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ECONOMIC REGULATION AND RURAL AMERICA

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ABSTRACT

Rural America today is at a crossroads. Widespread socioeconomic decline outside cities has fueled the idea that rural communities have been "left behind." The question is whether these "left behind" localities should be allowed to dwindle out of existence, or whether intervention to attempt rural revitalization is warranted. Many advocate non-intervention because rural lifestyles are inefficient to sustain. Others argue that, even if the nation wanted to help, it lacks the law and policy tools to redirect rural America's course effectively.

This Article argues that we do have the law and policy tools necessary to address rural socioeconomic marginalization and that we neglect to use those tools to our own collective detriment. The Article focuses specifically on the tool of economic regulation, meaning government oversight of entry, exit, and participation parameters for service providers in certain markets. Robust historical precedents establish that strategic economic regulation is uniquely capable of sustaining rural communities, and that using it to do so is in fact critical to national resilience.

Rural diseconomies of scale—the problem of higher costs per capita and lower demand for resources in population-sparse regions—must be understood as a keystone question concerning whether and how rural communities can gain access to the amenities they need to survive. The pre-1970s regulatory regime governing infrastructure industries helped overcome the problem of diseconomies of scale by safeguarding rural access to services that precede economic growth. Infrastructure industries' subsequent abandonment of rural America during the deregulatory era amounts to a market failure because the nation remains dependent on rural communities for food and energy production, environmental stewardship, political stability, and retreat from urbanism. Thus, for the benefit of all, a broader conception of infrastructure and corrective interventions into

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infrastructure markets must help connect rural America to community-sustaining systems like broadband internet and national grocery store chains. Ultimately, this discussion also offers an answer to the problem of the so-called "urban/rural divide": enhancing "urban/rural connection," both literally and symbolically.

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INTRODUCTION

Throughout the country, communities outside major urban centers are no longer sustained by livelihoods in agriculture, natural resource extraction, and manufacturing.[1] Many of these communities are instead weakening by attrition as population and wealth flow toward regions with growing modern industries.[2] After the Great Recession of 2008, rural America fell below zero population growth for the first time in the country's history.[3] This and other trends—high rates of rural "deaths of despair" by suicide and opioids, high rates of rural unemployment, and high approval rates among rural voters of President Trump's isolationist rhetoric—have prompted

1. Ann M. Eisenberg, *Distributive Justice and Rural America*, 61 B.C. L. REV. 189, 206–10 (2020).

2. *Id.* at 214; Ann M. Eisenberg, *Rural Blight*, 13 HARV. L. & POL'Y REV. 187, 187–88, 194–96 (2018) (discussing causes and effects of rural depopulation); Michelle Wilde Anderson, *Losing the War of Attrition: Mobility, Chronic Decline, and Infrastructure*, 127 YALE L.J.F. 522, 522 (2017) (discussing rural depopulation during postwar period, as well as challenges faced by those unable to move); Lisa R. Pruitt & Bradley E. Showman, *Law Stretched Thin: Access to Justice in Rural America*, 59 S.D. L. REV. 466, 481, 481 n.53 (2014) (discussing recent trend of population loss in rural America and young people's tendency to move to cities).

3. John Cromartie, *Rural Areas Show Overall Population Decline and Shifting Regional Patterns of Population Change*, AMBER WAVES (Sept. 5, 2017), https://www.ers.usda.gov/amber-waves/2017/september/rural-areas-show-overall-population-decline-and-shifting-regional-patterns-of-population-change/ [https://perma.cc/DRJ9-4YZU].

commentators to deem these regions as increasingly "left behind" in the calculus of national economic development.[4]

The question before the country is whether these trends should be left to run their course. Should these "left behind" localities be allowed to dwindle out of existence? Or is some form of intervention warranted to stop or reverse large-scale patterns of rural socioeconomic decline?[5] Many advocate non-intervention, insisting that the rural way of life is simply too inefficient to sustain and that rural populations—still about one seventh of the national population[6]—should instead be incentivized or helped to relocate en masse to cities.[7] Proponents of this view tend to insist both that nothing *should* be done to address rural decline, but also that nothing *can* be done—namely, no set of tools in law and policy is positioned to counteract the worldwide tidal waves of globalization, automation, and urbanization that drive these patterns.[8]

4. *See* Nicole Huberfeld, *Rural Health, Universality, and Legislative Targeting*, 13 HARV. L. & POL'Y REV. 241, 248 (2018) ("[T]he diseases and deaths of despair (suicide, chronic substance abuse, overdose) are both more prevalent and more deadly for rural populations."); Lisa R. Pruitt, *The Women Feminism Forgot: Rural and Working-Class White Women in the Era of Trump*, 49 U. TOL. L. REV. 537, 564 (2018) (suggesting that "lack of economic opportunity fueled [rural] working-class voter migration toward Trump."). For sociological literature examining rural voting patterns and socioeconomic trends, see ROBERT WUTHNOW, THE LEFT BEHIND: DECLINE AND RAGE IN RURAL AMERICA (2018); ARLIE RUSSELL HOCHSCHILD, STRANGERS IN THEIR OWN LAND: ANGER AND MOURNING ON THE AMERICAN RIGHT (2016); LOKA ASHWOOD, FOR-PROFIT DEMOCRACY: WHY THE GOVERNMENT IS LOSING THE TRUST OF RURAL AMERICA (2018); KATHERINE J. CRAMER, THE POLITICS OF RESENTMENT: RURAL CONSCIOUSNESS IN WISCONSIN AND THE RISE OF SCOTT WALKER (2016); Paige Kelly & Linda Lobao, *The Social Bases of Rural-Urban Political Divides: Social Status, Work, and Sociocultural Beliefs*, 84 RURAL SOCIO. 669 (2019); *see also* Timothy Meyer, *Misaligned Lawmaking*, 73 VAND. L. REV. 151, 221 (2020) (observing that failure to secure adequate trade adjustment programs to correspond with liberalized trade arrangements mean that those who lose out in liberalized trade (mostly rural communities) will continue to oppose it); Clara Hendrickson, Mark Muro & William A. Galston, *Countering the Geography of Discontent: Strategies for Left-Behind Places*, BROOKINGS (Nov. 2018), https://www.brookings.edu/research/countering-the-geography-of-discontent-strategies-for-left-behind-places/ [https://perma.cc/8YSN-QYCF]; *cf.* ORG. FOR ECON. COOP. & DEV., OECD RURAL POLICY REVIEWS: STRATEGIES TO IMPROVE RURAL SERVICE DELIVERY 24 (2010) (across OECD countries in Europe, remote rural regions show negative population growth, lower share of national Gross Domestic Product, lower Gross Domestic Product per capita, and lower sectoral productivity).

5. *Cf.* Eduardo Porter, *The Hard Truths of Trying to 'Save' the Rural Economy*, N.Y. TIMES (Dec. 14, 2018), https://www.nytimes.com/interactive/2018/12/14/opinion/rural-america-trump-decline.html [https://perma.cc/8UTV-MUDX].

6. ECON. RSCH. SERV., U.S. DEP'T OF AGRIC., RURAL AMERICA AT A GLANCE: 2018 EDITION 3 (2018) (rural America includes fourteen percent of national population).

7. *Cf.* David Schleicher, *Stuck! The Law and Economics of Residential Stagnation*, 127 YALE L.J. 78, 82–85, 141–45 (2017) (arguing that policy approaches to geographic inequality should focus on removing barriers to mobility rather than place-based investments); David Swenson, *Most of America's Rural Areas Are Doomed to Decline*, THE CONVERSATION (May 7, 2019, 7:20 AM), http://theconversation.com/most-of-americas-rural-areas-are-doomed-to-decline-115343 [https://perma.cc/AU3S-DMV7].

8. *See, e.g.*, Swenson, *supra* note 7 (arguing that "what to do about rural economic and persistent population decline is the one area that has always confounded" presidential candidates visiting Iowa); Porter, *supra* note 5 ("One thing seems clear to me: nobody—not experts or policymakers or people in these communities—seems to know quite how to pick rural America up.").

As a threshold matter, this Article insists that intervention is indeed warranted and that in fact, we fail to nurture rural livelihoods to our own collective detriment. Rural communities remain essential to a functioning, resilient nation.[9] The full spectrum of rural communities' worth and potential is outside the Article's scope. But the current and possible contributions of the small towns and remote counties characterized by greater expanses of land and sparser populations are not insignificant.[10] Rural communities and workers produce the bulk of the nation's food and energy and steward eighty percent of the country's land mass and its associated ecosystem services.[11] They are an integral part of the national political community.[12] In the face of the COVID-19 crisis, they have offered an alternative to urban lifestyles that have become newly stressed, where skyrocketing housing costs were already prohibitive for many.[13] The need to intervene stems not from nostalgia for a mythologized, antiquated rural idyll, but more from the urgency of envisioning a healthy and modernized rural future as a necessary part of an interdependent national system.[14]

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9. Laurie Ristino, *Surviving Climate Change in America: Toward a Rural Resilience Framework*, 41 W. NEW ENG. L. REV. 521, 525–30 (2019).

10. Eisenberg, *supra* note 2, at 199–200 (discussing definitions of rural as characterized by lower population density and distance from urban centers).

11. *Cf.* ORG. FOR ECON. COOP. & DEV., *supra* note 4, at 20, 56 (calling for improvements in place-based rural investments and service delivery because of incremental benefits to society as a whole, including taking advantage of human and natural resources located in rural areas); Ristino, *supra* note 9, at 522–28 (arguing rural America has key role to play in national resilience and is neglected to our collective detriment because it is locus of nation's food and fiber provisioning, as well as ecosystem services including clean air, clean water, climate mitigation functions, and biodiversity).

12. *See generally* Rick Su, *Democracy in Rural America*, 98 N.C. L. Rev. 837 (2020).

13. *See, e.g.*, Ruth Bender, *Escape to the Country: Why City Living Is Losing Its Appeal During the Pandemic*, WALL ST. J. (June 21, 2020, 11:00 AM), https://www.wsj.com/articles/escape-to-the-country-why-city-living-is-losing-its-appeal-during-the-pandemic-11592751601 [https://perma.cc/S2FG-HQNV]; Elizabeth A. Andrews & Jesse Reiblich, *Reflections on Rural Resilience: As the Climate Changes, Will Rural Areas Become the Urban Backyard?*, 44 WM. & MARY ENV'T L. & POL'Y REV. 745, 774 (2020).

14. *Cf.* ORG. FOR ECON. COOP. & DEV., *supra* note 4, at 3. Recent devastating Australian bushfires that killed dozens of people and millions of animals provide a tragic example of rural significance: intensive indigenous controlled burning practices might have helped prevent or mitigate the fires, but the largely urbanized Australian population has been dismissive of these traditions. Jason Scott, *There's a 60,000-Year-Old Way to Help Stop Australia Burning*, BLOOMBERG (Dec. 16, 2019, 7:00 AM), https://www.bloomberg.com/news/articles/2019-12-16/there-s-a-60-000-year-old-way-to-help-stop-australia-burning [https://perma.cc/TT7H-9579]. For analysis on comparable tensions in the United States, see Tony Marks-Block, Frank K. Lake & Lisa M. Curran, *Effects of Understory Fire Management Treatments on California Hazelnut, an Ecocultural Resource of the Karuk and Yurok Indians in the Pacific Northwest*, 450 FOREST ECOLOGY & MGMT. 1 (2019), https://www.sciencedirect.com/science/article/pii/S0378112719306826?via%3Dihub [https://perma.cc/7RFR-B5ER]; FOREST SERV. PAC. SW. REGION, U.S. DEP'T OF AGRIC., SOMES BAR INTEGRATED FIRE MANAGEMENT PROJECT: FINAL ENVIRONMENTAL ASSESSMENT (2018), https://www.fs.usda.gov/nfs/11558/www/nepa/106291_FSPLT3_4291171.pdf [https://perma.cc/9554-UDA9]; Mejs Hasan, *Native Tribes Are Taking Fire Control into Their Own Hands*, WIRED (Aug. 9, 2018, 2:57 PM), https://www.wired.com/story/wildfires-native-tribes-controlled-burns/ [https://perma.cc/NLU5-95X4]; *see also* Stephen R. Miller et al., *Planning for Wildfire in the Wildland-Urban Interface*, ADVOCATE, June–July 2016, at 42.

More centrally, the Article argues that the idea that we lack the law and policy tools to counteract rural socioeconomic decline overlooks important historical precedents that are critical to informing a more fruitful and equitable path forward.[15] This discussion focuses on the tool of economic regulation, or government oversight of entry, exit, and participation parameters for service providers in certain industries.[16] In particular, the regulatory apparatus governing infrastructure industries for the century from the 1880s to the 1970s reveals the unique power of economic regulation to support and sustain rural communities.[17]

This argument about the import of economic regulation to rural communities has four components. First, rural diseconomies of scale—the higher costs per capita and lower returns on investment associated with rural service provision due to lower population density—must be understood as a keystone question as to whether and how rural communities can gain access to the services and resources they need to survive.[18] Rural communities' struggle to achieve economies of scale means they are naturally disadvantaged in attracting most types of resources, ranging from public education funding to hospitals to private housing developers.[19] Limited access to fundamental amenities, such as affordable transportation and broadband internet, plays a substantial role in today's rural

15. *See generally* William Boyd, *Just Price, Public Utility, and the Long History of Economic Regulation in America*, 35 YALE J. ON REGUL. 721 (2018).

16. Orly Lobel, *The Renew Deal: The Fall of Regulation and the Rise of Governance in Contemporary Legal Thought*, 89 MINN. L. REV. 342, 364 (2004) (differentiating economic regulation (interventions into markets) and social regulation ("aimed at enhancing health, safety, environmental quality, equal opportunity, and quality of life")); *see also* Joseph D. Kearney & Thomas W. Merrill, *The Great Transformation of Regulated Industries Law*, 98 COLUM. L. REV. 1323, 1327 (1998) (differentiating economic from social regulation and observing unique relevance of economic regulation to "six core regulated industries" including common carriers (railroads, airlines, trucks, and telecommunications companies) and public utilities (electricity and natural gas)).

17. *See* discussion *infra* Section II.A; *see also* K. Sabeel Rahman, *Infrastructural Regulation and the New Utilities*, 35 YALE J. ON REGUL. 911, 913 (2018) (defining infrastructure as "those goods and services that are essential, upon which much of our economic and social life are built. While conventionally the idea of 'infrastructure' might evoke images of roads and bridges, the concept is much broader . . . also describ[ing] a wider range of goods and services, which together operate at scale, enable widespread downstream uses, and thus serve as foundational necessities for economic and social life.").

18. *See* discussion *infra* Part I; ORG. FOR ECON. COOP. & DEV., *supra* note 4, at 24, 26–27; Janice Probst, Jan Marie Eberth & Elizabeth Crouch, *Structural Urbanism Contributes to Poorer Health Outcomes for Rural America*, 38 HEALTH AFFS. 1976, 1980 (2019) (describing inefficiencies stemming from population sparseness and greater distances as barriers to effective rural service provision).

19. Eisenberg, *supra* note 1, at 194; Debra Lyn Bassett, *Ruralism*, 88 IOWA L. REV. 273, 282–83 (2003); Lisa R. Pruitt, *Spatial Inequality as Constitutional Infirmity: Equal Protection, Child Poverty and Place*, 71 MONT. L. REV. 1, 6 (2010) [hereinafter Pruitt, *Spatial Inequality*]; *see also* Lisa R. Pruitt & Beth A. Colgan, *Justice Deserts: Spatial Inequality and Local Funding of Indigent Defense*, 52 ARIZ. L. REV. 219, 312 (2010) (discussing delivery of indigent defense services) [hereinafter Pruitt & Colgan, *Justice Deserts*]; Probst et al., *supra* note 18.

socioeconomic challenges.[20] The question of whether to maintain or extend such amenities to under-served communities largely drives the conversation on whether rural populations can or should be sustained at all.[21] A common instinct is to direct scarce resources to population centers that offer greater returns on investment for more recipients, raising the question of whether, how, and why rural communities can be adequately served despite appearing not to offer the "best" use of resources.

