

Economic Development Administration

Background and History

Regional development, particularly as it relates to business development and subsequent job creation in distressed areas, has been the focus of federal efforts for many years. The first federal agency charged with furthering regional economic development efforts was the Area Redevelopment Agency (ARA); its successor is the Economic Development Administration (EDA). Among the EDA's prime targets are traditional industrial regions experiencing the effects of technological change, degraded agricultural regions, and depleted mining locations. In order to maintain sufficient support in Congress, the criteria utilized by EDA in providing assistance have been broad. Given its limited resources, this encompassing locational mandate has presented a continual challenge for the agency.

EDA's emphasis on public works also has its basis in the policy experiments of the 1960s. At the agency's inception (as the ARA), the general consensus was that lack of available capital was the basic reason for uneven regional development and economic distress. The presumption was that distressed locations needed business capital to attract and retain private sector investment; the early programs under ARA emphasized the availability of capital. With passage of the Public Works Acceleration Act of 1962, communities successfully argued that a lack of basic infrastructure, not insufficient capital, was the problem. EDA's enduring emphasis on public works is thus founded on a key strategy: to make communities attractive for business development.

Debates about the reasons for economic distress and its appropriate remedy rest in part on defining distress and how distress is both manifested and distributed across the United States. Since EDA's inception, the character and distribution of economic distress has varied widely. Here, we provide information on the level, characteristics, and distribution of distress throughout the United States from 1960–1997. First, we present an analysis of the spatial distribution of economic distress based on EDA's 1998 criteria, which emphasize unemployment and income levels. Second, we look at the distribution of distress based on an index of economic health developed by Glasmeier and Fuellhart for the Appalachian Regional Commission (ARC).¹ Third, we consider the regional determinants of economic distress and evaluate whether and how these determinants have changed throughout the EDA's history.

An assessment of EDA's role in addressing economic distress requires careful specification of the nature and distribution of distress in the United States. Before turning to the examination, the legacy of ARA and particularly its criteria for designation of distressed areas are discussed below.

¹ A. Glasmeier and K. Fuellhart, *Building on Past Experience: Creation of a New Future for Distressed Counties* (Washington, D.C.: Appalachian Regional Commission, 1998).

THE ARA LEGACY

Many of EDA's organizational features cannot be understood outside the context of ARA, its predecessor agency. EDA's distressed area designation largely followed the criteria originally used by ARA. According to an early evaluation of the policy context of EDA, ARA "focused on creating jobs in depressed areas."²

The economic distress that led to the creation of ARA stemmed from the changing employment experiences of many U.S. regions. These experiences took several forms. First and foremost was the need to encourage full employment after the Depression and in light of the effects of demobilization after World War II. Next, places faced long-term severe unemployment as a result of technological changes that were rendering former commodity-based industrial economies obsolete, and thereby resulting in the loss of jobs. Another grave concern was that high unemployment would lead to a downward spiral that would prohibit communities from making effective recoveries from economic changes.

During the ARA years, more than 1,000 communities were identified as being eligible for government assistance according to criteria that included "high unemployment," "lagging areas," and "depressed communities." The specific criteria used to identify distressed areas consisted of income and unemployment characteristics combined with other attributes of local economies. Given the framework's basis in income and economy factors, the underlying rationale for ARA was that communities needed help making transitions from one economic state to another. Thus, ARA's programs provided public works and technical assistance to help communities "redevelop."³

Unfortunately, despite earnest attempts by ARA staff, several of the agency's limitations led to its demise. The problems were numerous and intertwined. Early on, ARA was criticized for overreach. More structurally, it also suffered from low funding and an inability to expend those funds rapidly enough and with sufficient oversight to meet with congressional approval. Additionally, several congressmen and representatives of organized labor argued that the program's design and intent aided and abetted the relocation of plants from one region to another.⁴ In a fatal implementation flaw, ARA was never given a proper administrative home and thus lacked the ability to develop organizational capacity. But perhaps most importantly, given the nature of the underlying problems, the program was insufficiently funded to have a significant impact. At its peak, funding levels provided, at most, \$352,000 (in current year, 1964, dollars) per eligible county—far less than the construction cost of most basic infrastructure projects. While it was recognized that the underlying problems addressed by ARA were real and persistent, Congress and the president agreed that ARA was not the right vehicle for the job. As

² Economic Development Administration, *The EDA Experience in the Evolution of Policy* (Washington, D.C.: U.S. Department of Commerce, 1974) 1.

³ In accordance with the Area Redevelopment Act (Public Law 87-27), in 1965 EDA designated "Redevelopment Areas," which included counties or clusters of counties, county equivalents, or Indian Reservations within the U.S. "5(a)" Redevelopment Areas were marked by high unemployment, while "5(b)" Redevelopment Areas were characterized by a range of unfavorable economic conditions.

