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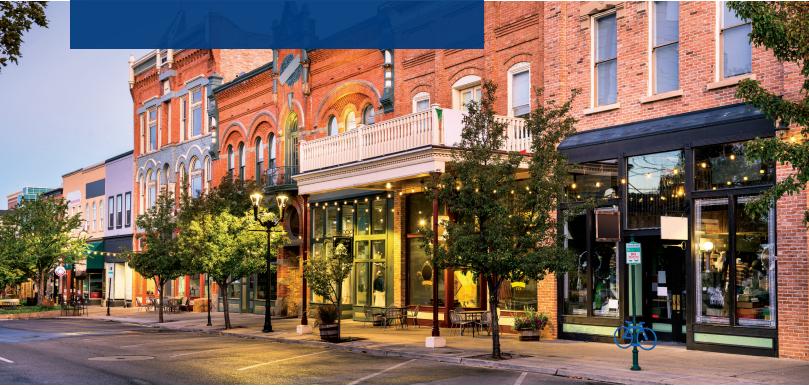
Defining Distress:

Lessons from the Federally Chartered Regional Commissions

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Introduction

The geographic distribution of economic resilience and prosperity across U.S. communities has changed dramatically over the past several decades. Increasing spatial inequality in the U.S. has heightened the interest in designing federal policies and resources that support and invest in "places" as well as "people." President Biden signed an executive order on his first day in office that, in addition to advancing racial equity, prioritizes support for underserved communities, specifically noting the importance of supporting rural people and places."

With the passage of the Appalachian Regional Development Act (ARDA) and the Public Works and Economic Development Act (PWEDA) in 1965, federal policymakers began using the concept of "economic distress" in earnest to identify underserved communities or the places most in need of public investment. "This concept has real political resonance. As evidenced by the legislation passed in the 1960s and since, it evokes a commonly understood image that builds common cause and consensus among Congressional members and other political leaders who approve government resources, since it makes intuitive sense to direct public investment to communities that have disproportionately high levels of vulnerability. As an organizing principle for public investment, "distress" possesses significant power.

However, while this terminology is used liberally in federal statutes and regulations, no common definition of economic distress exists. A wide variety of conceptions and approaches are applied across different federal programs and agencies.

How distress is defined can determine how funds are allocated to those communities most in need. Among other things, it can determine eligibility for grant and loan programs, determine match requirements to access such programs, or provide tax benefits to individuals or investments. When used intentionally, distress definitions are a key means of targeting federal grants, loans, and technical assistance to vulnerable populations. When designing programs, policymakers face the difficult task of crafting definitions that are effective and equitable and hold a magnifying glass to the communities that are often overlooked, underserved, and under-resourced.

This has particular relevance to many rural U.S. communities, since differences in economic and social outcomes between rural and other size places have grown especially sharp since the 2008 recession. Prior to the economic disruption of the COVID-19 pandemic, employment and labor rate participation rates in rural areas were still below pre-2008 levels, while metropolitan and suburban areas had not only recovered, but had grown. In 2019, rural poverty rates stood at 15.4 percent, compared to 11.9 percent in metro areas. vi While some rural areas are thriving, many rural places face significant challenges, including lack of relevant community infrastructure alongside fewer resources to address these challenges.

To examine the implications for rural development of defining distress in different ways, this report draws insights from the three multi-state federally chartered regional commissions that are active: the Appalachian Regional Commission (ARC), the Delta Regional Authority (DRA), and the Northern Border Regional Commission (NBRC). All were established with the expressed purpose of reducing economic distress, and 67.3 percent of the counties in these regions are considered rural. This analysis draws upon their various definitions, as well as others used by federal agencies, to analyze the tradeoffs and impacts of different approaches and offer insights into the ability of vulnerable communities to access critical federal funding.

While the analysis explores how particular definitions drive resource decision-making, it recognizes that there is no one superior way to define "distress" across programs with different policy objectives and tools. Yet some definitions seem to do a better job of capturing the range of social and economic indicators that reflect a community's well-being and may be particularly useful for programs that aim to catalyze holistic community and economic development in historically underserved, remote rural regions where economic and social hardship concentrate. The report concludes with a set of key takeaways and recommendations to inform the design of definitions that enable targeting to underserved rural communities and promote program effectiveness and equity.

This brief uses the 2013 delineation of "non-metropolitan" counties, as defined by the U.S. Office of Management and Budget, to denote "rural."

Federal Definitions of "Distress"

Definitions of "distress" across the federal government vary widely. A rudimentary search of federal guidance and legislation surfaces at least 29 definitions used by 25 federal agencies, administrations, and commissions. These definitions differ meaningfully in the number, types, and specificity of the indicators they include, the data sources they utilize, and the geographic areas to which they apply.

Of the 29 definitions identified, 16 use only economic indicators, such as poverty rates, median household income, and employment rates, while 13 incorporate measures of social well-being such as incidence of homelessness, food insecurity, and high school graduation rates. The majority of the definitions define a "distressed area" at the county level, but some utilize census tracts, zip codes, or units of local government. Six definitions included no geographic unit of analysis at all. Table 1 summarizes several definitions from federal agencies and highlights distinctions among them.

