America must be considered. Second, and perhaps more importantly, are the potential problems on the horizon related to nursing manpower supplies for rural areas.

It is evident that increasing pressures to reduce federal spending coupled with the attention in recent years on the recognition of a physician surplus have focused greater attention on the need for support of medical education programs. Although much debate has been engendered, little consensus has emerged. As with many public policy issues, the answer to the question "Does a physician surplus exist and are the needs of the public being met?" depends largely on one's interests. Of specific concern today is the question of whether or not an adequate supply of physician manpower is available to rural America.

The federal government with its heavy debt and an Administration which is attempting to reduce federal responsibilities argues that a surplus of physicians, *de facto*, exists. As a consequence, the Administration supports efforts to reduce tax-financed support of

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medical education, decreased federal obligations for programs such as the National Health Service Corps; and, reduced support of federal loan programs for medical students. The American Medical Association has been quite cautious during the course of these debates and only recently supported a report recognizing that many parts of the country have a "surplus of physicians regardless of specialty." It should be noted that the impetus for the report emanated from urban areas and large metropolitan states.

Sixteen year ago, the Carnegie Commission on Higher Education declared in a report, "The most serious shortages of professional personnel in any occupation group in the United States are in health services." At that time there were 152 nonfederal physicians for every 100,000 population. In the ensuing years, Congress increased the federal investment in educating health professionals and, as a result, bolstered the total supply of providers in a spectacular fashion. By 1981, there were 199 physicians per 100,000; the Department of Health and Human Services projects that the number of physicians per 100,000 population will increase to 235 in 1990 and to 260 by the year 2000.

There is no question that federal health policy over the past two decades has been successful in alleviating the overall shortage of physicians which existed at the time a strategy of intervention was first developed. Of interest to rural America is whether or not the surplus of physicians has, in fact, diffused to areas which were previously underserved. Several studies have been conducted on the issue and conflicting results are evident. The most prominent of the studies has been the Rand study conducted by Schwartz and Newhouse. Their assessment of the diffusion of physicians to rural areas was that substantial migration of physicians both of subspecialty and primary care training has occurred over the decade of the 1970s. There has been, however, substantial debate on the results of their study. Rather than critique the study as part of this presentation, let me simply highlight two of the major problems: (1) there is some question of the applicability of the results due to the inherent bias of the study when 57 percent of the nation's non-metropolitan populations was excluded from the study; and, (2) the retirement of physicians from communities was not counted as a decrease in the supply of physicians. There are several other concerns but I believe it is sufficient to say that disagreement continues over the results of the study and the several efforts have been initiated to re-examine the results. In fact, a study specifically addressing the impact of diffusion on rural America is currently in progress and should be reported out in mid-1987.

Although I cannot offer you any new studies or data today to support my contention that problems continue to exist in rural America, I believe there are several persuasive arguments supporting the notion that the problem has not been resolved.

First, we need to recognize that the physician surplus is primarily in the subspecialty areas of medicine. As an example, the Graduate Medical Education National Advisory Council (GMENAC) Report projected that we would have doubled the number of needed pulmonologists and endocrinologists by the year 1990. It also predicted that the number of family physicians and general internal medicine physicians would be about even with need. In fact, these

projections appear to be relatively on target. The Department of Health and Human Services recently recalculated the data based on a different methodology than used in GMENAC and predicted a surplus of physicians that represented about 50% of the original estimate. The surplus in that restudy also replicated the excess number of specialty physicians.

The type of physician we are training, I believe is equally—if not more—important than the relative total number of physicians. Subspecialists in hematology or cardiology or gastroenterology are not well prepared to provide primary care services—especially in rural areas. As a result, the surplus of these types of physicians does not affect the supply of physicians available to rural America. One of the major concerns with this question is that with increasing calls for a decrease in federal support of medical education, the schools at greatest risk are the “primary care-oriented” medical schools that grew out of our national efforts to increase the supply of physicians. The important point on this issue is that as we begin the debate on cutbacks in medical education, we must guarantee that attention is given to the continuing need for primary care physicians. If we return to the pre-1970s approach to medical education, we will be reconvening this conference in another 15 years to discuss the impending shortage of physicians for rural America.

A second issue that will have a dramatic effect on the question of physician diffusion to rural areas is the growth of the prepaid health sector. Dr. Alvin R. Tarlov who served as Chairman of the GMENAC and is currently President of the Kaiser Foundation has referred to the “compartments of medicine in practice” as a factor that was not totally evaluated in GMENAC. The two “compartments” that were considered in the GMENAC report included the fee-for-service and government-employed physicians. However, the third compartment—prepaid health care through such programs as Health Maintenance Organizations (HMOs)—was not considered as part of the equation. I believe that this new category of practice by physicians will have a substantial impact on the eventual location and the practice patterns of physicians. We cannot simply apply prepaid physicians standards to rural populations in aggregate without considerations of time, distance and support service availability. To compare the projected physician to population need of a large urban area using prepaid services with the same population base spread over 50,000 square miles does not seem reasonable. Yet such an analysis recently occurred in the national medical literature.