⁴ S. Levitan, *Federal Aid to Depressed Areas* (Baltimore: Johns Hopkins University Press, 1974).

indicated in a 1973 evaluation of EDA, “the Area Redevelopment Administration was sacrificed for reasons of political expediency.”⁵

LESSONS FROM ARA AND THE EMERGENCE OF EDA

Lessons learned from ARA provided ample motivation to create EDA. Among the most important insights gained from the ARA experiment was that the problem for many high-unemployment locations was not capital shortages, but the need for basic infrastructure. During implementation of the Public Works Acceleration Act in 1962, it became evident that troubled communities lacked sufficient basic infrastructure, such as water, sewers, and commercial space, to attract and retain industry. Communities argued that these tangible prerequisite elements were needed to attract new investment—simply making low-interest loans available to firms was insufficient. Partly as a result of this recognition, EDA maintained many of the features of ARA but increased emphasis on infrastructure. An important holdover from ARA was the criteria EDA used to identify communities in economic distress.

Area Designation

The heart and soul of both ARA and later EDA was the generation of jobs, and the problem of “depressed” or “distressed” areas was defined as a lack of jobs. The original regional image of distress that justified ARA was job loss in industrial areas such as New England and parts of the Midwest and in the coal fields of Appalachia.

As a result, ARA’s designation criteria provided guidelines “only in relation to substantial and persistent unemployment.”⁶ Eligibility under ARA required that an area “have an unemployment rate of six percent or more for the most recent calendar year, for which statistics were available; ... and meet one of three conditions: (1) have experienced unemployment 50 percent above the national average for three of the preceding four calendar years; (2) have experienced unemployment 75 percent above the national average for two of the preceding three calendar years; or (3) have experienced unemployment 100 percent above the national average for one of the preceding two calendar years.”⁷ In addition, the Secretary of Commerce could designate redevelopment areas based on high numbers of low-income families.

In addition to the unemployment criteria applied by ARA, EDA was instructed to develop further criteria to identify distressed areas. Four additional characteristics were employed: (1) areas with mean family incomes not exceeding 40 percent of the national median; (2) Indian reservations manifesting the greatest degree of economic distress; (3) areas previously designated by ARA, subject to yearly review on the basis of EDA criteria; and (4) status as the one area that most nearly qualified for designation in states that otherwise had no designated areas. Places where economic change would likely lead to high unemployment also could be designated. This last provision improved upon ARA

⁵ Economic Development Administration, *The EDA Experience*, 4.

⁶ *Ibid.*, 8.

⁷ *Ibid.*

practice by providing the Secretary of Commerce with the flexibility to deal with emergency situations such as natural disasters or other unexpected sources of high unemployment.

Political Pressure and the Expansion of Area Coverage

Over the life of EDA, particularly in the early 1970s, the number of designated areas grew in response to both political and economic realities. One such designation was areas of short-term unemployment, which was added between 1965 and 1971. New legislative mandates also expanded the types of counties that could receive assistance. In 1970, 983 areas qualified for EDA assistance; by 1973, that number had nearly doubled, to 1,818. Forty percent of the newly qualifying areas entering EDA's ranks between 1970 and 1973 were localities experiencing short-term unemployment. Less than a decade after EDA's original passage, distressed urban areas were included in the agency's realm of responsibility under Title 1. By 1976, the full range of EDA programs was available to urban areas suffering from short-term, high unemployment. A final adjustment was made to the income-level criterion in 1971. Originally set at 40 percent of national median family income, this figure was increased to 50 percent, qualifying an additional 130 counties.⁸

Further complicating the meaning of designation was the fact that a moratorium passed in 1970 disallowed de-designation of a locality without prior consent. Once designated, a county remained a potential recipient of EDA assistance indefinitely. While EDA staff could and did restrict funding to counties that failed to demonstrate true need, nonetheless, from a congressional point of view, more than half of all U.S. counties qualified for assistance.

A final change in designation in the early 1970s further expanded the types of areas eligible for EDA support. Following the logic of the "growth center" concept, areas that were within an economic development district, but not within a redevelopment area, could receive support if the applicant could demonstrate that the redevelopment area would benefit from the project's funding.

THE GEOGRAPHY OF EDA

The geographic scope of EDA differed from that of ARA in several respects. Based on ARA experience, EDA was designed with three geographic scales in mind:

1. Regional commissions, dealing with economic problems on a multi-state basis;
2. Multi-county districts, "reflecting the belief that certain areas could not mount effective attacks on unemployment and low income on their own"; and
3. Growth centers within economic development districts.

⁸ The use of median family income proved problematic given it was calculated on a decennial basis whereas the data were needed on a timelier basis.

Growth centers were justified based on the notion that “the provision of jobs, income, and local services in growth centers would benefit not only these centers, but residents of the surrounding area as well.” Concentrating development resources in locations of existing economic activity also would stem migration by providing jobs within a reasonable commuting range. Finally, it was assumed that EDA’s actions would be more effective in reaching the “target population (i.e., the unemployed and underemployed residents of depressed areas) through investments in growth centers.”⁹

Geographic scale affects the designation of eligible places in two ways: development processes, and the statistical measurement of economic distress. The original concept of development is based on the belief that growth occurs in places of at least a certain minimum size. Thus, a redevelopment area could be larger or smaller than a county, depending on its core population. The critical threshold adopted by EDA—population base of 250,000 people per redevelopment area—was based on the belief that sufficient economies of scale would be present at this size to support a range of economic activities. Counties and metropolitan areas became redevelopment areas using this designation; growth centers could, but were not required to, be within a redevelopment area.