Table 1: A sampling of federal definitions of "distress"

AGENCY/ DEPARTMENT	ASSOCIATED PROGRAMS OR PURPOSES	DEFINITION OF DISTRESS WITHIN THE ASSOCIATED PROGRAM	GEOGRAPHIC UNIT OF ANALYSIS	SOURCE DATA
Economic Development Administration (EDA)	Determines applicant eligibility for EDA Public Works and Economic Adjustment Assistance grant programs	Meets at least one of these criteria: • Unemployment rate ≥ 1 percentage point above U.S. average • Per capita income ≤ 80% of U.S. average • Demonstrates a special need	Area/Region (self-defined by applicants)	American Community Survey, Bureau of Labor Statistics data
USDA Rural Development (USDA-RD)	One factor considered when determining lender guarantee fees for certain USDA-RD programs and funding prioritization for USDA-RD's Rural Energy Pilot Program	Counties/zip codes considered distressed according to the Economic Innovation Group's Distressed Communities Index. "Distressed" communities are those in the highest quintile of an index composed of: • Share of adult population with no high school diploma • Housing vacancy rate • Adults unemployed/not in labor force • Poverty rate • Median income ratio • 5-year change in employment • 5-year change in business establishments	Zip code or County	Census Bureau Business Patterns and American Community Survey 5-Year Estimates

Table 1: A sampling of federal definitions of "distress" (continued)

AGENCY/ DEPARTMENT	ASSOCIATED PROGRAMS OR PURPOSES	DEFINITION OF DISTRESS WITHIN THE ASSOCIATED PROGRAM	GEOGRAPHIC UNIT OF ANALYSIS	SOURCE DATA
U.S. Department of Education	Criteria for Promise Neighborhoods program projects	 High concentrations of low-income individuals Multiple signs of distress, which may include high rates of poverty, childhood obesity, academic failure, and juvenile delinquency, adjudication, incarceration 	Neighborhood	Not specified
Department of Labor	Selection criterion for YouthBuild program grantees	 Poverty rates Youth unemployment Number of individuals who have dropped out of secondary school Incidence of homelessness Shortage of affordable housing 	Varies; "community"	Not specified
Internal Revenue Service (IRS) and Department of Treasury	General tax benefits for those who invest in Qualified Opportunity Zones (QOZs)	QOZs are considered "economically distressed communities." They are identified and proposed by states and certified by the Secretary of Treasury. They must be a (1) Qualified Low- Income Community (LIC), using the same criteria as eligibility under the New Markets Tax Credit (NMTC) program, or (2) a census tract that was contiguous with a nominated LIC if the median family income of the tract did not exceed 125% of that contiguous, nominated LIC.	Census tract	American Community Survey 5-Year Estimates

Federal Regional Commissions: A Mandate to Alleviate Distress

Federal regional commissions and authorities were chartered by Congress to promote economic development and alleviate distress in a specific geographic service area (Map 1). While Congress has chartered seven regional commissions and authorities, only four are currently active-the Appalachian Regional Commission (ARC), Delta Regional Authority (DRA), Denali Commission, and the Northern Border Regional Commission (NBRC).

Established in 1965, the ARC is the oldest commission and covers the largest geographic area, serving portions of 13 states. In 1998, the Denali Commission was established to serve Alaska. This was followed by the establishment of the DRA in 2000. The Northern Great Plains Regional Authority (NGPRA) was authorized in 2002 but was only active for a brief period after its creation; its authorization lapsed in 2018. The 2008 Farm Bill authorized the NBRC, the Southwest Border Regional Commission, and the Southeast Crescent Regional Commission, but only NBRC has been active. In December 2021, the U.S. Senate confirmed the first-ever federal co-chair of the Southeast Crescent Regional Commission (SCRC), and it is now positioned to begin work in that region. vii

Northern Border Northern **Great Plains** Appalachian Delta Southwest Border Southeast Crescent In both Appalachian & Delta regions Denali

Map 1: Service areas of the seven federal regional commissions

Source: Compiled by CRS using data from the various commission and authorities and Esri Data and Maps 2018.

U.S. regional commissions are unique federalstate partnerships. Each (except for the Denali Commission) is governed by a Senate-confirmed federal co-chair 2 and a board that typically includes the governors of participating states and, in some cases, other local leaders. The active commissions run competitive grant programs that deliver funds to organizations, state and local governments, and other government entities and public bodies to support a wide range of economic and community development activities. They take pride in their ability to incorporate federal, state, and local voices and engage directly with residents on the ground, which they often accomplish through networks of "local development districts," planning organizations that span multiple jurisdictions within states. viii

While these regional commissions share governance characteristics, each is an independent entity with its own origin story, unique mandate and accountability, and business operations. Nonetheless, the general mandate to alleviate economic distress and promote social and economic development is central to each commission's mission. For each of the three active regional commissions that serves more than one state—the ARC, DRA, and NBRC—the authorizing legislation explicitly requires the commission to assess annually which places within their service area can be classified as "distressed," and to spend at least half, but often more, of their grant resources in those places.ix, x, xi

Each commission defines distress differently, starting from the respective statutory requirements, balanced by internal analysis and capacity. Examining the definitions used by the three active, multi-state commissions illuminates the implications of different definitions of distress and provides insights into the idiosyncrasies of designing methods for targeting specific types of communities for support. It also highlights the important role of definitions in both the allocation of funds and the reporting of that spending back to Congress and taxpayers.

Distress Definitions by Regional Commission

In general, the authorizing statutes of the commissions offer guidance but do not prescribe the exact criteria or process for calculating "distress." While each of the active regional commissions defines it differently (Table 2), they all incorporate economic indicators such as unemployment rates and measures of income.

ARC: The ARC's authorizing legislation requires the commission to categorize counties into four tiers: distressed, at-risk, competitive, and attainment. The ARC created a fifth tier, transitional, which falls between at-risk and competitive (Figure 1).