Second, the regime regulating infrastructure industries from the 1880s to the late twentieth century showed that measures to ensure rural access to the services that precede economic growth were key to protecting and cultivating rural communities.[22] In other words, this regime helped overcome the natural barrier rural diseconomies of scale pose to accessing the infrastructure that any community needs to thrive.[23] The term, "infrastructure," can describe "a wide range of goods and services"; throughout U.S. history, the infrastructure concept has encompassed at one time even the provision of milk.[24] But much of the discussion of this regulatory genre focuses on what were once known as the regulated industries, including common carriers (trains, trucks, buses, and airlines) and utilities (telecommunications, electricity, and natural gas).[25]

Until relatively recently, economic regulatory policies embraced the idea that rural communities, in light of their remoteness and smaller populations, needed protection from service providers' unilateral, profit-driven decision-making, which would tend to motivate those providers either not to serve

20. Eisenberg, *supra* note 1, at 225–26; ORG. FOR ECON. COOP. & DEV., *supra* note 4, at 3, 16 (observing that all OECD countries, including the United States, face a significant challenge to ensure "that rural residents and firms have access to an appropriate set of public and private services," without which development potential can be limited; "[w]hen statistics are collected and compared using different types of territory, it is usually possible to see if there are differences in the level of service available across places. In general we find fewer and weaker services in rural than in urban regions."); Probst et al., *supra* note 18, at 1979 (discussing biases in health care toward large population centers).

21. *Cf.* Schleicher, *supra* note 7, at 106, 113 (observing problem arising from mismatch between state and local fiscal capacity to provide services and residents' needs for such services); Shelley Welton & Joel Eisen, *Clean Energy Justice: Charting an Emerging Agenda*, 43 HARV. ENV'T L. REV. 307, 325–28 (2019) (noting the question of whether rural communities should be cross-subsidized by urban ones).

22. *See* discussion *infra* Section II.A.

23. *See generally* Paul Stephen Dempsey, *Transportation: A Legal History*, 30 TRANSP. L.J. 235 (2003) [hereinafter Dempsey, *Legal History*]; Paul Stephen Dempsey, *The Dark Side of Deregulation: Its Impact on Small Communities*, 39 ADMIN. L. REV. 445 (1987) [hereinafter Dempsey, *The Dark Side*]; Edwin B. Parker, *Closing the Digital Divide in Our Rural America*, 24 TELECOMMS. POL'Y 281, 282 (2000) ("[T]he two major barriers to rural economic growth are distance and lack of economies of scale . . . .").

24. K. Sabeel Rahman, *Challenging the New Curse of Bigness*, AM. PROSPECT, Fall 2016, at 68, 70; *see also* Kearney & Merrill, *supra* note 16.

25. *See* Kearney & Merrill, *supra* note 16, at 1327 (analyzing past twenty-five years of changes in economic regulation of common carriers and public utilities).

rural communities or to charge them substantially higher prices.[26] Under the germinal 1887 Interstate Commerce Act (ICA) and subsequent regimes enacted for a variety of industries, common carriers and public utilities were bound by a principle of non-discrimination among localities and mandates to provide universal service at "just and reasonable" rates.[27] Cross-subsidization and resource bundling helped to finance entry into less-profitable places.[28] These protections were understood at the time as anticipating and preventing the potential for markets to fail to provide sufficient services to small and remote communities; failing to serve such communities was seen as both unfair and contrary to national interests.[29] Equitable rural access to infrastructure services in turn promoted the growth of local and regional economies and connected rural communities, literally and symbolically, to the rest of the country.[30]

Third, the deregulatory era then served to prune small and remote localities off the national systems on which they depended. Following a "vigorous and sustained critique" of existing regulations, reforms such as the Airline Deregulation Act of 1978, the Staggers Rail Act and Motor Carrier Act of 1980, and other developments in transportation and telecommunications in particular replaced principles of non-discrimination and universal service with regimes favoring competition.[31] Proponents of deregulation insisted—arguably unrealistically—that market-driven regimes would still serve the aim of providing universal service.[32] Yet, with the elimination of strong mandates to serve rural communities, markets largely redirected services to more populated areas that wielded providers more profits.[33] After widespread and abrupt departures by common carriers, for instance, this transformation left rural communities to "wither on the vine" or die "like a human limb or organ starved of oxygen by an artery

26. *See* discussion *infra* Sections II.A, II.B; *see also, e.g.*, 17 CONG. REC. 3,877–78 (1886) (senators discussing need to account for disadvantages for rural and remote locales in accessing fair railroad rates); Michal S. Gal, *Size Does Matter: The Effects of Market Size on Optimal Competition Policy*, 74 S. CAL. L. REV. 1437, 1438 (2001); Anderson, *supra* note 2, at 538 (discussing inevitability of decline where "weak cities" are left by federal and state governments to address infrastructure spending as a local task). *See generally* Boyd, *supra* note 15.

27. Interstate Commerce Act of 1887, Pub. L. No. 49-104, 24 Stat. 379. *See generally* Kearney & Merrill, *supra* note 16, at 1331–32.

28. *See generally* Kearney & Merrill, *supra* note 16, at 1328; Meyer, *supra* note 4, at 184–85.

29. 17 CONG. REC. 3,877–78 (1886) (discussion among Senators about fairness to residents of interior states in benefiting from equal railroad tariffs, and also highlighting concerns about facilitating low-cost export of crops produced in such states for national benefit).

30. *See* Dempsey, *The Dark Side*, *supra* note 23, at 458–59.

31. William Boyd, *Public Utility and the Low-Carbon Future*, 45 ENV'T L. REP. NEWS & ANALYSIS 10788, 10791 (2015); Boyd, *supra* note 15, at 727; Airline Deregulation Act of 1978, 49 U.S.C. § 1301; Staggers Rail Act of 1980, 49 U.S.C. § 10101; Motor Carrier Act of 1980, 49 U.S.C. § 10101.

32. *See* Boyd, *supra* note 15, at 727; Dempsey, *The Dark Side*, *supra* note 23, at 454.

33. Dempsey, *The Dark Side*, *supra* note 23, at 455.

made impassable by a tenacious blood clot."[34] In light of continued rural importance to national interests, these infrastructure industries' abandonment of rural communities during this era should be viewed as a series of market failures that now warrant correction.[35]

Fourth and finally, embracing a new conception of infrastructure can help reconnect rural communities to the national systems that they need to survive through corrective interventions into infrastructure markets. This Article focuses on the rural relationship to transportation and telecommunications markets in particular as prominent historic instances of economic regulation and subsequent deregulation.[36] This discussion can in turn illuminate the role for economic regulation of markets allocating other important resources, such as energy, healthcare, and even access to grocery stores.[37] In order for policymakers to fully understand and meet the needs of rural communities, the concept of "infrastructure" should be broadened. Strategic interventions to correct infrastructure markets that exclude or disadvantage rural communities will in turn serve the dual goal of counteracting the cycle of rural socioeconomic decline while furthering national resilience.[38]

Two overarching points contextualize these arguments. First, the effects of deregulation are a missing piece of today's dominant narrative about rural decline. Many attribute rural decline to organic operations of markets or

34. *Id.* at 446, 463 ("Unfortunately, the literature criticizing the previous regime of regulation, and applauding the benefits of deregulation, tends to gloss over one of deregulation's major costs—its impact upon individuals who reside in America's small towns and rural communities."); *id.* at 447 ("Transportation was the first American industry to be regulated and, paradoxically, the first to be significantly deregulated."); Paul W. Barkley, *The Effects of Deregulation on Rural Communities*, 70 AM. J. AGRIC. ECON. 1091, 1093–95 (1988); Dempsey, *Legal History*, *supra* note 23, at 238, 239–40 ("Any region, which loses access to the [transportation] system, and thereby the means to participate in the broader market for the exchange of goods and services, will wither on the vine.").

35. *Cf.* John M. Newman, *Procompetitive Justifications in Antitrust Law*, 94 IND. L.J. 501, 509–10 (2019) (providing "brief primer" on market-failure approach, where "market failure occurs when the relevant market produces outcomes that are less efficient than they might be," with efficiency generally measured as whether losers in transitions are somehow compensated for their losses).

36. *See generally* Dempsey, *Legal History*, *supra* note 23 (discussing the regulation and deregulation of transportation).

37. *Cf.* William Boyd, *Public Utility and the Low-Carbon Future*, 61 UCLA L. REV. 1614, 1620 (2014) (arguing that "a revitalized notion of public utility—one that sees it less as an obstacle to markets and innovation and more as an 'instrument of the commonwealth'—could play an important role in the effort to secure a low-carbon future"). Unique legal regimes shaping sectors such as energy also suggest that they are worthy of their own, separate inquiry as it relates to this Article's themes. Rural communities arguably bounced back from energy deregulation more than in other sectors; the proliferation of rural electricity cooperatives filled in much of the vacuum left by firms' exit. *See generally* Debra C. Jeter, Randall S. Thomas & Harwell Wells, *Democracy and Dysfunction: Rural Electric Cooperatives and the Surprising Persistence of the Separation of Ownership and Control*, 70 ALA. L. REV. 361 (2018) (discussing the benefits of Rural Electric Cooperatives).

38. *Cf.* Rahman, *supra* note 24, at 69–70 (noting revived interest today in the public utility tradition and arguing that historical public utility concepts can be adapted across various modern regulatory policy debates).

other faceless culprits, such as globalization and automation.[39] This discussion shows that rural decline was undoubtedly in part a foreseeable consequence of a large-scale movement to favor consumer choice and service providers' profits over measures designed to actively sustain rural communities and the positive externalities that they generate.[40] It seems almost disingenuous for a country to facilitate a mass exit of the infrastructure services necessary for economic stability and growth from entire regions, and then to lament those regions' isolation and lack of economic viability.[41]

Second, this discussion is also central to questions surrounding the "urban/rural divide" that stymies commentators today.[42] The need to reconnect rural America to national systems is discussed here in a literal sense as to actual, physical systems—rural communities are disproportionately cut off from services like broadband internet infrastructure, a utility which most agree today is what electricity was a century ago.[43] But the need to reconnect rural communities to national systems is also meant in a more allegorical sense. Rural communities are isolated not just physically, but also culturally, politically, and

39. *See* Eisenberg, *supra* note 1, at 193 (discussing dominant discourse in which rural decline is "no one's fault"); *cf.* Boyd, *supra* note 37, at 1620 (arguing that "a broader notion of public utility offers a possible normative and conceptual frame for moving beyond the false separation of markets and regulation"); Lina Khan, *The New Brandeis Movement: America's Antimonopoly Debate*, 9 J. EUR. COMPETITION L. & PRAC. 131, 132 (2018) (discussing tenet of New Brandeisian movement that "[t]here are no such thing as market 'forces'" and that "the political economy is structured only through law and policy").

40. *See* Boyd, *supra* note 37, at 1620 (describing "sustained intellectual assault" from 1960s forward mounted by economists and lawyers that served to diminish the notion of the import of the public utility).

41. *See* ORG. FOR ECON. COOP. & DEV., *supra* note 4, at 26, 35 (noting that "[t]ransport infrastructure policies have been commonly used by governments as the main means to improve accessibility to remote peripheral areas and to promote economic development. . . . [G]ood infrastructural endowment is essential to achieve economic growth" and "[t]he availability of certain services has . . . become a pre-condition for the viability of a particular place"); Schleicher, *supra* note 7, at 145 (differentiating between prosperous regions and stagnant ones); Ganesh Sitaraman, Morgan Ricks & Christopher Serkin, *Regulation and the Geography of Inequality*, 70 DUKE L.J. (forthcoming 2021), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3527055 (noting that the effects of deregulation on geographic inequality have been predictable but too often unacknowledged).

42. *See generally* Emily Badger, *How the Rural-Urban Divide Became America's Political Fault Line*, N.Y. TIMES: THE UPSHOT (May 21, 2019), https://www.nytimes.com/2019/05/21/upshot/america-political-divide-urban-rural.html [https://perma.cc/9YWB-9BXM] (providing background on the urban/rural divide).

43. *See LIFT America: Modernizing Our Infrastructure for the Future: Hearing on H.R. 2741 Before the H. Comm. on Energy & Com.*, 116th Cong. (2019) (statement of David A. Lyons, Professor, B.C. L. Sch.); *2018 Broadband Deployment Report*, FCC (Feb. 2, 2018), https://www.fcc.gov/reports-research/reports/broadband-progress-reports/2018-broadband-deployment-report [https://perma.cc/JZ4T-F6QW] (showing 70% of rural and 64% of Tribal areas had access to broadband internet compared to 90.5% in urban areas).

rhetorically.[44] It seems natural, in fact, that a response to the "urban/rural divide" should involve "urban/rural reconnection."[45]

These proposals raise several important questions, in addition to ever-present political obstacles to reform. What about unfairness to urban communities and the environmental problems associated with directing scarce resources to sparser populations?[46] What about critiques of economic regulation, ranging from promoting inefficiency and consumer costs to problems with the accountability and effectiveness of the administrative apparatus that enforces them?[47] Does it matter that rural voters tend to disfavor government intervention, and that this Article's proposals would likely not be embraced by a majority of rural residents?[48] Even if interventions were pursued, how would policymakers make difficult choices about where to intervene, given that not all rural communities could be salvaged or revitalized?

These concerns are addressed throughout the Article. Significantly, these proposals are not presented as mere altruism for potentially skeptical rural communities, but as an important part of a collective problem. This

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44. While much of the commentary on rural America today focuses on the alienation of the white rural working- and middle-class, physical, cultural, and economic isolation are also deep concerns for rural communities of color. Rural communities of color in poverty in the United States quite literally experience some of the worst living conditions in the developed world. Philip Alston, U.N. Special Rapporteur on Extreme Poverty & Hum. Rts., *Statement on Visit to the USA*, OFF. OF THE HIGH COMM'R FOR HUM. RTS. (Dec. 15, 2017), https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=22533 [https://perma.cc/EY8L-PSF4]; *see also* Maybell Romero, *Viewing Access to Justice for Rural Mainers of Color Through a Prosecution Lens*, 71 ME. L. REV. 227, 228, 234–35 (2019) (discussing limited access to justice for rural communities of color).

45. *See* Bill Lindeke, *Intercity Rail Would Bridge Minnesota's So-Called "Rural-Urban Divide,"* STREETS.MN (Feb. 24, 2020), https://streets.mn/2020/02/24/intercity-rail-would-bridge-minnesotas-so-called-rural-urban-divide/ [https://perma.cc/4GYM-8LBQ] (suggesting that an intercity railway would bridge the rural/urban divide by facilitating travel between smaller and larger cities); Sheryll D. Cashin, *Localism, Self-Interest, and the Tyranny of the Favored Quarter: Addressing the Barriers to New Regionalism*, 88 GEO. L.J. 1985, 2048 (2000) (arguing that although equity has been most important justification for devolved governance, localist strategies dependent on voluntary cooperation fall victim to power dynamics that fuel regional inequities); Steve Craig, *"The More They Listen, the More They Buy" Radio and the Modernizing of Rural America, 1930–1939*, 80 AGRIC. HIST. 1, 3 (2006) ("As radio helped dispel rural isolation, it also served to convey and reinforce the notion of a single, American national identity."); RICHARD J. ORSI, SUNSET LIMITED: THE SOUTHERN PACIFIC RAILROAD AND THE DEVELOPMENT OF THE AMERICAN WEST (2005) (development of rail system prompted corporations to view United States as unified national economy rather than series of regional economies).

46. David Schleicher, *Surreply: How and Why We Should Become Un-Stuck!*, 127 YALE L.J.F. 571, 579 n.34 (2017); *cf.* KATE ARANOFF, ALYSSA BATTISTONI, DANIEL ALDANA COHEN & THEA RIOFRANCOS, A PLANET TO WIN: WHY WE NEED A GREEN NEW DEAL 129 (2019) (describing "urbanists' chauvinist fantasy that we could all live in Manhattan-like cities, walking and biking everywhere with a tote bag loaded with ramps, smiling smugly at our green virtuosity").

47. *See* Boyd, *supra* note 31, at 10791–92 (detailing critiques of economic regulatory frameworks); Hannah J. Wiseman, *Remedying Regulatory Diseconomies of Scale*, 94 B.U. L. REV. 235, 237 (2014).