It was clear by the mid-1970s that the average size of many potential rural growth centers was significantly smaller than the original redevelopment area threshold size set by EDA. In 1976, the minimum size of redevelopment areas was reduced from 250,000 to 25,000 persons so that smaller places could qualify that might otherwise have been excluded or overlooked. The result was that 800 additional cities became eligible for assistance. In addition, under the old system small rural areas were combined into redevelopment areas of at least 250,000 persons. Whether the specific development problems of smaller areas were addressed within a large redevelopment area depended, in part, on the effectiveness of the planning process that accompanied receipt of EDA funds.

In the late 1970s, the size of redevelopment areas was revised once again, this time to include locations of 500,000 persons or more. The expansion of the eligible spatial unit was necessary to incorporate urban areas, a realm that became more important to EDA’s mandate through time.

REAUTHORIZATION OF EDA IN 1998 AND CLARIFICATION OF DISTRESS DESIGNATION

The reauthorization of EDA in 1998 stabilized the designation of distress and made more concrete and explicit the criteria used for designation. To be eligible for EDA funding, an area must demonstrate high unemployment, low income, or special circumstances that threaten to cause local economic distress. According to EDA regulations, an area is eligible for a project grant under Sections 305 (Public Works) and 308 (Economic Adjustment) if it has one of the following:

- “An **unemployment rate** that is, for the most recent 24-month period for which data are available, at least one percent greater than the national average unemployment rate. For example, if the national unemployment rate is 6

⁹ Economic Development Administration, *The EDA Experience*, 6.

percent, an area is eligible under this provision if it has an unemployment rate of 7 percent.”

- “**Per capita income** that is, for the most recent period for which data are available, 80 percent or less of the national average per capita income.”
- “A **special need**, as determined by EDA, arising from actual or threatened severe unemployment or economic adjustment problems resulting from severe short-term or long-term changes in economic conditions. These include outmigration or population loss, natural disaster, and military base closure.”¹⁰

EDA’S ELIGIBILITY CRITERIA: A MAP OF ECONOMIC DISTRESS

The histories of ARA and EDA provide background for the statistical analysis of economic distress in the United States. This analysis has two parts. In the first section, we provide a broad view of distress using the criteria legislated in the 1998 EDA Reauthorization Act (hereafter the 1998 Act). The 1998 criteria differ in specifics but are identical in spirit to the criteria originally specified in 1965.

Following the review, we then apply an index of economic health based on income, unemployment, labor force participation, and transfer payments.¹¹ The incorporation of transfer payments and labor force participation rates supplements EDA’s narrower emphasis on income and unemployment and provides finer detail and greater specificity regarding conditions of economic distress over time. Further, the index facilitates annual comparisons of economic health among and across localities by providing a continuous score for each county over time. By way of contrast, EDA’s designation method has only two alternatives: economically distressed or not distressed.

Designation of Economic Distress Based on EDA Criteria

First, we examine the number and distribution of counties that qualify as economically distressed based on EDA’s 1998 criteria: an unemployment rate of one percentage point or more above the national level or median income less than or equal to 80 percent of the national median, for the years 1960, 1970, 1980, and 1990.

The resulting data can be used to identify change in the distribution of distress over time based on EDA criteria. Specifically, then, we can calculate:

- The number of counties that qualify for EDA funds in both 1960 and 1990;

¹⁰ *Public Works and Economic Development Act and the Appalachian Regional Development Reform Act of 1998 (P.L. 105-393).*

¹¹ The analysis does not include counties or county equivalents in Alaska and Hawaii. We did not include Alaska due to the significant number of boundary changes that occurred over the study period, and we excluded Hawaii due to the lack of data for the early years. This allows us to compare over time and it also allows us to compare the EDA definition with our index for the same years.

- The number of counties that qualify for EDA funds in 1960 but not in 1990;
- The number of counties that did not qualify for EDA funds in 1960 but qualified in 1990.

This analysis yields the following county groups:

- Qualified in 1960 and 1990: 1,754 (80.1%)
- Qualified in 1960 but not in 1990: 437 (19.9%)
- Not qualified in 1960 but qualified in 1990: 290 (33.0%)

The pattern of economic distress based on EDA criteria is enduring—1,754 counties (80%) that qualified as economically distressed in 1960 were still distressed in 1990. At the same time, 437 (20%) of the counties that qualified in 1960 had moved out of distressed status by 1990. However, 290 counties (33%) that were not economically distressed according to EDA criteria in 1960 became so by 1990. These results suggest that, based on EDA criteria, few counties left the economic distress category over the 1960–1990 period. By contrast, one third of the counties that were doing relatively well in 1960 had entered the distressed category by 1990.

A RETROSPECTIVE LOOK AT EDA DESIGNATION

While some movement has occurred over time among counties that qualified for EDA support, nonetheless a core of counties consistently qualified as distressed over the 30-year period.