To define these categories at the county level, the ARC's methodology incorporates three indicators: three-year average unemployment rates using data from the Bureau of Labor Statistics, per capita market income using data from the Bureau of Economic Analysis, and poverty rates from the most recent five-year American Community Survey estimates.xii ARC then compares each value to the U.S. national average, summing and averaging the resulting values to create a composite index value for each county. Finally, it ranks every county in the nation based on its index value. Distressed counties are those with values that fall within the worst 10 percent of U.S. counties on the index; attainment counties fall within the best 10 percent.xiii

Using this methodology, as of 2019, about one in five ARC counties are classified as "distressed." They are disproportionately rural: while 64 percent of all counties in the ARC service area are rural, 93 percent of distressed ARC counties are rural. These distressed counties account for 6 percent of ARC's total service area population and 15 percent of its rural population.

The Denali Commission presents a notable exception. While the federal co-chairs of the other regional commissions are appointed by the President with the advice and consent of the Senate, the Denali federal co-chair is appointed by the U.S. Secretary of Commerce without Senate confirmation.

Figure 1: Appalachian Regional Commission's 5-tier distress classification scheme



Source: Appalachian Regional Commission, https://www.arc.gov/distressed-designation-and-county-economic-status-classification-system/

In addition to categorizing counties, the ARC also identifies "isolated areas of distress," which are distressed census tracts within "at-risk" or "transitional" counties. By having a classification that analyzes vulnerability below the county level, ARC adds an ability to differentiate among communities within counties. This is an added dimension that reflects the diversity of economic and social well-being that is often present even within a single county.

These isolated areas of distress are calculated using a different methodology than the one used for counties, primarily due to data limitations. To be considered an "isolated area of distress," a census tract must have a median family income equal to or lesser than 67 percent of the U.S. average and a poverty rate at least 150 percent of the U.S. average. In 2019, ARC identified 893 isolated areas of distress across its 13 member states. These 893 areas-all within "at-risk" or "transitional" counties-contained 3.1 million people, or 12.3 percent of the ARC's total service area population. Strikingly, for 2019, the population in these isolated areas of distress is more than double the population in counties identified as distressed (1.4 million).

While the ARC does not designate isolated areas of distress in "competitive" or "attainment" counties, its identification of pockets of distress in "at-risk" and "transitional" counties represents a nuanced and intentional effort to compensate for the drawbacks of aggregate county-level measures. This further categorization adds a valuable element and degree of sophistication, illustrating how measurement at the county level often masks significant vulnerability in particular communities. Adding the two population groups together means that 17.9 percent of the ARC service area population resides in a distressed area.

Northumberland County in Pennsylvania offers an example highlighting the benefit of including isolated areas of distress. As of 2019, Northumberland was classified as a "transitional" ARC county. However, it contained four isolated areas of distress, each with about 3.000 residents. Two of those isolated areas of distress, located in the city of Shamokin, had poverty rates more than twice the national average. ARC's isolated area scheme calls attention to and encourages investment in these highly impoverished communities that are located within counties which are considered non-distressed.

ARC typologies are tied to programmatic requirements. By statute, the ARC is mandated to direct at least 50 percent of its funds to distressed counties and areas. A county's distress status also determines the maximum financial contribution that ARC can make to a project which, by implication, determines the amount of matching funds a grantee must provide. Generally (though with a few exceptions), ARC cannot provide funds to "attainment" counties, and it cannot cover more than 30 percent of costs in "competitive" counties. ARC's programs generally require a 50 percent match from applicants, but ARC can contribute up to 70 percent for projects in "at-risk" counties and 80 percent for projects in "distressed" counties.xiv

DRA: The DRA uses a binary county-level distress scheme, classifying counties as either distressed or non-distressed. The DRA definition of distress is based on the unemployment rate and percapita income compared to national averages. Its authorizing legislation directs the commission to designate those counties that "are most severely and persistently distressed and underdeveloped and have high rates of poverty and unemployment."xv While the statute also directs the DRA to designate isolated areas of distress within non-distressed counties, limited capacity due to small budgets has meant the commission has not yet utilized this approach.

Using DRA's methodology, as of 2019, 92 percent of the counties in the DRA, comprising 64 percent of the population, are classified as distressed. Among these, 79 percent of distressed DRA counties are rural.

DRA is mandated by statute to direct 75 percent of its funding to projects designed to serve the needs of distressed counties and areas.xvi Its typology is also linked to programmatic requirements related to funding. The support provided by the DRA is generally limited to a maximum of 90 percent of the costs of a project, except for projects providing transportation or basic public services to residents of one or more distressed counties or areas.3 DRA frequently accepts in-kind contributions to satisfy matching requirements in lieu of cash contributions, which increases flexibility for low-income and low-capacity applicants.

NBRC: The NBRC uses a three-tier scheme, classifying counties as distressed, transitional, or attainment, as mandated by its authorizing legislation. These classifications are calculated through a combination of primary and secondary indicators chosen by the commission.

Primary indicators are prioritized and, as of 2019, included thresholds related to poverty, unemployment, and population change. Secondary indicators included thresholds related to educational attainment, median household income, and the level of secondary and seasonal home ownership.xvii The NBRC created the secondary indicators, which are not included in its authorizing statute, in order to provide a more indepth look at distress in the region.xviii

As of 2019, 70 percent of the counties in NBRC's coverage area were classified as distressed, of which 67 percent are rural. NBRC's distressed counties contain 2.8 million people, or 69 percent of its total service area population.

NBRC also annually publishes a list of "isolated areas of distress" within attainment counties. These are places with high rates of poverty, unemployment, or outmigration.xix In 2019, NBRC identified 32 isolated areas of distress, all of which are in New Hampshire. Together, they account for 90,436 residents, all of whom lived in rural areas. Combining this population with that of NBRC's distressed counties increases the total NBRC distressed population to 2.9 million, raising the distressed population percentage from 69 to 71 percent.