48. *Cf.* HOCHSCHILD, *supra* note 4, at 8–10 (discussing conservative rural voting patterns despite apparent rural need for increased government assistance).

discussion is also not merely a call to turn back the clock on regulation.[49] Varied means may accomplish the ends this discussion insists are necessary; if means other than regulation could accomplish those ends, those means should be considered too.[50] The discussion draws upon K. Sabeel Rahman's formula for conceptualizing modernized regulatory interventions in this era of "the new utilities."[51] Of course, any intervention will not be a panacea for widespread rural decline. Complementary policy efforts—such as increased anti-poverty initiatives, assistance for local governments, and planning for economic diversification—would need to be pursued in tandem with the proposals presented here if large-scale rural revitalization were to be achieved.[52]

In sum, this Article reveals that the need for legal intervention to ensure better service provision to rural communities is not merely a question of sentimentality, or even morality. We isolate and neglect rural communities to our own collective detriment. Infrastructure markets that exclude or disadvantage rural communities are not markets functioning optimally. The persistent challenge of limited rural economies of scale is a central, yet underappreciated keystone of this puzzle. It is past time to contemplate more robust, modernized interventions into infrastructure markets to counter rural communities' natural disadvantages, reconnect rural communities to the rest of the country, and help pursue a more resilient future in an era of poignant interdependence.

The Article proceeds in three parts. Part I defines "rural," describes modern rural conditions associated with widespread rural socioeconomic decline, and argues that diseconomies of scale are central to understanding today's rural challenges. Part II illustrates the unique power of economic regulation to sustain rural communities, tracing rural America's development from the late nineteenth century to the present and focusing on the role of regulation and deregulation of the transportation and telecommunications sectors in shaping rural welfare. This Part argues that

49. *Cf.* Rahman, *supra* note 17, at 915 (arguing that historical public utility concepts need to be adapted to policy debates of the current moment).

50. ORG. FOR ECON. COOP. & DEV., *supra* note 4, at 12 (suggesting that "we should not assume that only one type of service provider can provide a specific service"); s*ee also* Boyd, *supra* note 15, at 728 (contemplating whether "ideas of just price or public utility or economic justice could . . . be refashioned and redeployed in the face of current challenges").

51. K. Sabeel Rahman, *The New Utilities: Private Power, Social Infrastructure, and the Revival of the Public Utility Concept*, 39 CARDOZO L. REV. 1621, 1668–69 (2018).

52. *See* Eisenberg, *supra* note 2, at 220, 238 (advocating increased external support for rural local governments to provide basic services like building code enforcement); Eisenberg, *supra* note 1, 198–99 (advocating fairer allocations of resources to rural communities, including more robust anti-poverty efforts in light of rural poverty's disproportionately chronic nature); Ann M. Eisenberg, *Just Transitions*, 92 S. CAL. L. REV. 273, 330 (2019) (calling for sustainable economic diversification initiatives in rural communities historically reliant on mono-economies now in decline).

infrastructure industries' abandonment of rural communities in the deregulatory era amounts to a series of market failures because of how this abandonment undermined the many important positive externalities associated with rural development. Part III argues that in light of ongoing rural importance to national interests, more robust consideration of modernized market-correcting mechanisms is warranted for nurturing rural communities' economic growth and well-being, not just for transportation and telecommunications, but also for other markets that exclude and disadvantage rural communities. This Part proposes a broader conception of the idea of "infrastructure" and offers a normative assessment of how such interventions might be pursued.

I. RURAL CONDITIONS AND THE CHALLENGE OF DISECONOMIES OF SCALE

A. Rural Socioeconomic Decline

The question of the costs and benefits associated with a rural way of life has taken on some increased urgency of late. Rural communities' dramatic, consistent declines in population and increases in socioeconomic problems such as suicide, opioid addiction, and unemployment have all contributed to a desire to understand what factors drive these phenomena and whether they can or should be reversed or mitigated.[53] After the 2016 election of President Trump, commentary sought to understand his popularity with white rural voters, bringing more attention to the "urban/rural divide" associated with a wide set of issues ranging from racial polarization to disparate access to technology.[54]

Although rural localities are diverse and variable—and it is important not to fall into the trap of characterizing rural America as "a monolith in a perpetual state of decline"[55]—certain trends can be seen across rural places. The annual report of the U.S. Department of Agriculture Economic Research Service, *Rural America at a Glance*, describes today's rural socioeconomic challenges.[56] The Report first defines rural as "nonmetropolitan," (nonmetro) a designation estimated to encompass 46.1

53. *See* Hendrickson, Muro & Galston, *supra* note 4; ORG. FOR ECON. COOP. & DEV., *supra* note 4, at 11 (noting that "[w]hile there has been a longstanding interest in rural services, the severity and persistence of the recession has made the issue even more important. . . . [R]ural areas have been largely left to adjust to the recession on the basis of their own resources," even though they may be more dependent on public support for services).

54. *See* James Fallows, *The Rural-Urban Divide Is More Complicated Than You Think*, THE ATL. (May 28, 2019, 11:48 AM), https://www.theatlantic.com/notes/2019/05/rural-urban-divide-more-complicated-you-think/590326/ [https://perma.cc/U2NM-QCTE].

55. Ristino, *supra* note 9, at 528.

56. ECON. RSCH. SERV., U.S. DEP'T OF AGRIC., RURAL AMERICA AT A GLANCE: 2019 EDITION (2019).

million residents as of 2018, or 14.1 percent of the national population.[57] This designation applies to places that have "some combination of: 1. open countryside, 2. rural towns (places with fewer than 2,500 people), and 3. urban areas with populations ranging from 2,500 to 49,999 that are not part of larger labor market areas (metropolitan areas)."[58] Counties designated nonmetro can therefore contain substantial urban populations or be adjacent to urban centers.[59] From 2010 to 2018, populations grew in metropolitan (metro) counties and in nonmetro counties containing urban populations, while population declined in nonmetro counties without urban populations.[60] Everywhere saw employment growth except for nonmetro counties that lacked urban populations and were not adjacent to metro areas.[61] Growth was substantially slower in nonmetro counties generally. The Report continues:

> In addition to slower population growth, lower rates of labor force participation in nonmetro areas—due to an older, less educated population that is more likely to be disabled—also contributed to slower employment growth in nonmetro than in metro areas. Poverty rates are highest in the most rural, isolated settings, and the gap between poverty rates in these and other settings has grown. . . .
>
> Real personal income per person (PIPP) was significantly higher and grew faster in metro counties than in nonmetro counties during 2010–17.[62]

In an effort to capture how these trends are distributed with more nuance, sociologists Lawrence Hamilton et al. have suggested that today there are "four rural Americas," only one of which is prosperous. Those categories include (1) amenity-rich rural America; (2) chronically poor rural America; (3) resource-dependent, declining rural America; and (4) mixed amenity/decline rural America.[63] Underlying all of these categories is the question of whether and how rural communities have economic activity to sustain them. Amenity-rich rural America—which includes communities that enjoy "natural splendor," tourism activity, relative proximity to urban centers, and higher property values—is in a better position to sustain

57. *Id.* at 1–2.

58. *Rural Classifications: Overview*, U.S. DEP'T OF AGRIC.: ECON. RSCH. SERV., https://www.ers.usda.gov/topics/rural-economy-population/rural-classifications/ [https://perma.cc/7W99-GHPJ].

59. ECON. RSCH. SERV., *supra* note 56, at 1.

60. *Id.* at 2.

61. *Id.* at 2–3.

62. *Id.* at 1.

63. LAWRENCE C. HAMILTON, LESLIE R. HAMILTON, CYNTHIA M. DUNCAN & CHRIS R. COLOCOUSIS, PLACE MATTERS: CHALLENGES AND OPPORTUNITIES IN FOUR RURAL AMERICAS 6 (2008).

regional economic activity than its counterparts, while challenges with sustainable economic activity characterize the other three categories.[64]

The second and third categories—declining resource-dependent communities and communities suffering from chronic poverty—are arguably the most distressed and in need of attention today. These types of communities share some overlapping characteristics and some important differences. Resource-dependent communities in decline would include the timbering communities of the Pacific Northwest and deindustrializing regions of the Midwest. These communities have mostly conservative, white populations whose families have resided locally for multiple generations.[65] Communities struggling with chronic poverty, by contrast, mostly include populations of color. These populations are concentrated in African-American communities in the South, Native American reservations in the West, and fast-growing Latinx communities throughout the country, in addition to the majority-white populations of Appalachia.[66]

Although these categories of distressed rural localities may seem fundamentally different in some ways, two points are worth noting. First, white rural residents receive the lion's share of attention in the public discourse about "rural America."[67] But rural populations of color dealing with chronic poverty quite literally experience some of the worst living conditions in the developed world.[68] Second, resource-dependent rural communities may seem relatively privileged; they, at least, had something to lose in the first place by way of robust economic activity, unlike the chronically impoverished communities. But the logical conclusion of declining to intervene to mitigate or counteract these trends is that communities in decline are on track to become chronically impoverished if nothing is done. Across both categories, these populations are struggling with substance abuse and mental health crises, high rates of unemployment, and difficulty accessing services necessary to meet basic needs ranging from healthcare to clean drinking water to libraries to building code enforcement.[69]

The town of Cairo, Illinois, provides an illustrative example of what rural distress can look like today. Cairo's population was once 15,000, and it grew and was constructed as a home for 15,000 people living at a hub of river commerce.[70] Cairo suffered as a result of competition from railway and highway traffic and the loss of its largest employer, the Burkart Foam

64. *Id.*
65. *Id.* at 6–17.
66. *Id.* at 4, 15.
67. Eisenberg, *supra* note 1, at 191.
68. *See* Alston, *supra* note 44.
69. *See* Eisenberg, *supra* note 2, at 187–94.
70. *Id.* at 188.

Company.[71] Today, Cairo's population hovers just above 2,000. The majority-Black residents have had to deal with a proliferation of empty and dilapidated buildings, the closure of the town's last grocery store in 2015, and the condemnation of the town's last public housing complex in 2017.[72] Meanwhile, the prospect of local residents attracting new services and amenities, like a new public housing complex, seems grim in light of the lack of incentives for providers and developers.

A common proposal to address these problems is that, instead of pursuing place-based policies, rural residents should relocate to regions with more resources.[73] Where barriers to mobility exist, our focus should, it is argued, be on removing those barriers, rather than on efforts to revitalize distressed places. Of course, removing barriers to mobility would keep those seeking to relocate from being tethered to localities where they do not want to be.[74] But failing to acknowledge rural marginalization as a problem, and a structural one that should be addressed, raises troubling ethical, political, and logistical implications.[75] It is not clear, for instance, that a better life awaits residents relocating to cities, where housing costs and other challenges—most recently including the pandemic-related dangers associated with population density—may simply bring new forms of suffering.[76] Although the prospect of attempting wholesale rural

71. *Id.* at 194–95.

72. *Id.* at 195–96; *see also* Kirk Siegler, '*Nobody Cares About Cairo': Residents of Shrinking River Town Fight to Bring It Back*, NPR (June 16, 2018, 5:00 AM), https://www.npr.org/2018/06/16/618959048/nobody-cares-about-cairo-residents-of-shrinking-river-town-fight-to-bring-it-bac [https://perma.cc/T37P-74W4]; Kirk Siegler, *Saving Cairo: A Once Thriving River Town Finds Itself On Life Support*, NPR (June 4, 2017, 5:00 AM), https://www.npr.org/2017/06/04/528650995/saving-cairo-a-once-thriving-river-town-finds-itself-on-life-support [https://perma.cc/K5SJ-7AZ].

73. *See The "Just Move" Argument: Reflections on Distributive Justice, Mobility, and Rural America*, YOUTH CIRCULATIONS (Feb. 26, 2020), http://www.youthcirculations.com/blog/2020/2/26/the-just-move-argument-reflections-on-distributive-justice-mobility-and-rural-america [https://perma.cc/YG8Y-Z7XN] (referring to "the pervasive public claim that rural individuals should 'just move'").

74. *Cf.* Sara Pratt, *Civil Rights Strategies to Increase Mobility*, 127 YALE L.J.F. 498 (2017) (acknowledging importance of mobility to reducing concentrated poverty and segregation).

75. *See* Anderson, *supra* note 2, at 542 (arguing that increasing geographic mobility is not enough to address rising social inequality and calling for "new antipoverty agenda" and investments in basic infrastructure in declining regions); Sheila R. Foster, *The Limits of Mobility and the Persistence of Urban Inequality*, 127 YALE L.J.F. 480, 487–90, 496–97 (2017) (discussing growing inequality within metro regions that makes migration from struggling regions to megacities less desirable than it may seem and questioning efficacy of "federal interventions that simply move people around"); Naomi Schoenbaum, *Stuck or Rooted? The Costs of Mobility and the Value of Place*, 127 YALE L.J.F. 458, 479 (2017) (discussing being "strongly embedded" in a community as explaining choices not to move, as opposed to more negative connotation of being "stuck").

76. *See* David Montgomery, *The Neighborhoods Where Housing Costs Devour Budgets*, BLOOMBERG: CITYLAB (Apr. 4, 2019, 5:30 AM), https://www.bloomberg.com/news/articles/2019-04-04/mapping-where-housing-costs-hit-budgets-the-most [https://perma.cc/2VCR-RQQV] (detailing problems in both rural and urban areas); Paul Stephen Dempsey, *Interstate Trucking: The Collision of Textbook Theory and Empirical Reality*, 20 TRANSP. L.J. 185, 230 n.170 (1992) (deregulation of bus

revitalization may be both daunting and complicated, it is also problematic to treat rural marginalization as nature simply running its course.[77]

At the broadest level, the discourse on rural communities today, in light of their increasingly distressed conditions, seeks to understand how these conditions came to be and what could be done to address them. The next sections seek to illuminate those questions by linking today's rural conditions to the fundamental question of rural economies of scale. Critically, this discourse has neglected the country's past efforts to account for rural diseconomies of scale and prevent the very form of rural stagnancy that we see today; in turn, then, the solution to rural marginalization must involve the question of rural diseconomies of scale.

B. Rural Diseconomies of Scale

The discussion in this section focuses on two important characteristics of rurality: remoteness from an urban center and relatively low population density.[78] Although definitions vary, the commonly understood characteristic of rural communities is that they have relatively few people living in a place that is relatively far from a population center and its associated amenities.[79] For example, consistent with the Department of Agriculture, the U.S. Census Bureau defines "rural" as anything that is not "urban," with "urbanized areas" defined as having a population of 50,000 or more, and "urban clusters" as having a population of between 2,500 and 50,000.[80] Of course, small urban centers and urban clusters, including towns with just a few thousand residents, may face issues similar to communities officially designated as rural. The proportion of people living in places designated as rural has dropped dramatically over the course of the past hundred years; the rural population was approximately sixty percent of the national population as of 1900, and today it is about fourteen percent.[81]

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industry resulted in increased isolation of rural residents from "society at large," and though "[a]n alternative for some elderly people is to move away from their homes in rural areas to an urban area . . . they no longer have the support of their local community network and . . . may require the support of human services agencies to remain independent." (quoting EILEEN S. STOMMES, U.S. DEP'T OF AGRIC., RECONNECTING RURAL AMERICA: REPORT ON RURAL INTERCITY PASSENGER TRANSPORTATION 31 (1989)).

77. *Cf.* Swenson, *supra* note 7 (arguing that policymakers should "seriously consider the fact that most rural areas will not grow").

78. Eisenberg, *supra* note 2, at 199–200.

79. *Id.*

80. *How Does the U.S. Census Bureau Define "Rural?"*, U.S. CENSUS BUREAU: RURAL AM., https://gis-portal.data.census.gov/arcgis/apps/MapSeries/index.html?appid=7a41374f6b03456e9d138cb014711e01 [https://perma.cc/YF7P-9FSJ].

81. CAROLYN DIMITRI, ANNE EFFLAND & NEILSON CONKLIN, ECON. RSCH. SERV., U.S. DEP'T OF AGRIC., THE 20TH CENTURY TRANSFORMATION OF U.S. AGRICULTURE AND FARM POLICY 3 (2005), https://www.ers.usda.gov/webdocs/publications/44197/13566_eib3_1_.pdf?v=7007 [https://perma.cc/WA2W-8ZJG].