Urban and Rural Trends

At its inception, EDA was a predominantly rural-focused agency; it has accepted urban responsibilities over time. According to the Beale county-level urban-rural continuum (which designates counties based on population size and the degree of urban population concentration), the majority of counties qualifying for EDA funding in 1960 were rural. By 1990, nearly 90 percent of those counties were still rural. Looking at urban counties, 126 qualified for EDA program funds in 1960; by 1990, 323 qualified for program support. Naturally, some of the counties that now qualify for EDA assistance moved from rural to metropolitan status over the study period, so the increase does not necessarily indicate a rise in urban economic distress. It may be that formerly rural areas have become urban and remained economically distressed over the study period. Thus, although new urban counties have qualified for EDA assistance, EDA's target area remains predominately rural in nature.

Counties with Higher Than Average Unemployment Rates and Lower Than Average Incomes Over Time

Another way to examine changes in economic distress is to compare the number of counties qualifying for assistance to the total number of counties in a state over time. In

doing so, we see the circumstances of counties at the beginning of the period and can track the experience of individual counties within states through time. Table 1 exhibits the percentage of counties in each state that qualified as distressed in 1960 and in 1990. Table 2 shows the percentage of counties by state that changed their ranking between 1960 and 1990.

In 1960, the top ten states with at least 92 percent of their respective counties qualifying for EDA status were all located in the South (Table 1), matching the historic distribution of economic distress in the United States—the South is consistently considered the most economically distressed region. By 1990, the rank order of distressed states and regions had changed dramatically. While southern states such as Mississippi, Louisiana, Alabama, and West Virginia still had a majority of their counties designated as distressed, new state and regional entrants were noticeable: Utah, Missouri, Arkansas, Michigan, and Idaho had more than 86 percent of their counties qualifying for distressed status based on EDA's 1998 criteria.

Another indicator of state-level change in economic well-being is the percent of a state's counties that, qualifying for EDA funding in 1960, then moved out of distressed status by 1990 (Tables 1 and 2). Of the states with the greatest decreases in distress as a percent of each state's total counties, only four were in the South: Maryland, Virginia, North Carolina, and South Carolina. The Upper Midwest and Great Plains were also well represented in this group of states. Reasons for this development differ by region. In the Great Plains, population out-migration, temporary stabilization of the agricultural sector, and growth in technological industries reduced the number of qualifying counties. In the South, post-World War II industrialization, in conjunction with targeted state-level investments and the consolidation of defense-related activities in the Upper South, helped lower the region's level of economic distress.

States with counties entering the distressed category for the first time stand in sharp contrast with the previous group. Sixteen states saw an increase in the number of such counties, based on 1998 EDA designation criteria (Table 2). Seven of the new entrants were in the Midwest and eight were in the West. Only two states in the South, Florida and Texas, joined the ranks. Western states entering the distressed category were a more mixed group in terms of population size and economic base.

Changing county fortunes by state suggest that the nature of economic distress is changing. While the South continues to experience high rural economic distress, newly distressed entrants from the West are experiencing increased economic disparity as a result of the dwindling of their traditional natural resource based economies. Poverty in that region stems from restructuring and job loss in traditional industries. Wealthy second-home owners find themselves the object of local suspicion as long-time residents struggle to make ends meet amid rising land and housing prices and diminishing economic opportunities. Growing distress in the Upper Midwest reflects the restructuring of natural resource and agricultural economies. Population is being drawn to urban centers where more and higher paying jobs are available.

Table 1.
Rank Order of States by Percent of Counties Meeting 1998 EDA Eligibility Criteria
in 1960 and in 1990

1960		1990	
STATE	Percent	STATE	Percent
MISSISSIPPI	99	MISSISSIPPI	96
ARKANSAS	99	ARKANSAS	96
SOUTH CAROLINA	98	UTAH	93
ALABAMA	96	LOUISIANA	92
WEST VIRGINIA	95	ALABAMA	91
GEORGIA	94	WEST VIRGINIA	91
LOUISIANA	94	MISSOURI	89
TENNESSEE	94	KENTUCKY	88
KENTUCKY	93	MICHIGAN	87
NORTH CAROLINA	92	IDAHO	86
NORTH DAKOTA	91	ARIZONA	86
MISSOURI	83	NEW MEXICO	84
MINNESOTA	83	GEORGIA	83
SOUTH DAKOTA	82	TENNESSEE	82
VIRGINIA	82	OKLAHOMA	78
NEW MEXICO	75	SOUTH CAROLINA	76
UTAH	72	MONTANA	75
NEBRASKA	71	OREGON	72
MICHIGAN	70	FLORIDA	70
WASHINGTON	69	TEXAS	69
CALIFORNIA	69	ILLINOIS	69
MAINE	69	NORTH CAROLINA	68
TEXAS	67	NORTH DAKOTA	68
MONTANA	66	WASHINGTON	67
IDAHO	66	OHIO	64
FLORIDA	66	WISCONSIN	63
OKLAHOMA	65	CALIFORNIA	59
IOWA	65	SOUTH DAKOTA	58
PENNSYLVANIA	64	VIRGINIA	57
WISCONSIN	63	INDIANA	53
MARYLAND	58	PENNSYLVANIA	51
VERMONT	57	MINNESOTA	49
OREGON	56	COLORADO	46
NEW YORK	55	MAINE	44
ARIZONA	50	IOWA	40
ILLINOIS	47	NEW YORK	40
OHIO	44	VERMONT	36
KANSAS	43	WYOMING	35
NEVADA	41	KANSAS	33
COLORADO	38	MARYLAND	33
INDIANA	38	NEBRASKA	29
WYOMING	30	NEW JERSEY	14
NEW JERSEY	14	NEVADA	12
CONNECTICUT	13	MASSACHUSETTS	7
NEW HAMPSHIRE	10	CONNECTICUT	0
MASSACHUSETTS	7	D.C.	0
D.C.	0	DELAWARE	0
DELAWARE	0	NEW HAMPSHIRE	0
RHODE ISLAND	0	RHODE ISLAND	0
U.S. TOTAL	71	U.S. TOTAL	67