NBRC's typology is also linked to funding allocation. The NBRC is mandated by statute to direct at least 50 percent of its funding to programs and projects designed to serve the needs of distressed counties and isolated areas of distress. Its authorizing legislation limits the maximum federal share of project funding to 50 percent for non-distressed counties, 80 percent for distressed counties, and 60 to 90 percent for special multi-state or multi-county projects.xx

Technically the DRA can contribute up to 100 percent of a project, but it strongly emphasizes in its program regulations that the greater the applicant's contribution, the more competitive its application will be. https://dra.gov/images/uploads/content_files/2021_SEDAP_Manual_SB_edit1.pdf

Table 2: An overview of distress definitions for the three active, multi-state regional commissions

	DISTRESS CATEGORIES (COUNTY-LEVEL)	DISTRESS INDICATORS/ CRITERIA (COUNTY-LEVEL)	DISTRESS INDICATORS/ CRITERIA (ISOLATED AREAS)	# ISOLATED AREAS OF DISTRESS (2019)	DISTRESSED COMMUNITY MATCHING REQUIREMENT	% POP Distressed	% POP RURAL + DISTRESS ED	% FUNDING MUST SERVE DISTRESSED
ARC	Indexes counties relative to US averages for three indicators, classifies into 5 categories: • Distressed (bottom 10%) • At-risk (bottom >10% to 25%) • Transitional (middle 50%) • Competitive (top >10 to 25%) • Attainment (top 10%)	 US 3-year average unemployment rate Per capita market income Poverty rate 	 Located in atrisk/transitional county Median family income ≤ 67% of U.S. average Poverty rate ≥ 150% of U.S. average 	893	Minimum 20% for distressed, 30% for atrisk, 70% for competitive. Standard program match is 50%. Attainment counties do not receive funds.	18%	10%	At least 50%
DRA	Classifies counties as distressed or non- distressed based on whether they meet two economic criteria.	 Unemployment rate ≥ 1% higher than national average over last 24 months Per capita income ≤ 80% of national per capita income 	N/A	N/A	No match required for distressed communities for basic public/ transportation infrastructure projects; minimum 10% match for other projects	64%	39%	At least 75%
NBRC	Classifies counties as distressed, transitional, or attainment. Distressed counties meet 3+ distress factors, including one from each category of indicators (primary and secondary).	Primary: % population below poverty level Unemployment rate % change in population Secondary: % population with bachelor's degree or higher Median household income Seasonal home ownership rates	High rates of poverty, unemployment, or outmigration.	32	Minimum 20% for distressed, 50% for transitional. Attainment counties do not receive funds.	71%	35%	At least 50%

Variations & Implications

The variations in the definitions of distress and geographic targeting by the federal commissions reflect the independence given to each commission to develop its own methodology. Some of the variation in their definitions may be related to considerations that state leaders participating in the commissions find meaningful, given differences in regional contexts. Other considerations include constraints on data availability and quality, budgetary limitations and costs, and the preferences and experience of staff and associated researchers.

The variations themselves, however, offer a window into the importance of these definitions, given the role they play in helping the commissions target resources and report on the successes and impact of those resources to Congress and taxpayers. Quite simply: it matters how you measure.

Comparing across these definitions illustrates how more nuanced, multi-tiered classification schemes offer more specific differentiation. In addition, using isolated areas within more prosperous counties can also offer better targeting toward particular places in need.

Table 3 compares the percent of the population designated as distressed, as well as rural and distressed, for all three active multi-state federal commissions using the commissions' own definitions, several existing federal definitions, and an alternative definition developed for this report (explained below). For the alternative definitions, both counties and sub-county areas (census tracts) were used to classify distress.

When zooming out and looking at the combined service area of the three active, multi-state regional commissions, variations become even more apparent. Maps 2-7 and Table 3 visualize and summarize the results.

The ARC has the most disaggregated classification scheme, combined with targeting of sub-county areas (census tracts) in non-distressed counties. This provides an interesting basis to illustrate some of the differences among various definitions. For example, as of 2019, the ARC, by its own definition, counts 17.9 percent of its population as distressed. However, using the definition from the Economic Development Administration (EDA), 78.4 percent of the ARC population would live in a distressed area.

Both the ARC's and EDA's definitions are created solely from economic indicators; both include employment and income as key elements, but each uses different scales, time spans, and weights. The variations result in a much broader swath of geographic area being considered "distressed" according to the EDA definition. EDA's definition is especially broad, allowing counties or tracts to be designated as distressed based on deviations from either the national average unemployment rate or median household income (and due to demonstration of a special need, though that is not reflected in the maps).

The landscape of distress also changes when noneconomic indicators are introduced. Another federal framework, the Social Vulnerability Index (SVI) developed by the Centers for Disease Control and Prevention (CDC), uses 15 social factors to place U.S. census tracts and counties on a continuum based on their vulnerability to "negative effects caused by external stresses on human health." such as humancaused disasters, natural disasters, and disease outbreaks.xxi Incorporating these additional measures of well-being seeks to provide a more well-rounded view of a community's capacity and opportunity. When using the bottom fourth of the SVI's measure of Overall Social Vulnerability as a proxy for "distressed," 4 25.8 percent of the ARC population would be classified as distressed, with about half that population residing in rural areas.

USDA-RD is using the bottom 25% of CDC's SVI in eligibility requirements for certain programs.