Nonetheless, rural communities have faced consistent tensions in the context of their economic development, whether the community in question existed a century ago or today. Namely, by their nature, it is more difficult to form economies of scale in rural communities due to their low population density and remoteness from other economic activity.[82] This in turn means that it is more difficult for rural communities to attract resources because they offer less in exchange, whether in the form of profits or other forms of return on investment.[83] Rural diseconomies of scale catalyze the socioeconomic problems described above because residents have more limited access to services that could help address that distress.[84] The rural opioid crisis, for example, is exacerbated by more limited rural access to doctors.[85] In turn, the idea that rural America is too expensive to sustain shapes arguments that it is not worth intervening to counteract today's rural socioeconomic challenges.[86]

Commentators often refer to rural diseconomies of scale as an obstacle to rural development or service provision, but few have sought to explore this issue in more depth.[87] "Economies of scale" literature gained traction in the mid-twentieth century and originally focused on optimizing production levels within private enterprises.[88] Put simply, the idea is that the smaller the level of production is for a particular good or service, the more costs per unit the production will entail.[89] Producing a higher volume, up to a point,

82. Pruitt, *Spatial Inequality*, *supra* note 19, at 6; Pruitt & Showman, *supra* note 2, at 475, 501; Deirdre Purdy, Note, *An Economical, Thorough and Efficient School System and the West Virginia School Building Authority "Economy of Scale" Numbers*, 99 W. VA. L. REV. 175, 178–79 (1996); Theodore J. Fetter, *Improving Court Operations in Rural Areas*, 31 AM. U. L. REV. 255, 255–56 (1982).

83. ORG. FOR ECON. COOP. & DEV., *supra* note 4, at 18 ("Private services are made available when the service provider can operate at a profit. This means that there has to be enough demand by consumers to cover the cost of providing the service. In rural areas the private sector is less able to provide services that are readily available in urban settings.").

84. Eisenberg, *supra* note 2 (describing the downward socioeconomic spiral that can occur when economies of scale start to unravel due to population loss); ORG. FOR ECON. COOP. & DEV., *supra* note 4, at 24 ("Although some urban residents do not have access to specific services, particularly if they are provided through the market on a user pay basis, most services are generally available to urban residents in all income classes. On the other hand, in many rural areas, especially the more remote, certain services are not available, or are available at considerably higher cost and/or lower quality than in urban locations.").

85. *Amid Rural Doctor Shortage, Dozens Of Medical Workers Charged in Opioid Crackdown*, NPR (Apr. 20, 2019), https://www.npr.org/2019/04/20/715533601/amid-rural-doctor-shortage-dozens-of-medical-workers-charged-in-opioid-crackdown [https://perma.cc/W89A-RDHT].

86. Porter, *supra* note 5.

87. *See, e.g.*, Bassett, *supra* note 19, at 283 n.26; Pruitt & Showman, *supra* note 2, at 475.

88. Robert J. Tholkes & Charles H. Sederberg, *Economies of Scale and Rural Schools*, RSCH. RURAL EDUC., Fall 1990, at 9, 10–13 (providing review of literature on economies of scale from the 1950s through 1990); *see also* George J. Stigler, *The Economies of Scale*, 1 J.L. & ECON. 54 (1958).

89. Purdy, *supra* note 82, at 189 (summarizing economies of scale concept as idea that "a larger factory will produce cheaper widgets," but questioning the concept's applicability to schools); Fetter, *supra* note 82, at 256–57 (arguing that goal of achieving rural economies of scale relates to goal of

means a more efficient use of resources.[90] Thus, businesses "must operate at the optimum size" in order to "obtain maximum economies of scale."[91] A simple example of this might be the labor and expenses a baker would put into making a single cookie—still having to buy and measure all of the ingredients in bulk, mix them, shape the cookie, and bake the cookie—versus making an entire batch of cookies with only the slightly heightened proportionate amount of labor, mostly directed to shaping additional cookies.

A "diseconomy of scale," by contrast, exists when the average cost of production increases with increased output.[92] Rural population scarcity builds additional costs into the provision of virtually any product or service because of the costs associated with distance, such as needing to traverse the distance and increased uncertainty associated with that distance.[93] On the other side of that coin, because rural populations are more limited, there are fewer consumers to offset those higher costs, meaning rural diseconomies of scale will be more likely in most types of economic activity.[94] Drawing upon the cookie example, it would be as if the baker making the cookies had thirty customers for dozens of cookies within one mile, but then had to drive a small amount of cookies ten miles away for two customers; those latter customers do not necessarily seem worth the additional costs due to their diseconomies of scale for the cookies.

Thus, in the private sector, most companies would prefer to direct their services to urban centers because they can offer their products at a higher volume with lower relative costs.[95] Of course, urban communities, simply by having more people, also offer more demand for products. So, for example, a private internet service provider would want to establish itself to serve an urban community not just because the urban community would offer more consumers, but also because the provider would make a more

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achieving efficient use of resources, and often favors consolidation of resources); Donald J. Boudreaux & Roger Meiners, *Externality: Origins and Classifications*, 59 NAT. RES. J. 1, 4 (2019); Bradley T. Borden, *Taxing Shared Economies of Scale*, 61 BAYLOR L. REV. 721, 722–23 (2009) (describing the "cost-reducing potential of economies of scale" as "the decline in average cost per-unit as output rises").

90. Borden, *supra* note 89, at 724–25 (noting that production at too high a level produces diseconomies of scale).

91. *Id.* at 723.

92. *Id.* at 724.

93. ORG. FOR ECON. COOP. & DEV., *supra* note 4, at 25–26 (discussing higher costs per capita in smaller communities and increased costs associated with service provision to remote localities).

94. *See id*. at 3 (noting "delivering any particular service" is "more expensive in a rural location than in urban centres" because of lower population density, larger distances to travel, and smaller numbers of people that preclude economies of scale).

95. *Cf.* Borden, *supra* note 89, at 722–23 (noting businesses' motivations to create economies of scale due to their cost-reducing potential from decline in average cost per-unit as output rises).

efficient use of its own resources in yielding higher returns per capita.[96] Once a provider achieves a level of production and consumption that can be sustained, that threshold is considered to be "at scale." When it comes to industries with high fixed costs, such as the installation of permanent infrastructure fixtures, the prospect of rural investments seems all the less appealing.[97]

The aspiration to achieve economies of scale also arises in the context of public and quasi-public amenities, such as schools and hospitals.[98] Although schools and hospitals do not produce the goods initially contemplated by this theory, they do have outputs and operating costs.[99] The idea here, too, is that more output will tend to make for more efficient use of costs. Thus, a rural school or hospital that serves three people would likely be considered not "at scale."[100] The principle of the economy of scale favors consolidation, at least to an extent.[101]

When the question of "economies of scale" is applied to rural communities as a whole, their very existence—and the question of whether the broader community should support them—seems called into question.[102] Those who emphasize the primacy of economies of scale tend to suggest that declining rural communities are not self-sustaining enough to justify the public expenditures that they need to function.[103] A particular municipality's entire economic activity—local wages earned, property

96. *Cf.* Sharon Strover, *Reaching Rural America with Broadband Internet Service*, THE CONVERSATION (Jan. 16, 2018, 10:08 PM), https://theconversation.com/reaching-rural-america-with-broadband-internet-service-82488 [https://perma.cc/6P4D-FU79] (noting role of population sparseness and fewer customers from whom to recoup costs as reasons rural residents have limited access to quality internet service); ORG. FOR ECON. COOP. & DEV., *supra* note 4, at 3 (noting higher costs of service provision in rural areas).

97. ORG. FOR ECON. COOP. & DEV., *supra* note 4, at 33 (describing increase in minimum efficient scale in service provision due to technological change, as well as high fixed costs associated with technologies, both of which conflict with shrinking rural demand and minimal cost savings in rural communities); Borden, *supra* note 89, at 750 (describing small-scale output as a "typical barrier to entry" in a new market).

98. *See* Tholkes & Sederberg, *supra* note 88; Monica Giancotti, Annamaria Guglielmo & Marianna Mauro, *Efficiency and Optimal Size of Hospitals: Results of a Systematic Search*, PLOS ONE, Mar. 29, 2017, at 1, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5371367/ [https://perma.cc/6JVM-73N7]; *see also* ORG. FOR ECON. COOP. & DEV., *supra* note 4, at 16, 20–21 (suggesting that services can be grouped into three types: private, public (e.g., police protection, firefighting services, building inspection, or waste disposal), and collective/joint).

99. *See* Tholkes & Sederberg, *supra* note 88, at 10–11.

100. *See, e.g.*, H.R. 1109, 84th Gen. Assemb., 2d Extraordinary Sess. (Ark. 2004) (Arkansas law mandating school district consolidation or annexation when attendance drops below 350 students).

101. *See* Borden, *supra* note 89, at 723–24.

102. *See* ORG. FOR ECON. COOP. & DEV., *supra* note 4, 3 (observing that the high costs of rural service provision need to be weighed against the interests of society as a whole).

103. *See* Matthew Yglesias, *The Inefficiency of Rural Living*, SLATE (June 6, 2012, 10:13 AM), https://slate.com/business/2012/06/the-inefficiency-of-rural-living.html [https://perma.cc/4DSF-8RDK] (pointing out the inefficiency in providing services like broadband internet, brick-and-mortar mail, and medical services to rural communities).

taxes collected, and developers attracted, for example—may still be lower than the local and external public inputs that would be needed to meet residents' needs. Those inputs would also need to be disproportionately high on a per resident basis than they would for urban communities.

This tension raises the question of whether higher rural costs per capita mean that rural communities' existence cannot be justified, to the extent that their survival depends on disproportionately high public support and intervention.[104] Such diseconomies of scale are a constant concern underlying the question of whether and how public services should be provided to rural communities.[105] Rural communities are seen as a relatively inefficient use of resources; city-dwellers may resent the idea of having to "subsidize" rural life.[106] Diseconomies of scale also explain private enterprises' reluctance to locate in rural communities due to the more limited returns on their investments.

Proposals to pursue revitalization policies for rural communities need to account for the ever-present question of supposed rural inefficiency when measured on the basis of costs per capita. In later sections, this Article moves the discussion beyond what are ultimately relatively narrow questions of costs and return on investment. A community's worth and contributions to society, it is argued, cannot necessarily be summed up on an accounting sheet, a perspective that past regulatory policy seemed to embrace more readily.

II. RURAL AMERICA'S RELATIONSHIP WITH REGULATION

This Part provides a limited legal history of rural America and its relationship with economic regulation. Section II.A discusses late nineteenth- and early twentieth-century legal regimes that sought to protect rural communities and nurture their economic growth by regulating common carriers and public utilities. Section II.B moves to the mid- to late-century era of deregulation and its often-fatal effects for rural communities. Section II.C argues that the phenomena highlighted in II.B are an underappreciated part of the story of rural decline, and that the infrastructure industries' abandonment of rural communities during the deregulatory era should be recognized as a series of market failures that warrant correction.

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104. *See* Schleicher, *supra* note 7, at 143–45.

105. *See* Bassett, *supra* note 19, at 283 n.26.

106. *Cf.* ORG. FOR ECON. COOP. & DEV., *supra* note 4, at 31 (noting reduced willingness of national governments to subsidize rural service provision); Scott Wallsten, *Rural Broadband Subsidy Programs Are a Failure. We Need to Fix Them.*, THE HILL (Mar. 9, 2017, 1:20 PM), https://thehill.com/blogs/pundits-blog/technology/323200-rural-broadband-subsidy-programs-are-a-failure-we-need-to-fix [https://perma.cc/KJ5G-LUGF] (arguing that rural broadband subsidy programs have been wasteful and unfairly financed by all taxpayers, including low-income urban residents).

A. The Old Regime, 1870s-1970s: Ensuring Rural Access to Services

In the century prior to about 1970, federal economic regulatory policy embraced the idea that rural communities needed unique forms of protection if they were going to be able to survive. Indeed, there was more recognition generally that public intervention is a necessary precursor to private growth.[107] The 1887 Interstate Commerce Act (ICA), which introduced new regulations overseeing the railroad industry, reflected Congress's first significant intervention to control a major economic sector.[108] The ICA laid the groundwork for the next several decades of economic regulation of infrastructure industries by introducing the mandate for service providers not to discriminate among localities, to charge "reasonable and just rates," and to publish tariffs in the interest of transparency.[109]

The ICA's provisions "appl[ied] to any common carrier or carriers engaged in the transportation of passengers or property wholly by railroad, or partly by railroad and partly by water when both are used, under a common control, management, or arrangement," in interstate or international travel.[110] A common carrier was understood to be engaged in transportation of products or passengers for the benefit of the public, as opposed to those who typically engaged in ad hoc contractual arrangements.[111] The ICA also created the Interstate Commerce Commission (ICC) in order to implement and oversee the new regulatory regime.[112]

In the 1886 debates over the ICA, legislators consistently returned to the vulnerability of small and remote towns, as well as the "interior" of the country, to high rates and exploitation by unscrupulous railroad operators seeking to maximize their profits.[113] Common concerns included the risks

107. *See* Dempsey, *The Dark Side*, *supra* note 23, at 447–49.

108. Interstate Commerce Act of 1887, Pub. L. No. 49-104, 24 Stat. 379. The Supreme Court laid the foundation for Congress to pursue such a move a decade earlier with its decision in *Munn v. Illinois*, 94 U.S. 113 (1876), which established that state governments could regulate private businesses that affect public interests.

109. Interstate Commerce Act §§ 1, 2, 6.

110. § 1.

111. *Munn*, 94 U.S. at 121–32 ("[C]ommon carriers . . . are held to 'exercise a sort of public office,' and have public duties to perform. . . . [They stand] in the very 'gateway of commerce,' and take toll from all who pass."); Note, *National Transportation Policy and the Regulation of Motor Carriers*, 71 YALE L.J. 307, 307 (1961) ("A common carrier may be defined as one who holds himself out as willing to carry any or specified commodities for all who may choose to employ him; upon making this offer he becomes legally obligated to serve all shippers at reasonable rates and without discrimination. A contract carrier, on the other hand, is one who does not hold himself out to serve the public; he incurs no special legal obligations.").

112. Interstate Commerce Act § 11.

113. Congress's attention was brought to this topic by "a pre-Populist agrarian political movement" of farmers who "object[ed] to the excessively high rates being charged them by the

of the countryside depopulating, businesses having to close, and allowing or facilitating the concentrated growth of a few commercial centers if the railroads' ability to discriminate among localities remained unchecked.[114] For instance, Senator Camden of West Virginia commented that manufacturers and shippers in parts of the country with disadvantaged access to transportation "may be either forced into bankruptcy or compelled to remove their business to the cities or competitive railroad centers."[115] He observed that this would have "the effect of driving population and business enterprise from the country and the towns to the cities and centers of railroad competition, and of creating for one section over another section commercial advantages which no power ought to be permitted to exercise."[116]

Senator Miller of New York expressed a similar concern about commercial disadvantages to remote places and problems associated with compelling residents and businesses to move to cities. He proposed that "diversified industries should be spread all over the country and not brought together in a few great centers."[117] Miller argued that inequitable rail rates, by coercing relocation to urban centers for access to cheap transportation, were "making a few great centers rich—rich not out of newly created wealth, but rich simply because you transfer wealth from other portions of our country to those great centers."[118] Miller referred to "[t]he abnormal

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monopoly railroads for grain movements to eastern markets." Dempsey, *The Dark Side*, *supra* note 23, at 448.

114. *See* 17 CONG. REC. 3,872 (1886) (Senator Sherman of Ohio argued, "One of the great evils of our times in commercial transactions is the vast concentration of capital and labor in great commercial centers. What has built up Chicago? It is simply because Chicago has enormous advantages over every interior town."); 17 CONG. REC. 4,186–87 (1886) (Senator Camden, criticizing draft language limiting the non-discrimination principle, said, "In my judgment there can be no reason given for it except the reason to legislate in favor of the cities and the large competitive shipping points, to build them up and to depopulate the towns and the distribution of manufactories throughout the country. . . . I want to see cities grow, but they ought not to grow at the expense of the country at large."); 18 CONG. REC. 857 (1887) (Congressman Henderson argued, "Their coming builds up towns and enriches communities; so, too, their unjust management has often destroyed cities and towns and torn down hard-earned fortunes. Railroad owners must learn the new lesson that is coming to us all in this country, and that is to be content with a reasonable profit on investments, and that labor, small capital, and small shippers have their rights just as well as stock-owners and powerful shippers."); 17 CONG. REC. 7,281 (1886) (Congressman Reagan argued that allowing service providers to discriminate "enables the transportation companies to control the manufacturing interests of the country and to drive them from non-competitive points and from the rural parts of the country, where living is cheaper and health better, to the great commercial centers . . . This is a power which no government of a free people would dare to exercise, and which no wisely administered government would think of exercising, and yet the railroad companies demand and insist on the right to exercise this vast and dangerous power. And under it they are impoverishing some cities, towns, and communities, without any fault of theirs, and enriching others having no other merit to this favor than the arbitrary power of the transportation companies.").