As part of our program at The Center for Rural Health Services, Policy and Research of the University of North Dakota, we provide a variety of services for rural communities and health systems. One such service is physician recruitment and placement. Over the last 18 months we have noted a subtle and alarming trend among young graduates of primary care residency programs. Increasingly, these young physicians are being offered opportunities to stay in the city, on a salaried position with a prepaid health system. In effect, these physicians have become the desired commodity for the HMOs as they attempt to keep costs down and provide a range of services. General Internists and Family Physicians from a productivity standpoint can see more patients, handle more problems, and

are more versatile in different situations than their more specialty-oriented counterparts. As a result, the prepaid health systems are actively recruiting the very type of physician most needed for rural America. We recently had a young physician who was offered a substantial salary and a three year guarantee by a rural community and a one year guarantee and far less salary in Minneapolis. Needless to say, the young physician took the urban opportunity because of the call schedule and other factors despite the fact that the rural community in my estimation represented one of the best opportunities in rural North Dakota.

Another factor is the age of physicians in rural America. Within the specialty of family practice/general practice there is a disproportionate number of physicians who are in their late 50s and 60s and 30s. There are less physicians in the age cohort of 40 to mid 50s. If we examine the rural physicians, the older physicians represent a large percent of the practicing physicians. As a result, over the next decade when these older physicians enter an era of retirement, death and disability, there may possibly be an insufficient supply of younger family physicians taking their place.

Despite these problems, there are some positive signs on the horizon for rural health care. I am quite excited about the potential of new and evolving technologies on the practice of medicine. Specifically, the use of computers in medical practice and the rapid growth of outpatient laboratory capability make it possible to practice state of the art medicine in rural America. If we as a nation can continue to support programs which foster the education of primary care physicians, the needs of rural America will be met over the next decade. However, by listening solely to arguments on physician supply which reflect the status of urban America, we will not redress the continuing need for physician services in rural America. A student who grows up in Chicago, goes to medical school and residency in Chicago, subspecializes in oncology and marries a Chicago-born spouse will not likely make it to Ada, Minnesota.

Before summarizing, I would like to share with you a problem that will have important ramifications on the ability of rural health systems to deliver quality health care. Specifically, in the past several months representatives of the American Hospital Association Center for Small and Rural Hospitals and the National Rural Health Association have noted increasing concern among the members on a potential nurse shortage. The problem of nurse shortages has plagued us on an episodic basis over the past several decades. There appears to be a major problem on the horizon. The problem is especially alarming given recent changes which have occurred within the credentialing process of nurses.

The State of North Dakota was the first state in the nation to require that nurses receive a baccalaureate degree (i.e. four years of training) to practice nursing. No longer will the two year Associate degree and three year Diploma degree nurse be allowed to practice after a certain period of time. This change could have a substantial impact on the availability of nurses in rural areas. Baccalaureate nurses have not traditionally entered practice in rural areas. A recent review of nurses practicing in North Dakota conducted by the Center for Rural Health Services, Policy and Research

revealed that only 25% of the baccalaureate nurses practice in rural areas of the state. The statistic is particularly alarming when it is coupled with the fact that 45 of the 53 hospitals in the state are located in the rural areas. Clearly, there is a disproportionate maldistribution of baccalaureate nurses practicing in urban areas of the state.

A second factor in the nursing equation is that many nurses are specializing in areas of nursing that cannot be supported in rural areas. As an example, many young nurses—like their physician counterparts—are entering practice in such fields as coronary care nursing, obstetrical nursing, renal dialysis and other subspecialized fields. Nurses with this type of training are not well prepared and cannot practice in the “general or primary care” style of practice required in rural settings. In fact, only two rural nursing Masters level programs exist in the nation and very little emphasis has been placed on rural nursing by the educational programs offering undergraduate baccalaureate degrees. The change to baccalaureate degrees for licensure to practice nursing coupled with increasing subspecialization within the nursing profession will—I believe—have grave consequences for the delivery of health care in rural areas of our nation. These issues deserve the special attention of our policy makers in the coming months and years.

In sum, there appears to be continuing problems with maintaining an adequate supply of primary care physicians for rural America. Although a physician surplus is clearly present, the diffusion and availability of primary care physicians has not occurred. Continued efforts will be required to insure that an adequate supply of physicians is sustained for rural America. Finally, we must not neglect the question of nursing manpower. There are some initial concerns being expressed by administrators in the field that a short supply of nurses could occur in the next year or two. In particular, the problem is of concern due to the evolving changes in licensure requirements for nurses to practice. The change in these requirements will not doubt spread to other states since the goal of the baccalaureate level requirement for all registered nurses is a stated objective of the nurse professional organizations.

I would like to express my sincere appreciation to you for allowing me the opportunity to share perspectives with you on questions related to health manpower for rural areas. As you are aware, the National Rural Health Association is concerned that the “rural perspective” be considered in the debate on directions for our health care system. In particular, your continuing support and willingness to hear the rural health perspective is most appreciated.

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