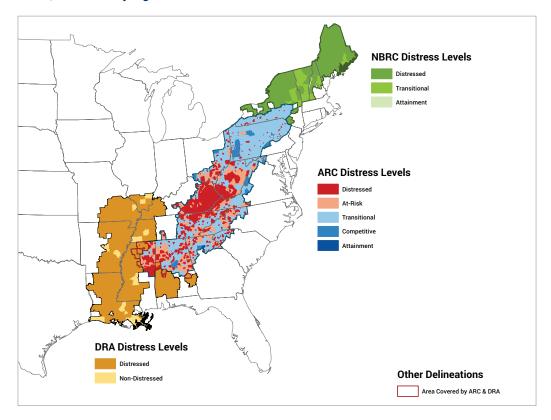
Table 3: Change in distressed and rural distressed population of regional commissions' coverage areas based on definition

AGENCY/DEFINITION	PERCENT SERVICE AREA POPULATION DISTRESSED (ALL RCs)	PERCENT SERVICE AREA POPULATION RURAL AND DISTRESSED (ALL RCs)
Regional commission definitions	34.7	19.5
Economic Development Administration (EDA)	78.1	34
CDC Social Vulnerability Index	33.4	15.7
Authors' definition (includes economic indicators + life expectancy)	50.1	25.2
Persistent poverty	18.9	10

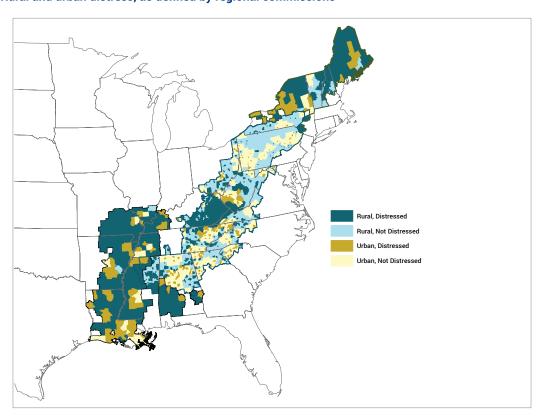
To hew more closely to the models used by the regional commissions but add a measure of wellbeing, the authors developed a composite measure that combines life expectancy at the county and census tract level with unemployment rate, poverty rate, and per capita income data from the U.S. Census. Integration of life expectancy provides a broad picture of the health of the community, given its usefulness as a composite measure based on various health outcomes. There is evidence that differences in life expectancy rates at the local level are driven by economic and community infrastructure, including health facilities and parks.xxii The county and tract rates are compared to the national average and aggregated into an index, with the bottom 25 percent of counties and tracts being classified as distressed. Using that definition, 48.1 percent of the ARC population is classified as living in a distressed area, with about half of that in rural areas.

The definition of persistent poverty provides another dimension and further insight, given its targeting toward the most vulnerable based on measuring both longevity and depth of poverty. Persistent poverty, used as the basis for the 10-20-30 formula proposed in bipartisan legislationxxiii and applied by some programs in the 2009 Recovery Act, is defined as counties experiencing 20 percent of their population in poverty for at least 30 years. Map 5 and ensuing analysis classifies counties and tracts as being in persistent poverty based on the 1990 and 2000 decennial censuses and the Census Bureau's American Community Survey (ACS) 5-year estimates for 2010 and 2018.xxiv Under this definition, 13.5 percent of ARC's population would be classified as living in a persistent poverty area, with just over half of them in rural areas.

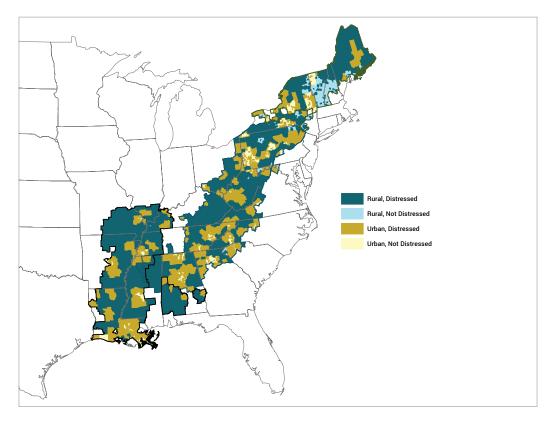
Map 2: Distress, as defined by regional commissions



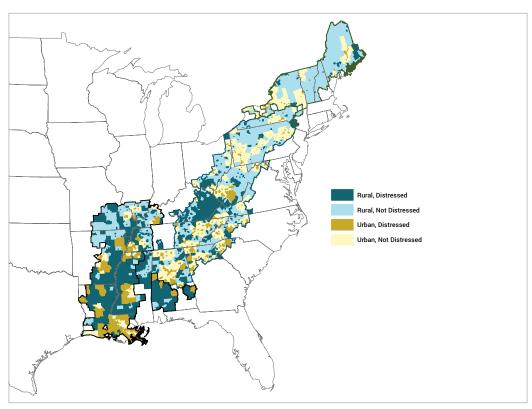
Map 3: Rural and urban distress, as defined by regional commissions