115. 17 CONG. REC. 3,553 (1886).

116. *Id*.

117. 17 CONG. REC. 3,727 (1886).

118. *Id.*

growth of our great cities," attributing it "almost entirely to the discriminations of railroad companies."[119] He argued that, but for this discrimination, "instead of a few great and overgrown centers where wealth is accumulated enormously . . . there would now be scattered all over this broad country in every little village and hamlet the great industries which collect around a few great competing points."[120]

Legislators were not merely concerned with fairness to small and remote places and their residents, but also with the public benefits of having widespread, equitable access to affordable transportation, at least for shipping purposes.[121] Senator Cullom of Illinois remarked upon the benefits to consumers, arguing, "[e]very portion of this country . . . is alike interested in having the products of different sections of the country moved long distances at cheap rates, which benefit the people who require these products as well as the people who raise them."[122] He emphasized further that it was in "the interest of the whole country" that domestic products find a market somewhere, making this "not simply a question of whether Tom Jones can get his corn to market in Springfield," but rather, "what the general policy shall be in order to encourage commerce all over this land."[123]

Like today, the prospect of protecting remote and sparsely populated places had detractors. For instance, New York Senator Platt criticized the possibility of all localities along railroad branches receiving comparable rates regardless of distance traveled. Raising concerns mirroring the efficiency considerations outlined above, he questioned the wisdom of charging the same rates for near and remote places "without reference to the cost of construction or the amount of business which is to be upon those branches" for branches that ran "through a sparsely populated country . . . and where there is very little business and over a road which it has cost no

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119. *Id*.

120. *Id*. In a perhaps less sympathetic line of reasoning, some legislators reflected the view that urban communities generally were sites of moral decay and that rural communities should be sustained because the residents were more moral or industrious. *See*, *e.g.*, 17 CONG. REC. 4,404 (1886) (Senator Sherman arguing that railroad discrimination "destroys the smaller towns or communities, where vice does not prevail so largely as in great cities . . . where public opinion to a certain extent controls vice and controls all the habits of mankind. Corruption breeds in cities."); 17 CONG. REC. 3,877 (1886) ("There are a great many people in the cities. They sow not, neither do they spin.").

121. Indeed, the entire reason railroads were able to expand involved "the economic incentives of generous federal and state land grants, loans, bonds, purchases of stock, and remission of taxes" based on the recognition "that the economic development of the interior of the North American continent required that a transportation infrastructure be built." Dempsey, *The Dark Side*, *supra* note 23, at 448.

122. 17 CONG. REC. 3,867 (1886).

123. *Id.* at 3,867–68; *see also id.* at 3,876 (Senator Miller arguing that "[i]f the West can not find a market for its vast surplus, then New England, New York, and Pennsylvania will have no market for their manufactured products.").

less to build."[124] Much commentary seemed to agree that an overly strict rule could cause harm, and exceptions were built into the legislation based upon potential hardships to railroad operators.[125] The bill passed the Senate with 47 votes in favor, four votes against, and 25 absences on May 12, 1886, and it passed the House with 219 votes in favor, 41 votes against, and 58 absences on January 21, 1887.[126]

This discussion is not meant to suggest that the post-ICA railroad system was perfect; the evolution of the industry was always plagued by controversy, exploitative practices, and financial complexities.[127] The ICC was also not necessarily the most potent administrator, at least initially.[128] Nonetheless, the ICA's intervention was largely effective in enabling small, remote, and rural places to access rail lines. In 1917, the national core rail network for freight and passenger service had 254,000 miles, compared to 140,000 today.[129] A passenger during that era could travel from Maine to Florida without changing trains.[130] By 1929, "[a]lmost every town and village in the nation enjoyed rail passenger service."[131]

Rural access to the rail lines in turn yielded the positive, or at least insulating, effects for economic development in remote communities that the ICA's drafters anticipated. In the early twentieth century, "thanks to the railroads, corporations now saw the whole country as a unified market, encouraging businesses to expand beyond the borders of a particular state or region. America was now a national economy, rather than a series of

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124. 17 CONG. REC. 3,834 (1886).

125. *See*, *e.g.*, 17 CONG. REC. 3,870 (1886) (Senator Gorman of Maryland stating, "every railroad expert, I think, who appeared before the committee . . . admit [sic] that a rule which prohibits a railroad company from charging more for hauling a car-load 300 miles than is charged for hauling a car-load 1,000 miles over the same road and in the same direction is just and proper; but they all contend that there are innumerable instances constantly occurring where exceptions must be made, or great injustice would result. Therefore, the rule should not be a rigid one[.]").

126. 17 CONG. REC. 4,423 (1886); 18 CONG. REC. 881 (1887).

127. *See* CHRISTIAN WOLMAR, THE GREAT RAILROAD REVOLUTION: THE HISTORY OF TRAINS IN AMERICA 325–26 (2012) (discussing Southern courts' role in convicting large groups of freed Black people through the early 1900s so that their cheap prison labor could be used for railroad construction); *id.* at 207 (discussing widespread rail company bankruptcies during 1890s due to economic downturn); ORSI, *supra* note 45, at 298 (discussing controversy over rate regulation in early 1900s).

128. *See* WOLMAR, *supra* note 127, at 308–19 (describing railway displacement of Native Americans, corruption among rail executives, and rampant railway company consolidation despite the advent of the ICC, as well as the ICC's ineffectuality until 1906).

129. *See id.* at 308–09; AM. SOC'Y OF CIV. ENG'RS, 2017 INFRASTRUCTURE REPORT CARD 71 (2017).

130. WOLMAR, *supra* note 127, at 308–09.

131. Dempsey, *The Dark Side*, *supra* note 23, at 450; *see also* Jonathan English, *Why Did America Give Up on Mass Transit? (Don't Blame Cars.)*, BLOOMBERG: CITYLAB (Aug. 31, 2018, 10:38 AM), https://www.bloomberg.com/news/features/2018-08-31/why-is-american-mass-transit-so-bad-it-s-a-long-story [https://perma.cc/AEH2-XB7U] (observing at the turn of the last century, "[h]uge networks of 'interurbans'—a kind of streetcar that ran deep into rural areas—spread out from cities across the country").

regional ones[.]"[132] As an example, historian Richard Orsi argues that the Southern Pacific Railroad played an integral, even intentional role, in Western "regional economic development, small-farm settlement, agricultural change, and environmental policy."[133] These relationships make sense, ultimately; a functioning, affordable transportation sector is a necessary precursor to economic growth, just as the absence of transportation will necessarily stifle commerce.[134]

Congress amended the ICA with the Motor Carrier Act of 1935 (MCA) to bring trucks and buses under the ICC's purview alongside railroads, in significant part due to the railroads' insistence that it was unfair for them to be the sole transportation industry impeded by strict regulation.[135] Similar strains in public sentiment also drove the MCA's passage: competition among truckers during the Great Depression had reached extreme levels, and "[s]ome feared that continuation of such unrestrained market forces might lead to a loss of service or higher prices for small shippers and communities, leaving the surviving carriers to concentrate on high-revenue traffic."[136]

Rural priorities seemed more mixed during debates over the MCA as compared to the ICA.[137] During the 1934 debates over the bill in the House of Representatives, one congressman submitted telegrams from constituents pointing out that rural communities who still lacked rail access depended disproportionately on the trucking industry. Federal regulation of trucks, they argued, would increase the costs associated with trucking and have an adverse impact on small and independent carriers.[138] A representative of the

132. WOLMAR, *supra* note 127, at 309–10.

133. ORSI, *supra* note 45, at xvii.

134. Dempsey, *The Dark Side*, *supra* note 23, at 463 ("Trade routes are the arteries of the economic system, linking every city, town, and hamlet to the life blood of commerce. 'Transportation and economic development are mutually interdependent—transportation improvements stimulate economic growth, and that growth, in turn, increases the demand for transportation.' The converse is also true." (quoting Abdussalam A. Addus, *Subsidizing Air Service to Small Communities*, 39 TRANSP. Q. 537, 552 (1985))); *see also* Dempsey, *Legal History*, *supra* note 23, at 237–38 ("As the gateways to an increasingly global market, transportation corridors are the arteries through which everyone, and everything everyone consumes, flow. . . . As a fundamental component of the infrastructure upon which economic growth is built . . . a healthy transportation system serving the public's needs for ubiquitous service at reasonable prices is vitally important to the region and the nation it serves. . . . [A] community with poor, declining or deteriorating access to the established and prevailing transportation networks will wither like a human limb or organ starved of oxygen by an artery made impassable by a tenacious blood clot.").

135. Note, *National Transportation Policy and the Regulation of Motor Carriers*, *supra* note 111, at 308–09.

136. Paul Stephen Dempsey, *Rate Regulation and Antitrust Immunity in Transportation: The Genesis and Evolution of This Endangered Species*, 32 AM. U. L. REV. 335, 344 (1983).

137. Motor Carrier Act of 1935, Pub. L. No. 74-255, 49 Stat. 543.

138. Representative Paul H. Maloney introduced telegrams opposing the bill, arguing in identical language, "Should trucks be under the Interstate Commerce Commission transportation costs will be

Eastern Apple Growers' Council testified before the House of Representatives:

> [W]ith the passage of this bill and the ultimate carrying out of all of the provisions . . . you are going to eliminate the small independent truck owner and turn the truck transportation over to large transportation companies . . .
>
> You take, for instance, now we have common carrier lines running out of the smaller cities in Virginia and all over the country, supplying storekeepers and merchants throughout the country that have no railroad facilities. Those trucks run regularly, on regular routes, and haul the goods out and the produce out under intrastate regulations.
>
> Now, if you put them under Federal regulation it will finally raise the cost of transportation. . . . You are going to affect the price level of the purchases and the sales of every farmer in every rural community in the entire United States.
>
> . . . .
>
> . . . I am a champion of the small and independent carrier, because he is the salvation of the rural section, so far as transportation costs are concerned. If we can keep him independent and unregulated, our transportation costs will be kept down.[139]

On the other hand, a representative of the Oneonta Chamber of Commerce and other Upstate New York organizations argued in favor of increased regulation. His region's economic activity largely depended on rail, and he argued that "communities where railroads and railroad employees are important factors . . . are all interested in overcoming the handicaps put on railroad transportation by unregulated carriers by water and motor trucks."[140] He insisted that this was a "vital" question for "agricultural sections of the country."[141] Similarly, a representative for southern grain shippers argued that "our business is in jeopardy on account of unregulated" transportation, and that the ICA was a success "because we do not have to worry about giving a big dinner party, or having a poker

increased, which will affect adversely rural communities which are dependent on trucking facilities." *Regulation of Interstate Motor Busses and Trucks on Public Highways: Hearing on H.R. 6836 Before the H. Comm. on Interstate & Foreign Com.*, 73d Cong. 453 (1934).

139. *Regulation of Interstate Motor Carriers: Hearing on H.R. 5262 and H.R. 6016 Before a Subcomm. of the H. Comm. on Interstate & Foreign Com.*, 74th Cong. 299 (1935) (statement of W.S. Campfield).

140. *The Water Carrier Act, 1935: Hearing on H.R. 5379 Before H. Comm. on Merch. Marine & Fisheries*, 74th Cong. 156–57 (1935) (statement of William Capron).

141. *Id.* at 158.

party, or something of that sort, in order to get a rate" in rail transportation.[142]

The MCA ultimately seemed to attempt to reconcile competing rural interests. It provided that common carriers by motor vehicle needed to secure a certificate of public convenience and necessity from the ICC in order to operate, and that such providers could not engage in unjust discrimination among localities.[143] But it automatically grandfathered in carriers operating before June 1, 1935.[144] The Act also excluded "motor vehicles controlled and operated by any farmer, and used in the transportation of his agricultural commodities and products thereof, or in the transportation of supplies to his farm" and "motor vehicles used exclusively in carrying livestock, fish (including shell fish), or agricultural commodities[.]"[145]

According to Paul Stephen Dempsey, the MCA, like the ICA, succeeded in providing equitable rural access to these transportation services. After the MCA's passage:

> Destructive competition abated, and during the half century which followed, motor carrier service was ubiquitously available throughout the nation at a price which was "just and reasonable." Service was safe and dependable to large and small communities throughout the nation. . . . [T]here was some measure of "cross subsidization" performed under the regulatory umbrella of the ICC . . . with more lucrative, denser traffic lanes paying a premium above marginal costs to subsidize rural and small community service.[146]

Congress continued its pattern of intervention with the Civil Aeronautics Act of 1938 (CAA).[147] In advocating the legislation's passage, aviator Colonel Edgar Gorrell, one of the law's most ardent advocates, argued in testimony before Congress that smaller airlines required protection against stronger, larger lines.[148] He contended that by "reaching out into the regions of light-density traffic and developing smaller communities, the small lines

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142. *To Amend the Interstate Commerce Act: Hearing on S. 1629, S. 1632, and S. 1635 Before the S. Comm. on Interstate Com. and the Merch. Marine Subcomm. of the S. Comm. on Com.*, 74th Cong. 714–15 (1935) (statement of Harry A. Volz).

143. Motor Carrier Act of 1935, Pub. L. No. 74-255, §§ 206(a), 216(d), 49 Stat. 543, 551, 558.

144. Motor Carrier Act § 206(a).

145. Motor Carrier Act § 203(a)(21)(b).

146. Dempsey, *supra* note 76, at 187.

147. Civil Aeronautics Act of 1938, Pub. L. No. 75-706, 52 Stat. 973 (codified at 49 U.S.C. §§ 401–722).

148. *Aviation: Hearing on H.R.5234 and H.R. 4652 Before the H. Comm. on Interstate & Foreign Com.*, 75th Cong. 90 (1937) [hereinafter *Aviation Hearing*]; *see also* Paul Stephen Dempsey, *The Rise and Fall of the Civil Aeronautics Board—Opening Wide the Floodgates of Entry*, 11 TRANSP. L.J. 91 (1979).

have performed an incalculable service to the country." [149] To keep providing that service, they needed assurance through "an opportunity to protect themselves against even the possibility of oppressive competition."[150] The CAA was passed, and "entry regulation was imposed upon the infant airline industry, in part, so that small communities would have access to this emerging mode of transport."[151]

Congress once again continued on the path of intervention with the Transportation Act of 1940.[152] This was the first federal effort to craft a comprehensive national transportation policy, [153] and the first time "a national transportation policy governing all agencies subject to the Interstate Commerce act [sic] ha[d] been enacted."[154] Its "chief feature" was "further extension of unified and centralized control of domestic transportation," including adding water carriers to the ICC's purview, setting additional rates and permit requirements, and establishing a Board of Investigation and Research to study each mode of transportation.[155] Overall, transportation policies culminating with the 1940 act "reflect[ed] a strong congressional policy that the public in rural areas be protected against pricing and service discrimination."[156]

As with transportation, regulatory policy of the era embraced the idea that geographically equitable access to telecommunications services was necessary. After the advent of the telephone in 1876, Alexander Graham Bell's use of his patented technology helped him establish the American Telephone and Telegraph Company (AT&T) in 1895, which initially had a monopoly.[157] With the expiration of the patents just after 1900, AT&T encountered competition from independent companies.[158] Theodore Vail, then-president of AT&T, "pressed for universal service and government regulation to curb what he saw as wasteful competition."[159] AT&T was then brought under the jurisdiction of the ICC with the Mann-Elkins Act of 1910, which amended the ICA.[160] The Act applied "to telegraph, telephone, and

149. *Aviation Hearing*, *supra* note 148, at 90.

150. *Id.*

151. Dempsey, *The Dark Side*, *supra* note 23, at 449; *see also* Dempsey, *supra* note 148, at 92–95 (discussing Congress's creation of the Civil Aeronautics Board and subsequent dismantling of it).