Source: Calculated from Bureau of Labor Statistics; Bureau of Economic Analysis.

Table 2.
Rank Order of States by Percent Change in Number of Counties Meeting 1998 Eligibility Criteria,
1960– 1990

STATE	Percent Change 1960 - 1990
NEBRASKA	-41.9
MINNESOTA	-33.3
NEVADA	-29.4
MARYLAND	-25.0
MAINE	-25.0
VIRGINIA	-24.5
IOWA	-24.2
SOUTH DAKOTA	-24.2
NORTH CAROLINA	-24.0
NORTH DAKOTA	-22.6
SOUTH CAROLINA	-21.7
VERMONT	-21.4
NEW YORK	-14.5
PENNSYLVANIA	-13.4
CONNECTICUT	-12.5
TENNESSEE	-11.6
GEORGIA	-11.3
CALIFORNIA	-10.3
NEW HAMPSHIRE	-10.0
KANSAS	-9.5
KENTUCKY	-5.0
ALABAMA	-4.5
WEST VIRGINIA	-3.6
ARKANSAS	-2.7
WASHINGTON	-2.56
MISSISSIPPI	-2.4
LOUISIANA	-1.6
D.C.	0
DELAWARE	0
MASSACHUSETTS	0
NEW JERSEY	0
RHODE ISLAND	0
WISCONSIN	0
TEXAS	2.0
WYOMING	4.4
FLORIDA	4.5
MISSOURI	5.2
COLORADO	7.9
MONTANA	8.9
NEW MEXICO	9.4
OKLAHOMA	13.0
INDIANA	15.2
OREGON	16.7
MICHIGAN	16.9
OHIO	19.3
IDAHO	20.5
UTAH	20.7
ILLINOIS	21.6
ARIZONA	35.7
U.S. TOTAL	4.8

Source: Calculated from Bureau of Labor Statistics; Bureau of Economic Analysis.

EDA Eligibility Defined By Income Level

Other reasons for economic distress could be high unemployment, low income, and job availability. A review of the 1998 EDA criteria on the basis of income reveals that unemployment adds little to the measure: between 1960 and 1990, approximately 90 percent of the counties qualify under the per-capita income criterion alone. Given that the average difference between urban and rural incomes is approximately 20 percent, these results are not surprising. Locations that qualify on the basis of unemployment are more likely to be urban areas, whereas rural areas qualify based on income.

AN ECONOMIC HEALTH INDEX: AN ALTERNATIVE MAP OF ECONOMIC DISTRESS

An index of economic distress was developed as an alternative measure of distress for the Appalachian Regional Commission (ARC),¹² and subsequently extended to include all counties in the nation for the period from 1960–1997. The additional factors were identified in discussions of economic distress dating back to the 1960s. In 1972, for example, ARC demographer Jerome Pickard constructed four indexes: poverty-population; low educational status; labor force participation and unemployment; and substandard housing. He then combined these factors into an additive index, rank-ordered the counties in the ARC region, and found that the index effectively captured the significant distinction between areas of severe economic distress and areas in transition.

Our alternative index draws, in part, on traditional measures of economic health used by other federal agencies, including EDA and ARC. It is composed of four individual indexes: a per-capita market income index, which compares a county's income level to the national level ($PCMI_{idx}$); an unemployment rate index, which compares the county-level unemployment rate to the national unemployment rate (URT_{idx}); a labor force to total population ratio index ($LFPOP_{idx}$); and a per-capita transfer payments to per-capita market income ratio index (TFP_{idx}). These indices were summed to arrive at an additive Economic Health Index (EHI). The use of these four sub-indices was designed to shed light on the quality of economic health. The configuration allows us to express the degree to which the experience of individual counties deviates from national norms.

The index also contains some significant additions. The inclusion of measures of transfer payments and labor force participation is designed to assess the extent to which the population depends on external sources of unearned income (e.g., transfer payments) and the share of the population that depends on the labor of others.

Evaluation of the Index

The strength of EHI is that it not only allows annual analysis of a county's economic condition but also permits an examination of distress that had been obscured by EDA's categorical designation. The EHI evaluates each county relative to all others, and tracks

¹² A. Glasmeier and K. Fuellhart, *Building on Past Experience: Creation of a New Future for Distressed Counties* (Washington, D.C.: Appalachian Regional Commission, 1998).

changes in county scores over time. At the same time, the Index allows us to examine the condition of counties on an annual basis. Its intent is to assist policy makers in ranking counties based on the most current and accurate data available.