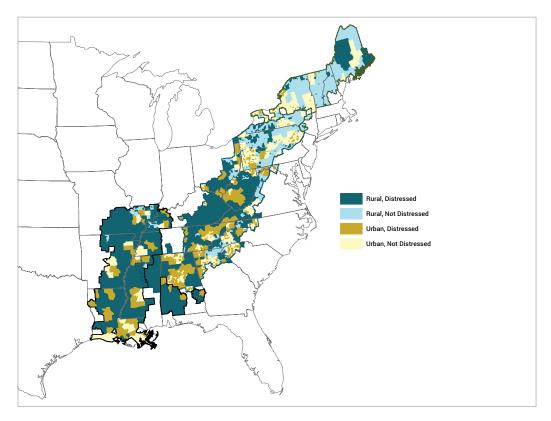
Map 4: Rural and urban distress-EDA



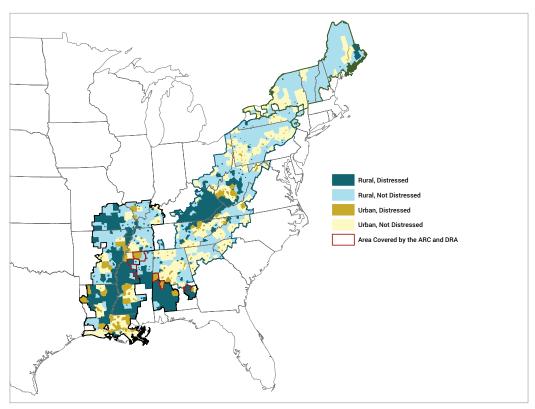
Map 5: Rural and urban distress—CDC SVI



Map 6: Rural and urban distress-Authors' definition



Map 7: Rural and urban distress—Persistent poverty



Key Takeaways

Moving from the idea of "distress" to a definition with the specificity necessary to guide program design involves making trade-offs and highlights the importance of clarifying policy objectives. Since definitions of "distress" are used to allocate funding to particular communities and often determine eligibility and matching requirements, aligning the definition with the policy objective is of utmost importance.

1. Classifying communities along a continuum of "distress" enhances targeting

Categorizing distress by placing communities on a continuum that distinguishes among gradations of vulnerability makes plain which communities are disproportionately struggling. Using a binary system (simply contrasting "distressed" vs. "nondistressed"), or a definition based on less stringent thresholds that makes it easier to be classified as distressed, risks diluting attention away from the most severely underserved or persistently poor communities. It can also leave them to compete with more prosperous areas for limited resources.

If the policy objective is to direct as many resources as possible to communities that are most in need, creating a refined and stratified classification system enables better targeting. Multi-tiered systems that also include subcounty isolated areas of distress, such as ARC's classification, allow for a more granular approach to prioritization than a binary county-level system.

This type of additional categorization provides greater transparency and confidence that when investments are described as going to "distressed" communities, they are likely to end up in the most underserved and least resourced places. For example, using the authors' definition, 48 percent of the ARC population would be defined as distressed, versus 18 percent using the ARC's own definition. ARC's five-tier system is better able to identify those most in need, while still providing a way to classify places that are doing better, but far from thriving.

2. Using clear cutoffs or multiple criteria can also help hone in on the most affected communities

If it is not possible to implement a graduated distress scheme, increasing the number of criteria used to define "distressed" is likely to enhance targeting. For example, the DRA and EDA use the same two economic criteria to determine distress, based on unemployment rates and per capita income. However, EDA stipulates that an area must meet one criterion to be considered distressed, while DRA requires counties and parishes to meet both criteria. As a result, while DRA classifies 64 percent of its population as living in distressed regions, using the EDA definition, 86 percent of the population in the DRA region would be classified as distressed. Despite the differences, both classifications demonstrate that the region served by the DRA is one with significant distress.

If the use of multiple criteria is not possible, a relatively strict threshold, such as persistent poverty, also makes such differentiation apparent.

Depending on program objectives and political considerations, it may be wise for some programs to keep general eligibility broad and avoid shrinking the geographic scope of program reach. If this is the case, then, as discussed above, higher thresholds can be used to establish preferences for grant or loan awards, or to establish more generous parameters regarding matches or reporting requirements. This may result in less public transparency about the gradations among communities but can still enable targeting toward the worst-off communities.

We do note, however, that the EDA definition allows for both counties and tracts to comply, while DRA does not designate noncounty distressed areas.

3. Differentiating among communities below the county level reveals variations that, if unnoticed, can otherwise disadvantage rural areas

County-level measurement facilitates easier data collection and analysis, given that many publicly available economic indicators produced by the Census Bureau, the Bureau of Labor Statistics, the Bureau of Economic Analysis, and other federal agencies are made available by county. They also map onto predominant definitions of rurality that are measured at the county level, including the delineation of metropolitan statistical areas (often used to define "urban") and nonmetropolitan areas by the Office of Management and Budget.

However, aggregate county-level measures also mask important variation in economic and social well-being among communities at the sub-county level. If the standard is set at the county level, a broader definition of distress based on simple thresholds—such as the ones used by EDA—can reassure policymakers that a larger swath of potential applicants will remain eligible. This can counteract some of the pitfalls of aggregate county-level measures, through which small, highly vulnerable communities end up classified as "non-distressed" because larger, more prosperous communities in the same county boost the county's classification.

At the same time, this also makes it harder to separate out the most vulnerable places with the most difficult challenges. If a large set of communities are considered distressed, then among these communities, their tangible levels of well-being will vary widely. This is likely to reduce the level of attention on those at the lowest end and make it more difficult for them to be competitive against other eligible applicants. It also makes it more difficult for Congressional members and taxpayers to discern both the amount of resources and return on investment in the places that would benefit most from outside support.

The use of "isolated areas of distress" by the regional commissions offers a more refined model for targeting particularly vulnerable communities whose realities might be different from the resilience and growth exhibited by their home counties. For example, the ARC applies a strict definition of distress at the county level; only 29 percent of its rural counties, containing 1.35 million people (just over 5 percent of its overall coverage area population), meet that standard. By complementing this delineation with identification of isolated areas of distress within its at-risk and transitional counties, it adds 303 rural census tracts with 1.2 million people to its "distressed" eligibility, expanding the rural distressed category to cover 10 percent of the ARC population.

Using an approach that targets both counties as well as places below the county level (census tract, zip code, etc.) requires high data resolution and significant analytical capacity. While part of its authorizing legislation, DRA has thus far lacked the capacity to calculate and publish a list of isolated areas of distress. This is understandable given its \$30 million annual budget, which it uses to serve eight states that contain some of the most distressed communities among any of the regional commission service areas. The case of DRA highlights the importance of additional budgetary resources to facilitate thorough measurement.