152. Transportation Act of 1940, Pub. L. No. 76-785, 54 Stat. 898.

153. Robert W. Harbeson, *The Transportation Act of 1940*, 17 J. LAND & PUB. UTIL. ECON. 291, 291 (1941).

154. Ralph L. Dewey, *The Transportation Act of 1940*, 31 AM. ECON. REV. 15, 15 (1941).

155. *Id.* at 16, 23.

156. Dempsey, *The Dark Side*, *supra* note 23, at 449.

157. Paul Stephen Dempsey, *Adam Smith Assaults Ma Bell With His Invisible Hands: Divestiture, Deregulation, and the Need for a New Telecommunications Policy*, 11 HASTINGS COMMC'NS & ENT. L.J. 527, 531–32 (1989).

158. *Id.* at 532.

159. *Id.*

160. Mann-Elkins Act, Pub. L. No. 61-218, sec. 7, § 1, 36 Stat. 539, 544–47 (1910).

cable companies (whether wired or wireless) engaged in sending messages from one State, Territory, or District of the United States, to any other . . . who shall be considered and held to be common carriers."[161] It excluded from the Act "the transmission of messages by telephone, telegraph, or cable wholly within one State."[162] It provided that all charges made for "the transmission of messages by telegraph, telephone, or cable . . . shall be just and reasonable"[163] and that rates and charges for telegraph and telephone transmissions could not be "unjust or unreasonable or unjustly discriminatory."[164]

The Radio Acts of 1912 and 1927 also held major implications for rural access to telecommunications. The former placed radio communications under the jurisdiction of the ICC.[165] The latter created the Federal Radio Commission and established the standard that radio stations, in order to receive a license, needed to show that the "public interest, convenience, or necessity would be served by the granting" of the license.[166] In advocating passage of the Radio Act of 1927, Congressman Johnson of Texas commented that his rural constituents had requested that Congress intervene with anti-monopoly, anti-discrimination measures:

> The people of Texas are interested in legislation on this subject. . . . I want to quote from [a letter] which I received . . . from a farmer who lives in an inland rural community in my home country. . . . [T]he writer says:
>
> ["]Please use your influence in keeping corporations from getting control of the air by a series of chain stations, high-power stations, purchase of wave lengths, or any other monopoly that would create further disturbances which will interfere with our listening in on other closer-in stations. The combination of the eight large stations in the northeast[] . . . are very annoying to people in Texas.["][167]

Congress subsequently enacted the Communications Act of 1934 and modeled it after the ICA.[168] As with the Transportation Act of the same period, rural interests were mixed, with some advocating protections and universal service and others arguing that small, independent rural service

161. *Id.*; *see also* Dempsey, *supra* note 157, at 532.
162. Mann-Elkins Act sec. 7, § 1.
163. *Id.*
164. Mann-Elkins Act § 15.
165. Radio Act of 1912, Pub. L. No. 62-264, 37 Stat. 302.
166. Radio Act of 1927, Pub. L. No. 69-632, § 11, 44 Stat. 1162, 1167.
167. 67 CONG. REC. 5,558 (1926).
168. *See* Dempsey, *supra* note 157, at 530, 533; Paul J. Larkin, Jr., *Turning Points in Telecommunications History*, 29 J. MARSHALL J. COMPUT. & INFO. L. 513, 530 (2012).

providers and their constituents would be better off left alone.[169] Many rural communities were served by small, independent phone companies with just a few dozen to a few hundred customers.[170] Their representatives insisted that complying with additional federal regulations would impose costs on companies that were already struggling to survive and serve their constituents.[171] On the other hand, some remained concerned about rural access to quality radio communications, particularly since rural communities were disproportionately dependent on radio.[172] Texas Congressman Thomas Blanton, in advocating for protecting rural access to radio communications, argued, "every congressional district of the United States is entitled to a small local station, and I want to see every Congressman here have at least a small local station in his home town. The people are entitled to this."[173]

The Communications Act of 1934 created the Federal Communications Commission (FCC) and tasked it with ensuring "so far as possible, to all the people of the United States a rapid, efficient, Nation-wide, and world-wide wire and radio communication service with adequate facilities at reasonable charges."[174] Like the MCA, it seemed to try to reconcile competing rural interests. The Act specifically excluded from its purview any intrastate communications or any wire communications already regulated by a state commission.[175] This would have excluded small, independent, locally focused telephone companies. But the Act's mandate for universal service was broad, meaning that those rural communities without service would be able to receive it under the Act, which provided:

> It shall be the duty of every common carrier engaged in interstate or foreign communication by wire or radio to furnish such

169. *See, e.g.*, 75 CONG. REC. 3,687–88, 3,692, 3,702 (1932) (discussing importance of small, independent radio stations).

170. *See Federal Communications Commission: Hearing on S. 2910 Before the S. Comm. on Interstate Com.*, 73d Cong. 184 (1934) (mentioning existence of thousands of "little telephone companies, cooperative lines, and farmer lines" which would be challenged to comply with new federal requirements).

171. *E.g.*, *Federal Communications Commission: Hearing on H.R. 8301 Before the H. Comm. on Interstate & Foreign Com.*, 73d Cong. 273 (1934).

172. *See* 75 CONG. REC. 3,698–99 (1932). One reason for the act involved opposition to the Federal Radio Commission. Congressman Sirovich characterized it as "autocratic and tyrannical," and claimed that they had "ridden ruthlessly over the small stations of the country." *Id.* at 3,699. He proposed "to stop their nefarious conduct" by abolishing the Commission and transferring their work to the Department of Commerce. *Id.*

173. *Id.* at 3698.

174. Communications Act of 1934, Pub. L. No. 73-416, § 1, 48 Stat. 1064, 1064 (codified as amended at 47 U.S.C. § 151); *see also* Larkin, *supra* note 168, at 530. Electrification was also a concern. In the early 1930s, ninety percent of city dwellers had access to reliable electricity, while only ten percent of rural residents did. To bridge this gap, the Roosevelt administration pushed the Rural Electrification Act (REA) of 1936 through Congress. Jeter, Thomas & Wells, *supra* note 37, at 365.

175. Communications Act §§ 2(b), 3(e).

> communication service upon reasonable request therefor; and, in accordance with the orders of the Commission, in cases where the Commission, after opportunity for hearing, finds such action necessary or desirable in the public interest, to establish physical connections with other carriers, to establish through routes and charges applicable thereto and the divisions of such charges, and to establish and provide facilities and regulations for operating such through routes.[176]

The Act required that charges for services be "just and reasonable" and prohibited common carriers from making "any unjust or unreasonable discrimination."[177] Its goal of achieving universal service meant that "subscribers in rural, isolated and high-cost areas . . . should have access to services at comparable rates to those available in urban areas."[178]

The tensions surrounding telecommunications service provision, access, and pricing mirrored those surrounding transportation.[179] In the 1950s, telephone companies requested rate increases, but were denied by the Public Utility Commissions that oversaw them in part due to the public policy objective of universal service.[180] Instead of increasing rates, agencies developed a policy of subsidizing local rates by making long-distance rates more expensive, thereby making local rates more affordable for average users.[181] This meant that "the generous profits earned on heavily trafficked, densely populated (urban) routes subsidized less profitable, thin (rural) markets."[182] This substantial revenue-shifting system persisted for several

176. Communications Act § 201(a).

177. Communications Act §§ 201(b), 202(a).

178. Nadine Irène Kozak, On the Last Mile: The Effects of Telecommunications Regulation and Deregulation in the Rural Western United States and Canada 18 (2010) (Ph.D. dissertation, University of California San Diego) (on file with the University of California eScholarship).

179. FCC Commissioner Craven gave a particularly passionate argument in favor of increased protections for rural access to radio in a 1942 House hearing to consider amendments in the Communications Act of 1934: "the proposed bill suggests correctly that the distribution of radio broadcasting facilities remains a problem. . . . [I]t is unthinkable that any section of the Nation's population should be deprived of radio service or that we should willingly permit a degradation of existing service to any area. . . . [T]he forcing of unsound competition in the field of radio will nullify the directions of Congress to distribute radio broadcasting facilities fairly and equitably among the various States and communities. Moreover, the forced application of the doctrine of unlimited economic competition will result in a further concentration of competitive stations in the large cities and a dearth of facilities in the smaller communities throughout the Nation. Likewise, if too many stations are forced into the large cities, the net result will be impaired program service to the entire Nation. . . . with the consequence that rural radio listeners may be sacrificed for a regulatory theory in which the commercial aspects of radio broadcasting are overemphasized and the public service aspects are neglected. . . . The population residing in rural areas is entitled to receive as much improved radio service as people in cities. There should be no discrimination." *Proposed Changes in the Communications Act of 1934: Hearing on H.R. 5497 Before the H. Comm. on Interstate & Foreign Com.*, 77th Cong. 981–83 (1942).

180. Dempsey, *supra* note 157, at 534.

181. *Id.* at 535.

182. *Id.*

decades. As late as 1983, "the average monthly price charged for local residential service was about $11, while the average monthly cost of providing the service was approximately $26."[183]

Although perhaps less profitable for the service providers, these approaches were effective. Telephone access went from forty percent of U.S. households in 1930 to more than ninety percent in 1970.[184] Rural access to radio, alongside rural electrification pursued in the same era, is credited with modernizing the American countryside. Like transportation, affordable access to telecommunications is an essential part of economic vitality.[185] Specifically, "the availability of telecommunication services reduces isolation, increases business viability, improves farming productivity, and improves access to educational and medical services."[186] The availability of quality telecommunications infrastructure can help rural communities attract other resources and thrive, while on the flip side, the absence of effective telecommunications may doom a region to economic stagnation.[187]

In general, the regulatory approach for public utilities in this era sought to reduce competition for several reasons. Certain service providers were deemed to have natural monopolies, or markets where high costs of entry would result in "economic waste" if competition were allowed by making customers pay multiple times for fixed costs of infrastructure, such as stringing telephone wires.[188] Thus, policymakers actively advocated barriers to entry and unification of services in order to allow the service provider in question to achieve an economy of scale.[189] But the question of rural access also revealed that competition needed to be curtailed for another reason: if small, independent rural service providers—like telephone companies, radio stations, and truck companies—were forced to compete with large corporate companies, the rural service providers were going to lose, which would likely also mean a drop in quality of service to rural communities. Further, if competition remained unfettered, more rural communities risked not being served at all.

From the passage of the ICA through the 1940s, the regulatory frameworks that governed the transportation and telecommunications

183. *Id.*

184. *Id.* at 535–36; *US Household Penetration of Telecommunications, 1920-2015*, *in* JEAN-PAUL RODRIGUE, THE GEOGRAPHY OF TRANSPORT SYSTEMS (5th ed. 2020), https://transportgeography.org/?page_id=1706 [https://perma.cc/C5YY-QASX].

185. *See* Peter L. Stenberg, Sania Rahman, M. Bree Perrin & Erica Johnson, *Rural Areas in the New Telecommunications Era*, 12 RURAL DEV. PERSPS., no. 3, 1997, at 32; Craig, *supra* note 45, at 2.

186. Stenberg, Rahman, Perrin & Johnson, *supra* note 185, at 32.

187. *Cf.* UTAH COAL COUNTRY STRIKE FORCE, EXECUTIVE SUMMARY 5, 7 (2019) (identifying high-quality regional broadband as economic asset that can be used to pursue large-scale revitalization).

188. Dempsey, *supra* note 157, at 536.

189. *Id.* at 536–37.

industries served the goal of securing, enhancing, or protecting rural service in four main ways. First, those frameworks removed barriers to rural access to services by forcing companies to be responsive to rural service requests through principles of non-discrimination.[190] Second, they protected existing rural services by excluding or protecting small, independent intrastate service providers from regulation, and by protecting existing providers from competition so they could achieve economies of scale.[191] Third, they limited service providers' ability to abandon rural service by requiring administrative justifications to do so and refusing requests if those justifications did not comport with public interest standards.[192] And fourth, they helped make rural services affordable through measures such as subsidizing rural rates with profits from less-expensive regions and by imposing the "just and reasonable" standard for rates.[193]

Altogether, these protections created a framework that had a substantial impact in helping rural communities overcome the handicap of the diseconomies of scale that naturally arise with distance and population sparseness. As Ganesh Sitaraman, Morgan Ricks, andChristopher Serkin observe, this regulatory order "promoted geographic dispersion in economic activity . . . [and] helped construct an era of geographic convergence in the mid-twentieth century." [194] While regional wealth today tends to be concentrated in a handful of megacities, during this regulatory period, more

190. The ICA, the MCA, the Telecommunications Act, and other major statutes included explicit mandates to this effect. Telecommunications Act of 1996, Pub. L. No. 104-104, § 104, 110 Stat. 56, 86; Motor Carrier Act of 1935, Pub. L. No. 74-255, § 202(a), 49 Stat. 543, 543; Interstate Commerce Act of 1887, Pub. L. No. 49-104, § 2, 24 Stat. 379, 379–80.

191. For example, small, local phone lines were excluded from telephone regulations; small, independent radio stations were given special treatment; and small, independent truckers were excluded from trucking regulations in order not to burden rural communities. *See* Communications Act of 1934, Pub. L. No. 73-416, § 2(b), 48 Stat. 1064, 1065 ("[N]othing in this Act shall be construed to apply or to give the Commission jurisdiction with respect to . . . intrastate communication service of any carrier"); Communications Act § 221(b) (excepting from Act any services or facilities "where such matters are subject to regulation by a State commission or by local governmental authority"); Communications Act § 307(b) (allowing Federal Communications Commission to issue special radio licenses for stations not exceeding 100 watts of power if deemed necessary); Motor Carrier Act § 203(a)(21)(b) (excluding various kinds of motor vehicles from statute's purview, including those controlled and operated by farmers to transport products to and from their farms, those used exclusively to carry livestock, fish, or agricultural commodities, and "casual, occasional, or reciprocal transportation of passengers or property"). Otherwise, natural monopolies, like phone service provision, were protected from competition by utility regulations. Communications Act § 214(a) ("No carrier shall undertake the construction of a new line or of an extension of any line . . . unless and until there shall first have been obtained from the Commission a certificate that the present or future public convenience and necessity require or will require . . . such additional or extended line"); *see also id.* (excluding from provision any "local, branch, or terminal lines not exceeding ten miles in length").

192. Many service providers, like railroad and airline services, sought to abandon service to rural communities over the years, but their requests were denied by state and federal agencies based on the likely effects to rural communities. Dempsey, *The Dark Side*, *supra* note 23, at 450–55.

193. Communications Act §§ 201(b), 202(a); Kearney & Merrill, *supra* note 16, at 1346–47.

194. Sitaraman, Ricks & Serkin, *supra* note 41 (manuscript at 2–3).

wealth moved across geographic boundaries. This distributional geographic equity was in large part due to the role of the regulatory apparatus in evening the playing field for disadvantaged localities that would otherwise be what they are seen as today—"left behind."[195]

Of course, regulated industries mandated to provide non-discriminatory access and fair rates to rural communities did not create rural utopias. Rural America was already transforming in the early twentieth century.[196] Agricultural economics were changing; populations fluctuated.[197] Economic regulation of infrastructure industries is not the only policy affecting rural communities. But as the next section shows, the transition to deregulating certain common carriers and public utilities inflicted a deep wound on rural communities—one that was easy to overlook from the vantage of the city, and one that made it all the harder for rural communities to recover from other shocks they would experience in the coming decades.

B. The New Regime, 1970s – the Present

The national rail system was not doing well by the 1950s and 60s.[198] Increasingly disgruntled rail companies used freight profits to subsidize struggling passenger lines.[199] With the Transportation Act of 1958, Congress limited state PUCs' jurisdiction over passenger train discontinuances and expanded the ICC's powers to allow discontinuances, pushing train service further down a path to decline.[200] By the late 1960s, train passengers experienced "poor service, schedules, and abrasive treatment" by railroads.[201] Rail companies supposedly had "deliberately downgraded standards and discouraged patronage" because of their desire to discontinue service on unprofitable lines.[202]

195. *Id.* (manuscript at 9).