Next, we use EHI to analyze the spatial and temporal patterns of distressed status in the United States from 1960 to 1997—the period of operation for ARA and EDA. A high index value indicates poor economic health, so counties at or above the national average in economic health will receive a lower score. Looking closely at the county scores, we see that a large number of counties received an index score of 120 or less. These counties reflect the national average in economic health and do not appear to experience volatility over time. In contrast, there were natural breaks between counties that scored between 100 and 149, 150 and 199, and 200 and above. Based on these natural breaks, we group the counties as follows:

Category 1	Counties scoring below 100	Very good economic health
Category 2	Counties scoring 100 to 149	Good economic health
Category 3	Counties scoring 150 to 199	Poor economic health
Category 4	Counties scoring 200 and above	Very poor economic health

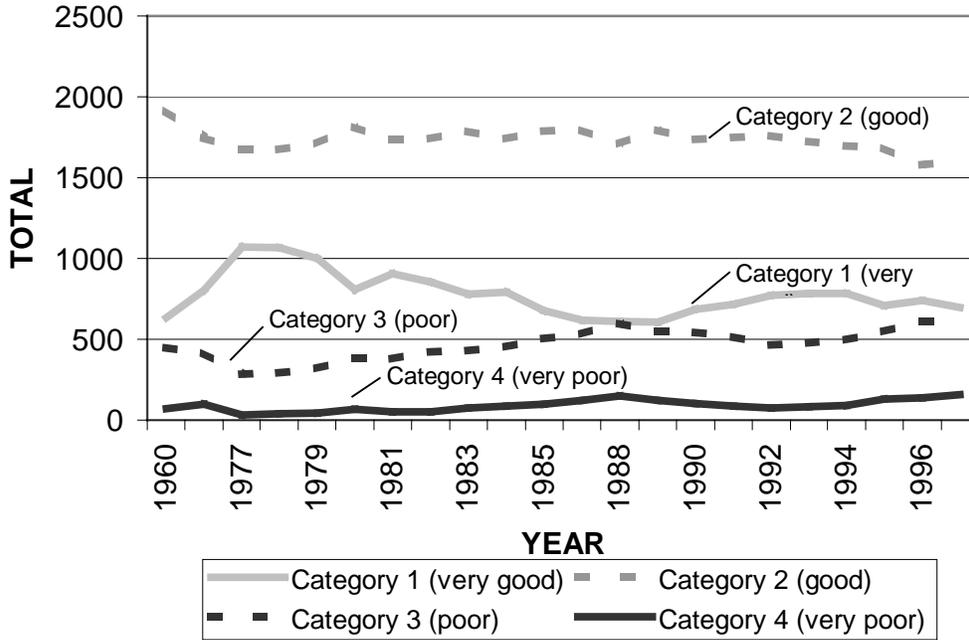
Counties in categories 1 and 2 have good or very good economic health, and counties in categories 3 and 4 have poor or very poor economic health.

An Overview of the Index

Figure 1 traces the number of counties in each index category over time. Although the degree of convergence and divergence varies over time, a long-term trajectory is evident in the increasing number of counties with poor or very poor economic health. The number of counties in very good economic health (category 1) peaked in 1977 and experienced a subsequent decline over the 1977–1997 period. Similarly, the number of counties with very poor economic health (category 4) hit a low point in 1977 and then climbed steadily in number, reaching a peak of 159 in 1997. A similar pattern is evident for counties in poor economic health (category 3). The number of category 3 counties increased by 330, from their low point of 285 in 1977 to 615 in 1997.

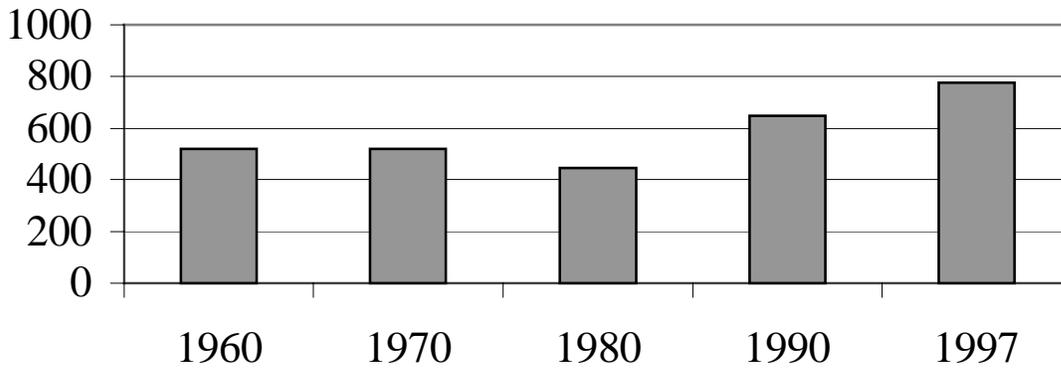
These data suggest that county economic health has been declining gradually but steadily over time (Figure 2). The most evident change is the increase in the number of counties with poor or very poor economic health (categories 3 and 4). In 1960, 518 counties fell into categories 3 or 4. The number stayed the same in 1970, declined to 445 in 1980, and then rose again to 647 in 1990, reaching 774 by 1997. Although volatility is evident, the number of counties experiencing high economic distress increased through time.