4. Utilizing nuanced distress designations can lower barriers to access and improve program success

For the regional commissions, the concept of "distress" defines their organizational mandate and responsibility: the ARC must spend 50 percent, the DRA 75 percent, and the NBRC 50 percent of its funding in distressed communities. At the same time, their distress definitions also have important programmatic implications that extend beyond eligibility.

For example, all three of the regional commissions use distress designations to determine match requirements for grantees. At NBRC, any applicant in a distressed county or area is eligible for a 20 percent match rate, meaning that the commission can cover up to 80 percent of project costs. For some DRA projects in distressed communities, DRA will consider funding 100 percent of the cost.

These match requirement schemes show a recognition of the challenges faced by truly distressed communities who often have limited institutional capacity and low levels of connectivity and infrastructure both to develop grant applications and use federal funds.

5. Looking beyond traditional economic indicators may enable a more comprehensive sense of a community's well-being and resilience

Economic indicators dominate the calculations of distress used by the regional commissions and most federal programs. Poverty levels, median household or per capita income levels, and unemployment rates often serve as the sole indicators to paint a picture of a community's distress (this is true for ARC, DRA, and EDA, among other federal definitions). The assumption is that these measures provide a suitable proxy for general economic health; however, relying too heavily on this narrow set of indicators can mask both social and economic challenges under the surface.

Rural local leaders and practitioners often object that economic indicators alone do not provide a full picture of a community. They argue that choosing to incorporate non-economic indicators—similar to the way the CDC SVI and the authors' definition do-can meaningfully elevate elements that a community deems important for its health and well-being. It can also shift the mindset of what it means to achieve "success."

Rural leaders often also emphasize that community prosperity and resilience depend on progress and quality of life indicators that purely economic metrics do not adequately capturesuch as improved health, strong civic institutions, social cohesion, environmental sustainability, and community safety. Improvements in jobs, income, and infrastructure must be tied to improvements in well-being for them to be meaningful. For this reason, federal policymakers looking to invest in long-term, holistic economic and community development may find a definition of distress that incorporates thresholds related to both economic and non-economic indicators advantageous. Some examples of non-economic indicators that are used in existing federal definitions of distress include:

- · Educational factors including graduation rates and drop-out rates
- Food insecurity
- Housing conditions (number of abandoned or substandard rental units, physical deterioration, average age of housing stock, presence or lack of complete plumbing and complete kitchen, having more than 1 person per room, etc.)
- · Homeowner distress (i.e., levels of home foreclosure)
- Population loss and net migration
- Levels of vandalism or crime
- Levels of homelessness
- Incidence of domestic violence
- Literacy rates
- Rates of childhood obesity, academic failure, and juvenile delinquency, adjudication, or incarceration
- Presence of environmental hazards
- Quality of built infrastructure

Policymakers and program staff also use "distress" for decisions beyond eligibility, often integrating the elements and metrics in program design and implementation. However, focusing solely on distress may do a poor job of catalyzing local ownership and agency. Recognizing that the health of a community depends on its assets and institutional capacity, policymakers may want to consider asset-oriented criteria as a better basis for programmatic parameters and design. The Urban Institute's asset-based typology of U.S. rural communities, built off the Community Capitals Framework, is one example of a tool that could help policymakers identify community capacity and assets.xxv, xxvi Local governments, economic development districts, and tribal governments can also provide a wealth of information about both community needs and assets to federal field staff and agency personnel.

6. Forward-looking indicators can capture vulnerability and risk, which may help forestall economic decline and dislocation

Forward-looking indicators can also play a key role in drawing attention to vulnerability, equity, and possibility. Measures like the CDC SVI are anticipatory, aiming to capture "potential [emphasis added] negative effects on communities caused by external stresses on human health," while lagging metrics such as unemployment and poverty rates capture negative events that have already occurred.xxvii Metrics that focus on vulnerability can be especially important in rural communities, many of which are poised to feel the effects of ongoing economic transitions.

For example, a policy intervention that targets a historically coal-dependent rural community a year before the announced closure of the local coal plant could prevent more economic suffering than one that takes place a year after the closure, when unemployment rates and poverty begin skyrocketing. Other potential factors to consider when devising forward-looking distress measures are trade exposure, labor force participation, local industrial composition, climate risk, and number of jobs likely to be automated.

7. Third-party innovations in measuring distress and community well-being can offer helpful insights for programmatic effectiveness, but risk adding confusion

As our preliminary analysis of definitions of distress across the federal government shows, federal agencies are beginning to experiment with classification schemes developed by researchers and academics outside of the federal government. For example, USDA uses both the Economic Innovation Group's Distressed Communities (EIG) Index (which is based on public Census data) as well as the University of Michigan Index of Deep Disadvantage in program eligibility and scoring. Third-party indices may provide new insights both for measuring outcomes and for targeting specific types of vulnerability, and they are also innovative in incorporating new methodologies and types of data.

Most of the indicators used by both the regional commissions and other federal agencies are point-in-time measures using data on factors like poverty or unemployment during the most recent one- to two-year period compared to national averages. Using multi-year or time series measures can capture changes and raise red flags to signal potential declines in community prosperity. For example, the EIG Distressed Communities Index incorporates changes in business establishments and changes in employment over a five-year period in order to capture progressive decline.

At the same time, third-party indices also risk increasing confusion and fragmentation among the various federal definitions of distress, and their use of new and recent data may make it harder to go back in time and assess historical trends. Agencies looking to adopt these measures for targeting would need to work around their limited time horizons or reconstruct the indices for prior years if historical data are available. Nonetheless, for agencies that lack the technical capacity or resources to design their own multifaceted indices, third-party measures can provide a useful tool or starting point.