196. Brian Thiede & Tim Slack, *The* Old *Versus the* New *Economies and Their Impacts* (noting nation was transformed in late nineteenth and early twentieth centuries by Industrial Revolution and urbanization, moving country from majority-agrarian-rural to majority-urban for first time in 1920), *in* RURAL POVERTY IN THE UNITED STATES 231, 232 (Ann Tickamyer, Jennifer Sherman & Jennifer Warlick eds., 2017).

197. Harry K. Schwarzweller, *Migration and the Changing Rural Scene*, 44 RURAL SOCIO., no. 1, 1979, at 7.

198. *See* Laurence E. Tobey, *Costs, Benefits, and the Future of Amtrak*, 15 TRANSP. L.J. 245, 249 (1987) (explaining that after World War II, private cars, planes, and intercity buses largely displaced demand for rail service).

199. *See* Dempsey, *The Dark Side*, *supra* note 23, at 452.

200. Transportation Act of 1958, Pub. L. No. 85-625, § 5(2), 72 Stat. 568, 571–72 ("[W]here the State authority having jurisdiction thereof shall have denied an application or petition duly filed with it by said carrier or carriers for authority to discontinue or change, in whole or in part, the operation or service of any such train or ferry . . . such carrier or carriers may petition the Commission for authority to effect such discontinuance or change.").

201. 116 CONG. REC. 14,166 (1970).

202. *Id.*

The Supreme Court set the stage for increased rates of discontinuing common carrier services with its 1964 decision in *Southern Railway Co. v. North Carolina*,[203] which tilted the scale in the decision-making process more heavily in favor of carrier profits over potential impacts of loss of service on local populations. *Southern Railway* and the ICC's evolving standards paved the way for railways to discontinue common carrier service. While 1929 saw a peak of 20,000 passenger trains, "the number of passenger trains fell by 60 percent between 1958 and 1970. By 1970, only 360 intercity trains were left."[204]

Demand grew for Congress to address the "national disgrace" of the railroads.[205] The Rail Passenger Service Act of 1970 reflected Congress's effort to save passenger rail service with the creation of Amtrak.[206] However, this law would usher in a new era of transportation deregulation that would deeply exacerbate rural isolation.[207] Nevertheless, some advocates of rural interests saw themselves as having no other choice. Senator Frank Church of Idaho explained why he reluctantly planned to vote in favor of the law:

> I have no confidence that this legislation will really solve the problems of providing clean, comfortable, and salable railroad passenger service. . . .
>
> . . . .
>
> . . . The theory seems to be that the Union Pacific can improve its railroad passenger service by removing it altogether. Many passengers who have suffered the poor service, schedules, and abrasive treatment of the railroad may feel that way also.
>
> Yet there are other people in rural areas who still must rely on train transportation. . . .
>
> . . . .
>
> . . . I will support the legislation. I hope that . . . it will result in some measure of assistance to the people of my State of Idaho.[208]

Perhaps most significantly, the Act created the National Railroad Passenger Corporation, which superseded the ICC as the overseer of

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203. S. Ry. Co. v. North Carolina, 376 U.S. 93 (1964).
204. Dempsey, *The Dark Side*, *supra* note 23, at 452 (footnote omitted).
205. *Id.*
206. Rail Passenger Service Act of 1970, Pub. L. No. 91-518, 84 Stat. 1327; Tobey, *supra* note 198, at 254.
207. Sitaraman, Ricks & Serkin, *supra* note 41 (manuscript at 17) ("Deregulation prompted railways to discontinue service along many routes and to altogether abandon many rail lines. The results were devastating for many rural and smaller communities whose economic well-being depended on rail service.").
208. 116 CONG. REC. 14,166 (1970).

passenger rail service and continued the trend of chipping away at the ICC as protector of geographic equity.[209] As private rail gave way to Amtrak, 500 additional communities lost intercity passenger train service.[210] As of the late 1980s, commentators observed that "with the exception of the heavily traveled Boston-Washington corridor, service levels on American passenger trains are the worst in the world."[211] Meanwhile, throughout these developments, "thousands of small communities" were "pruned from the system."[212]

Legislators debating the Airline Deregulation Act of 1978 recognized the grave risks deregulation posed to rural communities in light of the blow loss of airline service would inflict. Some insisted that the law included adequate protective measures. Kansas Republican Senator James Pearson explained that he:

> had some reservations . . . related more to the problems of local air service in those rural parts of our country where rail passenger transportation no longer exists, where bus service is inadequate, and where in many instances the commuter service or local air service is really one of the last means of people achieving a sense of communication and doing their commerce and business as is necessary.
>
> . . . I think [a change made to address that concern] adequately fills the needs of the local air carriers in a new and abbreviated certified manner with a new subsidy program.
>
> . . . It is a phased deregulation. It is not total deregulation. . . .
>
> . . . .
>
> . . . [M]y concern was for the small and isolated communities across the country. Communities that depend upon subsidized air service for economic growth and stability. But I now believe that the bill adequately protects such communities.[213]

In a similar vein, New Mexico Republican Senator Harrison Schmitt said during debates that his primary concern was "what would happen to the small communities of our country."[214] He said he believed that "small communities will be treated most fairly" because they would have a guarantee of air service for the first time.[215] He outlined the bill's provisions

209. Tobey, *supra* note 198, at 255.
210. Dempsey, *The Dark Side*, *supra* note 23, at 453.
211. *Id.* (quoting William E. Thoms, *Clear Track for Deregulation American Railroads, 1970–1980*, 12 TRANSP. L.J. 183, 196 (1982)) (misquotation in original).
212. *Id.*
213. 124 CONG. REC. 10,649–50 (1978).
214. *Id.* at 10,652.
215. *Id.*

that would protect small communities, including direct subsidies, a guarantee of air service for ten years, a requirement for an airline wishing to abandon a small community to be replaced, and a new certification for local air carriers with more liberal regulations.[216]

Others were less optimistic. South Dakota Democratic Senator George McGovern characterized airline deregulation as a "grim scenario" with virtually immeasurable downstream effects on municipal airport investments and airline industry employees with specialized skills.[217] But "[t]he focal point" of his concern was "the air service for smaller communities."[218] He anticipated a mass exit of rural service providers and a deterioration of service where it still existed, emphasizing that policymakers should look to what would happen after the ten-year phaseout.[219] Advocates for small communities also testified before Congress, "provid[ing] example after example of the discriminatory fares and deteriorating service resulting from deregulation," trends which would fall disproportionately on small, remote localities across the country.[220]

As McGovern predicted, the airline industry followed in step with the rail industry in curtailing service to rural communities. The Airline Deregulation Act of 1978 allowed "[a]ll but the last carrier in a market" to be free to discontinue service at will.[221] Congress did establish a ten-year program of federal subsidies to provide air service to impacted small communities, although it was generally "alleged that small communities had little to fear from deregulation" because of some policymakers' insistence that regional markets would adjust to meet needs.[222] Yet, 40% of small communities experienced a loss of air service after deregulation.[223] Meanwhile, ticket prices increased disproportionately for those communities, in addition to a rise in other convenience and safety concerns.[224]

Common carrier exits contributed to a demonstrable downward cycle for these communities, and many of these trends came before the ten-year

216. *Id.*

217. *Id*. at 10,660.

218. *Id.*

219. *Id.* at 10,660–61.

220. *Dempsey*, *The Dark Side*, *supra* note 23, at 457 (discussing impacts in California, the Midwest, the Dakotas, the Carolinas, Mississippi, New Mexico, Rhode Island, Tennessee, and West Virginia).

221. *Id.* at 454.

222. *Id.*

223. *Id.* at 457.

224. *Id.* at 455–57.

federal subsidy to ensure service to small communities ran out.[225] Regional access to commerce is in large part dependent on regional access to affordable transportation; the vast majority of major businesses at the time indicated in a survey that they would not locate in an area without access to air transportation.[226] With a national shift away from manufacturing in the 1980s toward the service sector, large employers began to require sophisticated communications and information systems, including high-quality air service, which had come to be viewed as a comparable necessity to electricity and telephones—prompting some to argue that air service should be treated as a public utility.[227] Just as Western ghost towns proliferated as a result of discontinued rail service, a bankrupt airline could create a ghost town. While some praised these deregulatory efforts as laudable moves toward efficiency, other commentary at the time lamented the retreat of critical public protections.[228]

Finally, "[w]ith the passenger trains having vanished from rural America, and with commercial aircraft no longer landing at many small town airports, the only means of public intercity transport left was the bus."[229] But, following in step, the Bus Regulatory Reform Act of 1982 expanded carriers' ability to abandon or discontinue service and raise fares. Local residents could attempt to forestall abandonment by proving that a closure would leave them without alternative means of public transport. Yet, the ICC consistently sided with companies, prompting the New York Department of Transportation to claim that the ICC showed "a total disregard and lack of concern for the welfare of the riding public."[230] A mere eleven months after deregulation, 1,294 locations in forty states lost or were proposed to lose service, 776 of whom lost intercity service entirely.[231] Most

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225. Meyer, *supra* note 4, at 219 ("Not surprisingly, carriers began to drop service on unprofitable routes. Direct subsidies failed to stem the tide of rural retrenchment. The result has been the well-documented isolation of rural communities." (footnotes omitted)).

226. Dempsey, *The Dark Side*, *supra* note 23, at 458.

227. *Id.*

228. *Id.* at 459 ("[S]ome measure of public protection is more than justified. And who else but a public agency can serve as the ultimate arbiter, stabilizing the kind of erratic market conditions that brought about the creation of these agencies in the first place?" (quoting SUSAN J. TOLCHIN & MARTIN TOLCHIN, DISMANTLING AMERICA: THE RUSH TO DEREGULATE 250 (1983)).

229. *Id.*; *see also* Dempsey, *Legal History*, *supra* note 23, at 366 (discussing measures to deregulate the trucking industry in the 1990s).

230. Dempsey, *The Dark Side*, *supra* note 23, at 460 (quoting *Household Goods Transportation and Bus Regulatory Reform Oversight: Hearing Before the Subcomm. on Surface Transp. of the S. Comm. on Com., Sci., & Transp.*, 99th Cong. 145 (1985) [hereinafter *Household Goods Hearing*] (statement of John K. Mladinov)).

231. *Id.* at 461 (citing *Household Goods Hearing*, *supra* note 230, at 2 (statement of Sen. Larry Pressler)).

of those communities had populations of less than 10,000.[232] In short, "[i]n less than [one] year, almost [one] million people lost their bus service."[233]

In 1991, Congress passed the Intermodal Surface Transportation Efficiency Act (ISTEA), which formally devolved highway planning to the states.[234] In 1998, the Transportation Equity Act for the 21st Century mandated statewide transportation planning, which included some of the first planning initiatives for rural areas.[235] Yet, today, rural communities remain isolated from national transportation networks. Anyone who has sought to take a bus, train, or plane to a remote or small town has experienced the expense and inconvenience associated with modern rural transportation access.[236]

As the regulation of rural telecommunications mirrored the regulation of rural transportation, so did deregulation, although the legal pathway was a bit different. In the 1940s, AT&T's size and dominance drew the attention of the U.S. Department of Justice, which argued as early as a 1949 lawsuit that AT&T was in violation of the Sherman Act and that its lack of competition undermined the goals of public regulation.[237] AT&T agreed in a 1956 consent decree that it would limit its activities to the telecommunications sector, license its technologies to competitors, and subject itself to competition from other firms.[238] It jostled for power with competitors in judicial and agency processes for the next twenty years when the political tides were turning even further away from the natural monopoly model. 1984 then saw the largest corporate dismantling in the history of antitrust, when AT&T was forced to divest itself of Bell operating companies.[239]

Like with transportation, deregulation of the telecommunications sector was disproportionately hard on rural communities. Specifically, Dempsey wrote in 1989:

232. *Id.*

233. *Id.* (quoting *Household Goods Hearing*, *supra* note 230, at 2 (statement of Sen. Larry Pressler)).

234. Intermodal Surface Transportation Efficiency Act of 1991, Pub. L. No. 102–240, 105 Stat. 1914.

235. Transportation Equity Act for the 21st Century, Pub. L. No. 105-178, 112 Stat. 107 (1998).

236. *See* Susan Stellin, *Small Airports, Left Behind*, N.Y. TIMES (Feb. 28, 2011), https://www.nytimes.com/2011/03/01/business/01airports.html [https://perma.cc/3GUZ-YQ2H].

237. 15 U.S.C. §§ 1–3; United States v. Am. Tel. & Tel. Co., 552 F. Supp. 131, 135–36 (D.D.C. 1982) ("On January 14, 1949, the government filed an action . . . against . . . the American Telephone and Telegraph Company, Inc. . . . alleg[ing] that the defendants had monopolized and conspired to restrain trade . . . in violation of sections 1, 2, and 3 of the Sherman Act . . . ."), *aff'd*, 460 U.S. 1001; *see also* Allocation of Frequencies in the Bands Above 890 MC., 27 F.C.C. 359 (1959); Hush-A-Phone Corp. v. United States, 238 F.2d 266 (D.C. Cir. 1956).

238. Dempsey, *supra* note 157, at 539.

239. *Am. Tel. & Tel. Co.*, 552 F. Supp. at 226–27; Dempsey, *supra* note 157, at 531, 552 (describing breakup of AT&T as "most significant single event in American telecommunications history").

> Deregulation . . . affected rural telephone bills as telephone companies passed on more of the actual service cost to their customers. In the past, federal regulation supported rural subsidies. Under rate-averaging requirements, the FCC required telephone companies to charge urban and rural customers the same for service, despite the fact that fewer customers were available to cover fixed costs. . . . Adequate telecommunications services at a reasonable price are essential for economic growth. . . .
>
> [R]ural telephone bills have increased. The process of deregulation could hasten depopulation of rural areas and further the congestion of urban areas because of the greater availability and lower costs of essential services in urban areas.[240]

Universal service is still a legal mandate for phone service providers today, both wired and cellular.[241] Yet, rural communities have been left behind in this sector as well. Dempsey observed in his writing thirty years ago that rural communities were being left out of the "technology revolution"; that rural communities might "never be strung to the national fiber optics system"; and that generally, "whatever benefits urban regions of the nation may enjoy in terms of new technology and increased competition, these benefits appear not to be trickling down to the rural regions of the nation."[242]

Replacing the Telecommunications Act of 1934, the Telecommunications Act of 1996 brought "[t]he cornerstone of telecommunications deregulation in the United States."[243] Ironically, then, the telecommunications sector was turned loose just as the seeds were planted for the internet to grow into one of the most important fundamental services of modern society. The "public interest" standard, once encompassing only the needs of "subscribers," "broadened to include private business and the market. Thus, the public interest morphed into a competitive economic environment."[244] In reducing the role for the FCC's oversight, the Act broke up traditional regulated phone monopolies and gave state public utility commissions responsibility for ensuring universal service and for overseeing pricing.

The 1996 Act mandated funding for rural schools, libraries, and healthcare facilities' telecommunications technology. But it "left out low-

240. Dempsey, *supra* note 157, at 580–81 (footnotes omitted).

241. *Universal Service*, FCC, https://www.fcc.gov/general/universal-service [https://perma.cc/2JUB-BPTV].

242. Dempsey, *supra* note 157, at 581–82.

243. Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56; Kozak, *supra* note 178, at 17.

244. Kozak, *supra* note 178, at 17 (footnote omitted).

income households and high cost regions, including rural areas."[245] As a result of relaxed regulations, some rural regions were left "with antiquated telephone technology" that technically meets modern federal requirements for universal service, but still "provides a menu of services far below those available in urban areas."[246] Again perhaps ironically, the current framework does use the old tool of cross-subsidization to enhance rural access to broadband internet, but most commentators agree that this tool alone, particularly as it is implemented, does not do nearly enough to ensure universal, equitable service to this critical amenity that serves as the gateway for access to many important downstream uses.[247]

C. Rural Abandonment as a Series of Market Failures

Many of today's challenging rural conditions can be traced back to deregulation. Rural communities other than those considered amenity-rich have experienced deterioration as populations have migrated to cities, regional employers have shuttered, local governments have lost tax revenue critical to providing basic services, and infrastructure has aged. This downward cycle of economic non-development is precisely what policymakers and rural advocates have feared since the debates over the ICA: when necessary infrastructure services are not required to provide service to less profitable places, they do not. The move toward service providers' discretionary service provision has contributed to the concentration of services in smaller geographic areas, regional economic turmoil, the depopulation of the countryside, and exacerbated geographic wealth inequality.