Figure 1. Economic Health Index for Counties, 1960-1997



Source: Calculations by the authors.

Figure 2. Total Number of Counties Ranking Poor or Very Poor (Categories 3 or 4) on the Economic Health Index, 1960-1997



While the number of counties with poor economic health decreased in number during the first half of the 1960–1997 period, new entrants into category 4 out-numbered them almost two to one. The total number of distressed counties reached a low point in the mid-1970s, when federal expenditures for social programs and public employment were at a post-World War II high. Following this general improvement in economic health between 1970 and 1977, conditions appeared to worsen throughout the early 1980s. The year 1988 appears to be one of particular hardship as the number of distressed counties

increased significantly over the 1984–1988 period. Another period of improvement occurred in the late 1980s and continued into the early 1990s but conditions worsened again by the mid-1990s.

COMPARING EDA DESIGNATION CRITERIA WITH THE ECONOMIC HEALTH INDEX

The number of counties designated as distressed in EHI is smaller than that designated on the basis of EDA criteria. Counties scoring 3 or 4 on EHI (poor or very poor economic health) form a considerably smaller group than EDA-designated counties. For example, in 1960, 2,191 counties qualified for EDA assistance based on the 1998 criteria but only 518 counties were in categories 3 or 4 on the Index. Further, approximately three fourths of the counties that qualified for EDA funds in 1960 would have been rated in good or very good economic health (category 1 or 2) according to EHI. Fully 104 counties rated in category 1 in 1960 (placing them above the national average in economic health) would have qualified for EDA funds based on the 1998 criteria.

Movement Into and Out of Distress

The EHI reveals that conditions in America's primarily rural counties deteriorated during the study period. First, 383 counties remained distressed between 1960 and 1997. These counties were concentrated in Appalachia and the Mississippi Delta. Further, although 161 counties moved out of categories 3 and 4 from 1960 to 1990, 290 entered these categories over the same time period. This trend continued between 1990 and 1997: 96 counties moved out of categories 3 and 4 but more than twice that number (223) moved in. Those entering these categories were scattered across the nation but there was an obvious improvement in economic health in counties in the southern United States, reflecting the post-World War II growth of manufacturing in the region. Nonetheless, only 145 counties moved out of categories 3 and 4 over the entire 1960–1997 period, while 401 counties moved into those categories.

The Geography of Economic Health

The geographic distribution of county economic health reveals that counties in poor economic health in both 1960 and 1997 are clustered in Appalachia, the Mississippi Delta, Oklahoma, the U.S.-Mexico border, the Southwest, the Upper Peninsula of Michigan, and the plains region of Montana.

In addition, the spatial distribution of counties that were distressed in 1960 but not in 1990 appears to be relatively random. The exception is a slightly higher frequency of counties leaving distress in some parts of the South. However, the South had a larger absolute number of counties in distress in 1960 than any other region. Moreover, the South appears to be the region with the largest number of new entrants that were not distressed in 1960 but that became distressed in 1990.

Counties that entered the distressed category were located in the border region with Mexico, the southwestern Indian reservations, southeastern Ohio, northern Michigan, and

the northern timber and agricultural counties of California. Overall, a more concentrated pattern of counties entered the distressed category in 1990 compared with 1960, suggesting geographic consolidation of new entrants over the study period.

ACCOUNTING FOR CHANGING PATTERNS OF ECONOMIC HEALTH

Changing patterns of regional economic health across the United States may be traced, in part, to dramatic changes in the U.S. economy over the past thirty-five years. In particular, the industrial structure of the U.S. economy has undergone dramatic changes since EDA's inception in 1965—shifting away from manufacturing, toward services. In addition to shifting regional industrial structure, other important factors have also affected the U.S. economy over the past several decades, including fluctuating crude oil and consumer prices, and changes in the U.S. trade balance. While the impacts of these changes are not directly accounted for in this analysis (which considers the determinants of distress across counties at single points in time), these broader indicators have affected EDA funding levels and program priorities.

The Regional Determinants of Changing Patterns of Distress

What are the reasons for the distribution of distress? To answer this question, multiple regression models were used to statistically identify socioeconomic factors most closely associated with differences in distress levels as shown by EHI. Separate analyses were run for the years 1970, 1980, and 1990.¹³ We examined the relationship of six variables to economic health: previous economic health as measured by EHI (score from ten years prior); urban population; race; educational attainment; dependent population; and employment by industry (including employment in agriculture, fisheries, and forestry, manufacturing, and mining). Regional “control” variables were included in all models (nine regions in the contiguous United States as determined by the Bureau of Economic Analysis) to control for the effects of regional variation on the models.