There are also opportunities to engage with federal statistical agencies to develop new data tools at smaller levels of geography that would help better target funds to those most vulnerable communities. Such agencies include the Bureau of Labor Statistics, the Bureau of Economic Analysis, the CDC, and others, whose current products are mostly unavailable below the county level.

8. Qualitative methods can add important elements and nuance to the state of a community's agency, resilience, and well-being

The definitions analyzed here use quantitative measures in one way or another to determine a given community's level of distress. However, a less commonly utilized practice-incorporating qualitative measures—may add nuance and help increase community agency in distress determination processes. Rural practitioners regularly point out the pitfalls of relying purely upon quantitative data to understand rural realities. They often see narrative, storytelling, and case studies as important to identifying communities that seem ready to leverage investment and those that may seem resilient but are starting to experience vulnerability. This is particularly important given the dearth of high quality rural data or sub-county data from public sources; in communities with small population sizes and limited communications infrastructure, accurate time series data from widely-used public sources, such as the Census Bureau's American Community Survey, may be limited.xxviii In some cases, when time and resources permit, directly engaging rural community leaders to provide qualitative assessments of well-being may be the best way to understand distress at the sub-county level.

Agencies that supplement quantitative measures with qualitative and circumstantial indicators can also be nimble and responsive to rural realities. EDA, for example, has made use of its flexibility to expand eligibility for grants to each area that "the Secretary determines has experienced or is about to experience a special need arising from actual or threatened severe unemployment or economic adjustment problems resulting from severe short-term or long-term changes in economic conditions."xxix This type of evidence has served the EDA well in responding to unique circumstances.

Historically, the special needs designation has been used for communities that are experiencing disasters, emergencies, the loss of a major employer, substantial outmigration, population loss, or several other economic injuries.xxx While caution must be taken to ensure that these types of designations are not overused and that persistently distressed communities are generally prioritized, such actions highlight the importance of flexibility and responsiveness to real-time circumstances to maximize the effectiveness of federal investments in times of instability.

Conclusion

The active multi-state regional commissions chartered by the federal government, with their explicit mandate to serve distressed communities and with large swaths of rural places within their service areas, offer many insights into the definitional elements that enable targeting of direct investment to vulnerable rural communities. A review of the commissions and their definitions of distress highlights the importance of having clear policy objectives and linking those objectives to a definition and related programmatic design elements that best enable them to serve their mission. Differentiation, both regarding the level of distress and the level of geography, is important in identifying and targeting those communities that might benefit most. And while calculating "distress" may be important for determining eligibility, programs would often benefit from more expanded metrics that include assets, wellbeing, and narrative as a means to identify and build future opportunities, guide program implementation, and redefine the meaning of success.

Each approach to defining distress comes with a unique set of tradeoffs and political considerations. This analysis demonstrates that these tradeoffs are often resolved in different ways. This elevates questions about which schemes best fit the policy objectives of specific economic and community development programs.

In conclusion, we propose three considerations which we believe would help to refine the meaning and use of "distress" and improve the effectiveness of rural policy:

- 1. Develop a normative framework for defining distress in order to be explicit in identifying and matching policy objectives to definitional characteristics and uses. For example, while undertaking this analysis, we came to prefer definitions that offer the most specific differentiation among communities and go below the county level, as they improve the likelihood of the funds being directed to the most distressed places. Yet we recognize that is not the sole policy objective for many programs. A normative framework would help policymakers weigh the importance of various factors and take into account the considerations posed by questions such as:
 - · What is the overall goal of the program or policy in question, in terms of outcomes? Is the program/policy narrowly focused on improving one aspect of a community (i.e., built infrastructure) or is it attempting to help communities achieve comprehensive development?
 - · What degree of technical capacity or funding does the agency have? Is it feasible to gather enough data and perform the necessary analyses to apply a sophisticated, multifaceted definition of "distress?"
 - Is it important to maintain broad eligibility for this program to keep or create political buyin? If so, are there factors that can be used to differentiate among communities for targeting or transparency purposes?
 - Considering the geographic scope and objectives of the program, does it make sense to compare communities to national or regional averages for the purpose of calculating distress?
 - Does the existing or proposed definition rely solely on lagging indicators? Is this appropriate?

- To what extent will the distress definition enable differentiation among communities below the county level? Is it possible to collect data below the county level for any of the indicators that comprise the proposed or existing definition? If distress is measured at the county level, are there ways to target funds toward communities whose situations significantly deviate from the county aggregate measure?
- 2. Improve transparency about the specific communities that are receiving funds and their defining characteristics, as well as the implications of describing distress in a particular way. Clear, accurate, and easily accessible information is all too often unavailable to determine which communities are accessing and benefiting from federal resources. Making such data widely available will improve our understanding of the extent to which resources of specific federal programs are reaching certain types of communities. This would be an important step forward in ensuring program effectiveness. Publishing explicit rationales for choosing key indicators that constitute a particular definition of distress or set of eligibility requirements would also enable greater refinement and deeper analysis of their effectiveness in helping achieve policymakers' intended objectives.
- 3. Engage potential recipients to learn from their experiences with different distress definitions and eligibility requirements, and to get their guidance on the extent to which particular indicators and approaches meaningfully reflect the realities of their communities. Definitions of distress, in essence, create a template by which communities are forced to describe themselves as they seek the partnership of the federal government in improving their wellbeing. Recognizing the importance of these definitions in shaping a community's identity and considering the extent to which they capture the full measure of a community's reality will deepen their utility and sharpen their accuracy. If current measures are not reflecting the reality on the ground, then such engagement will help identify what other factors can be included.

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