Inclusion of independent variables in the models was based upon two criteria: (1) variables had to be available for each of the years modeled to enable intertemporal comparisons; and (2) variables included in the models were assumed to have a positive or negative effect on county-level economic health. Specifically, it was assumed that increased urbanization, higher rates of educational attainment, and lower percentages of minority populations were associated with strong economic performance, while a high dependent population (which includes children and the elderly, who are considered dependent because they typically do not participate in the workforce) was associated with weaker economic performance. Furthermore, we assumed that increased employment in manufacturing was positively associated with economic performance. Our hypotheses regarding employment in mining as well as employment in agriculture, fisheries, and forestry were less strong; these variables, like the regional variables, were included primarily as “control” variables.

The strongest predictor of economic performance was past economic performance, as previous economic health, included in these models as the EHI score from ten years prior

¹³ The regression analysis is limited to decennial census years due to limited data availability in off-census years.

to the other variables in the model. It was by far the best predictor of current economic health. Not all of the variables in all of the models were significant. For example, urban population was not significant in any of the years modeled, meaning that after accounting for the other variables included in the models, there was never a significant correlation between economic health and urban population. This result was surprising, as we expected increased urbanization to be associated with better economic health. However, the lack of significant association between economic health and urbanization may reflect the definition of urbanization, as “urbanized areas” according to the U.S. Census can be rather small, and their sizes vary widely. Dependent population was not significant in 1970, but higher dependent populations were significantly associated with poor economic performance in 1980 and 1990. In the 1970 model, percent white population, though significant, was a weak contributor to the model. Over time, higher county-level minority populations were associated with weaker economic performance. Educational attainment was the second best predictor of economic health in both the 1980 and 1990 models, and the third best predictor of economic performance in the 1970 model. In all years, higher educational attainment levels were associated with better economic performance.

The employment by industry variables produced more complex results. Employment in agriculture, fisheries, and forestry demonstrated a positive association with strong economic performance in 1970 and 1990, but a negative, albeit less strong, correlation with economic health in 1980. Thus, where employment is strong in agriculture, economies are generally doing well. The employment in mining variable also demonstrated a variable effect upon economic conditions over time, though it is also important to note that in two of the three years mining was a poor predictor of economic performance relative to the other variables in the models. In 1970 and 1980, increased employment in mining was correlated with better economic performance. In 1980 this correlation was probably associated with a rise in energy prices. Though slight, the association between mining and poor economic performance in 1990 was likely indicative of the long-term trend of increased mechanization in the mining industry, with areas of high mining often having relatively high unemployment compared with much of the rest of the United States. Employment in manufacturing demonstrated a strong, positive association with economic health in 1970 and 1990, though in 1980 it did not contribute to economic performance according to the model (Table 3).

In general, educational attainment was an especially strong predictor of economic health in each of the years studied. Employment in agriculture, fisheries, and forestry made an exceptionally strong contribution to the models as well, which may be explained in part by the generally strong economic conditions observed in the nation’s agricultural heartland in all of the years studied. Employment in manufacturing also appears to have had a fairly strong and positive long-term relationship with economic performance. Employment in mining was a relatively small contributor to economic health, except in 1980 when mining areas enjoyed at least some short-lived prosperity due to a rise in

Table 3.
Effect of Demographic and Employment Characteristics on Economic Health Index, for Counties (beta coefficients)

	1970	1980	1990
Index Score Previous Decade	.777*	.693*	.795*
Urban Population	NS	NS	NS
Dependent Population	NS	.076*	.101*
White Population	.034*	-.067*	-.107*
Educational Attainment	-.191*	-.184*	-.310*
Employment in Agriculture, Fisheries, or Forestry	-.218*	.110*	-.269*
Employment in Mining	-.059*	-.133*	.045*
Employment in Manufacturing	-.175*	NS	-.183*
Adjusted R ²	.719	.696	.795

*Significant at the .001 level or above; data for 3,069 counties.
 NS Indicates variable was not significant

energy prices. A large dependent population and a large minority population both have had an increasingly stronger, negative association with economic health over time. Most importantly, however, past economic performance is by far the best predictor of current economic performance. This indicates that agency efforts to address economic distress are likely hindered by persistently poor economic conditions.

CONCLUSION

EDA's criteria for economic distress, which determine area eligibility for EDA's programs, have become increasingly inclusive. As a result, the number of communities and counties eligible for assistance has greatly expanded over time, moving beyond places of deep and persistent economic distress to also include places experiencing short-term increases in unemployment in excess of the national average.

Use of the EHI allowed greater precision in identifying places of severe economic distress and in comparing patterns of distress over time. The Index revealed the striking persistence of severe distress in many areas of the United States. Approximately 400 counties have remained persistently distressed throughout EDA's history. These counties are characterized by low income, high and persistent unemployment, low labor force participation rates, and high dependency on transfer income. In addition to persistent distress, a significant number of counties have become distressed since EDA's inauguration; many entered the distressed category during the 1990s, despite rapid national economic growth during the decade.

Investigation of the determinants of economic distress reveals that many of the underlying factors that account for persistent distress have also remained fairly consistent over time. In particular, educational attainment and industrial structure are key determinants of distressed status. Other factors include rural isolation and racial composition, though these factors tend to be somewhat less important. Thus, the persistence of economic distress in many areas and the emergence of new areas of distress reinforce the continuing need for EDA programs designed to alleviate distress, but also represent important future challenges for the agency.