Commentary on rural communities today has some consistent themes. Rural communities have been "abandoned," "left behind," made "strangers in their own land."[248] White rural residents are portrayed as resentful, enraged, and alienated. In searching for the causes of this alienation, commentary often points to two factors. The first is the disproportionate economic growth that has benefited cities, associated with the loss of traditional livelihoods that have contributed to rural obsolescence.[249] The second is increasing demographic diversity and cultural progressivism,

245. *Id.* at 19 (citing CORNELIA BUTLER FLORA & JAN L. FLORA, RURAL COMMUNITIES: LEGACY AND CHANGE 216 (2d ed. 2004)).

246. *Id.*

247. *See, e.g.*, Christopher Ali, *We Need a National Rural Broadband Plan*, N.Y. TIMES (Feb. 6, 2019), https://www.nytimes.com/2019/02/06/opinion/rural-broadband-fcc.html [https://perma.cc/TM4W-7HNS].

248. HOCHSCHILD, *supra* note 4 *passim*.

249. Eisenberg, *supra* note 1, at 206–12, 217–20.

much of which is seen in cities, making disproportionately older, white rural residents feel culturally estranged and angry.[250]

As to the first factor, ample commentary points to globalization and automation as drivers of rural obsolescence, a narrative which prior work has challenged.[251] Critically, deregulation remains an under-examined player lurking in the background of both the economic and cultural marginalization factors. Deregulating the transportation and telecommunications industries literally isolated rural communities, cutting them off from the rest of the country and exacerbating regional financial burdens.[252] This not only excluded them from national and regional economic activity, but also excised them from the broader cultural ecosystem. What was to be expected after rural communities were cut off from trains, planes, buses, and their access to communications systems made more expensive, other than economic stagnation and cultural estrangement?

Yet, the need to cultivate rural America remains. As Laurie Ristino has observed in *Surviving Climate Change in America: Toward a Rural Resilience Framework*, "[r]ural America has a key role to play in our national resilience because it is the locus of our nation's ecosystem services, including food and fiber provisioning."[253] Others have observed that transitions to renewable energy will require drawing more upon rural land and workers in light of the substantial footprint such installations often require.[254] In addition to the provision of food, energy, and fibers, as mentioned in this Article's introduction, rural communities have important potential as better-supported stewards of eighty percent of the country's land mass, such as in the management of forestland to prevent or mitigate devastating wildfires.[255] Other important roles for rural communities

250. WUTHNOW, *supra* note 4, at 2, 11, 142.

251. *See* Eisenberg, *supra* note 1, at 196 (arguing that several decades of legislative and policy decisions resulted in foreseeable losses for rural communities that have been rationalized in the name of "the greater good").

252. *See* Dempsey, *Legal History*, *supra* note 23, at 353–54.

253. Ristino, *supra* note 9, at 522–23; *see also* Megan Galey & A. Bryan Endres, *Locating the Boundaries of Sustainable Agriculture*, 17 NEXUS: J.L. & POL'Y 3 (2012) (discussing need to fundamentally rethink food system and relationships between agricultural policies and rural community economic development); Christy Anderson Brekken, South Dakota Farm Bureau, Inc. v. Hazeltine*: The Eighth Circuit Abandons Federalism, Precedent, and Family Farmers*, 22 LAW & INEQ. 347, 349 (2004) (discussing relationships among farm consolidation and corporate farming, reduction in farm jobs, and rural economic development).

254. *See* Welton & Eisen, *supra* note 21, at 360–61.

255. *See* Miller et al., *supra* note 14, at 44–45.

include maintaining outdoor recreation opportunities, safeguarding priceless heritage sites, and helping conserve or manage wildlife.[256]

In light of deregulation's role in undercutting the important services rural America is uniquely positioned to provide—and few would suggest that our current food and energy systems are acceptable as is—infrastructure industries' abandonment of rural communities should be viewed as a series of market failures. Despite developments attempting to maintain rural service provision even after deregulation, rural communities today are relatively isolated both from national transportation networks and national telecommunications networks. Where they are connected, the services they receive may be less robust or more expensive.[257]

This isolation and its associated harms to rural communities' contributions to society could be categorized under two different versions of "market failure." Generally, "[e]conomists use the term market failure to describe less than optimally functioning markets."[258] Markets are only allowed to operate based on the understanding that markets "enhance overall well-being" by moving toward optimal allocations of resources.[259]

The failure of markets to furnish rural communities with adequate infrastructure services could be considered as either or both of two different types of market failure. First, consumers may fall victim to market failures in a variety of conditions, including a "lack of choice due to a paucity of alternative sellers."[260] That is, if consumers demand a good or service but that good or service is in low supply, a market failure is present.[261] Rural communities certainly exemplify this today; if one simply attempts to purchase a plane ticket for a remote locality or nearby, the likely high price of the ticket illustrates how rural communities bear this burden.

A second version of market failure is the phenomenon known as the tragedy of the commons, or a failure to protect public goods.[262] The tragedy

256. *Cf.* Erin Morrow, *Agri-Environmentalism: A Farm Bill for 2007*, 38 TEX. TECH L. REV. 345, 388 (2006) (listing positive externalities associated with agricultural activities, including wildlife habitat, biodiversity, and cultural heritage conservation).

257. Christopher Terry, *Localism as a Solution to Market Failure: Helping the FCC Comply with the Telecommunications Act*, 71 FED. COMMC'NS L.J. 327, 330, 348 (2019) (deeming as a market failure the fact that "in many small and medium-sized American communities, market competition among media outlets is not fostering localism," meaning that "[t]he unregulated marketplace falls short . . . in providing local content to citizens of many American communities . . . fail[ing] to supply adequate competition, diversity, and localism").

258. Todd S. Aagaard & Andrew N. Kleit, *The Complexity Dilemma in Policy Market Design*, 30 DUKE ENV'T L. & POL'Y F. 1, 9 (2019) (emphasis omitted).

259. *Id.*

260. Michelle M. Mello & Rebecca E. Wolitz, *Legal Strategies for Reining in "Unconscionable" Prices for Prescription Drugs*, 114 NW. U. L. REV. 859, 918 (2020).

261. *See* Michal S. Gal & Daniel L. Rubinfeld, *Data Standardization*, 94 N.Y.U. L. REV. 737, 762 (2019).

262. Aagaard & Kleit, *supra* note 258, at 11–12.

of the commons arises when markets fail to protect or sustain goods or services that are important to everyone.[263] In light of rural communities' ongoing importance to the nation—and their close relationship with the classic example of the common good, the natural environment—markets' failures to sustain rural communities in and of themselves should be considered a tragedy of the commons. In other words, rural socioeconomic decline in and of itself reflects a tragedy of the commons—the classic market failure.

This argument does raise a fundamental question about rural revitalization: what about those communities that may never have served some form of national interest, or do not seem like they are well-positioned to? Should the approaches discussed in the next section still apply to them, or do we draw the line at some point in terms of a particular community's worthiness? For instance, former coal mining communities in Central Appalachia once contributed to the national energy grid; perhaps infrastructure markets' abandonment of them was a market failure during that era, but it is not necessarily clear now that this particular region warrants intervention, at least based on this rationale.[264]

This question implicates several important issues. First, greater recognition of the deep problems with the ways food and energy are produced could inform a substantially different vision of a possible rural future.[265] Both sectors require substantial restructuring. If food production is to be sustainable from an environmental and public health standpoint, it cannot continue to rely so fundamentally on monoculture cash crops, concentrated animal feeding operations, and other forms of hazardous industrialized agriculture.[266] Similarly, the need for low-carbon energy production is urgent, and will require a substantial land use footprint.[267] Enhanced wildlife and ecosystem conservation is also a pressing national

263. *See* Amy Sinden, *The Tragedy of the Commons and the Myth of a Private Property Solution*, 78 U. COLO. L. REV. 533, 534–35 (2007).

264. *Cf.* ADELE C. MORRIS, NOAH KAUFMAN & SIDDHI DOSHI, THE RISK OF FISCAL COLLAPSE IN COAL-RELIANT COMMUNITIES 31 (2019) (discussing massive investments that will be necessary to avoid economic collapse for formerly coal-reliant communities); Eisenberg, *supra* note 52, at 300–07 (arguing that intervention in coal-reliant communities is ethically necessary).

265. Nathan A. Rosenberg & Bryce Wilson Stucki, *The Butz Stops Here: Why the Food Movement Needs to Rethink Agricultural History*, 13 J. FOOD L. & POL'Y 12, 12–13 (2017); J.B. Ruhl, *Farms, Their Environmental Harms, and Environmental Law*, 27 ECOLOGY L.Q. 263, 348–49 (2000); Welton & Eisen, *supra* note 21, at 331.

266. Eisenberg, *supra* note 1, at 229–35 (discussing negative externalities associated with industrialized agriculture); Mary Jane Angelo, *Food Security, Industrialized Agriculture, and a Changing Global Climate: Perspectives on the United States and Cuba*, 29 FLA. J. INT'L L. 131 (2017); Terence J. Centner, *Enforcing Environmental Regulations: Concentrated Animal Feeding Operations*, 69 MO. L. REV. 697, 698 (2004).

267. Welton & Eisen, *supra* note 21, 360–61; James W. Coleman & Alexandra B. Klass, *Energy and Eminent Domain*, 104 MINN. L. REV. 659, 738–39 (2019).

need.[268] Rural communities, by their nature being population-sparse and proximal to more land, will need to be a central part of these solutions.

Thus, for any given community, the question should not be, "do they contribute to national interests?," but rather, "could they contribute to national interests?"[269] Again, this raises the point made earlier that these proposals are not seeking to recreate the rural America of the past, but to envision its role for the future. This question would in turn raise questions about how rural community economic development should be pursued more generally. Although prior work has argued that a vision for any given region's economic future must involve input from residents affected,[270] there is of course an important role for state and federal actors to contemplate and incentivize rural activities that contribute to national welfare.

Mobility, political stability, sovereignty, and ethical concerns are four additional considerations that factor into the question of intervention, regardless of a given region's contributions to national interests. Perhaps an existing community has nothing to offer—it would be difficult for a policymaker or other decisionmaker to conclude as much, but maybe it could be true.

In that case, asking four additional questions could help inform a path forward. First, are there barriers to mobility that keep the residents of this place from relocating to another region with a higher quality of life?[271] Second, does non-intervention nevertheless pose a threat to political stability that comes with destabilized socioeconomic welfare, as was arguably illustrated with high rates of rural support for President Trump?[272] Third, in the context of Native American reservations, which are mostly rural, is the given community imbued with sovereignty as an independent nation such that coercing relocation by neglect would be tantamount to

268. Karen Bradshaw, *Expropriating Habitat*, 43 HARV. ENV'T L. REV. 77, 82–87 (2019); Kirk Siegler, *This Land is . . . Cut Under Trump's Budget?*, NPR (May 23, 2017, 5:44 PM), https://www.npr.org/2017/05/23/529741146/this-land-is-cut-under-trumps-budget [https://perma.cc/W38H-7CPW] (discussing Trump administration's efforts to cut Department of Interior funding for wildlife and ecosystem management).

269. *See* Karl N. Stauber, *Why Invest in Rural America—And How? A Critical Public Policy Question for the 21st Century*, FED. RSRV. BANK KAN. CITY ECON. REV., Second Quarter 2001, at 33, 34 (arguing that federal rural policies are "unfocused, outdated, and ineffective," and should focus more on supporting rural middle class and addressing rural poverty while also pursuing environmental conservation).

270. Eisenberg, *supra* note 52, at 314, 324–28; Ann Eisenberg, *Addressing Rural Blight: Lessons from West Virginia and WV LEAP*, 24 J. AFFORDABLE HOUS. & CMTY. DEV. L. 513 (2016).

271. *See* Schleicher, *supra* note 7, at 111–32; Anderson, *supra* note 2, 524–25.

272. *See* Jon Emont, *The Growing Urban-Rural Divide Around the World*, THE ATLANTIC (Jan. 4, 2017), https://www.theatlantic.com/international/archive/2017/01/electoral-college-trump-argentina-malaysia-japan-clinton/512153/ [https://perma.cc/3AKL-HR52].

destroying a country?[273] And, fourth, could some other deep attachment to place also warrant against letting the community die, even if it does not benefit collective welfare?[274] One would be hard-pressed to find a locality where at least one of the answers to these questions is not in the affirmative. But to the extent a particular locality could be deemed beyond help, the struggles of the residents there would still implicate broader questions of non-place-specific problems with deep socioeconomic inequality.

In short, while this discussion does insist upon the import of ongoing rural contributions to society, it is not necessarily the case that rural communities should be mandated to earn their keep, so to speak, in order to merit access to infrastructure and other basic necessities. The next section examines what type of steps could be taken to counteract the trends of rural infrastructure abandonment, both through the lens of concern for the rural consumer and because of concern for common goods and services associated with rural livelihoods.

III. CORRECTING RURAL INFRASTRUCTURE MARKETS IN THE MODERN ERA

One would be hard-pressed to argue that that the regulatory apparatus of the past—relying fundamentally on mechanisms such as universal service mandates, cross-subsidization, tariffs, and service bundling—can simply be revived as a part of a reform effort to help overcome the barrier of rural diseconomies of scale.[275] Cross-subsidizing telephone rates, for example, may have worked a century ago, but would be less feasible in today's political climate.[276] The approach has been used in the context of broadband, but is largely viewed as not going far enough to achieve the aim of universal service.[277] This suggests that creative, novel thinking about market interventions in the modern context are warranted. This Part argues that if we are truly to understand and meet the needs of rural communities—

273. *Cf.* Jessica A. Shoemaker, *Transforming Property: Reclaiming Indigenous Land Tenures*, 107 CALIF. L. REV. 1531, 1556–67 (2019) (arguing that Indigenous land tenure policies must ensure protections for tribal sovereignty); Sarah Krakoff, *They Were Here First: American Indian Tribes, Race, and the Constitutional Minimum*, 69 STAN. L. REV. 491, 494 (2017) (Native nations are sovereigns with direct relationship with federal government, which situates them differently from other minority groups).

274. *See* Eisenberg, *supra* note 1, at 212 (questioning whether it is ethical to "mandate mobility," especially in light of how structural factors created precarious rural communities).

275. *See* Rahman, *supra* note 51, at 1690 (acknowledging that prior regulatory system cannot simply be resurrected).

276. *See* John Brooks, Brian Galle & Brendan Maher, *Cross-Subsidies: Government's Hidden Pocketbook*, 106 GEO. L.J. 1229, 1234–35 (2018) (noting transparency concerns associated with cross-subsidization); Rahman, *supra* note 17, at 931 (noting, in contrast to Progressive era, that regulators today operate in an environment of prevailing skepticism and unease about public actors' efficacy and accountability).

277. *Cf.* Ali, *supra* note 247.

which we should do not just for their sake, but for everyone's—our understanding of infrastructure will need to be broadened, which will also require a recalibration of the balance between public and private interests.

A new scholarly movement has sought to revitalize the idea of the public utility and to examine what a modernized version of infrastructural regulation could and should look like.[278] K. Sabeel Rahman has developed a framework for conceptualizing "the new utilities"—that is, contemplating where the balance between public and private interests should stand today and what today's version of interventions into markets, particularly for those markets affecting services thought of as "infrastructure," ought to be.[279] Rahman argues that the 1870s–1970s regulatory toolkit can actually be seen as broader than it is often characterized. It involved "a range of interventions aimed at addressing the problem of power over infrastructure," but did not necessarily insist on any particular approach.[280] Thus, even initially, the concept of regulatory interventions "was essentially fluid" and could change alongside changes in technological and economic conditions.[281] Rahman therefore argues that the old vision of regulation does not need to be resurrected by way of rote mimicry in the post-deregulatory era. Rather, there is a need to build upon the original approaches and contemplate "a more modern and flexible way of adapting public utility traditions to contemporary infrastructure."[282]

Rahman's framework has unique applicability to the rural question because it offers guidance as to when and how policymakers should seek to overcome the natural rural handicap of diseconomies of scale by intervening into markets.[283] This Part draws upon Rahman's framework to articulate possible pathways that could be used to help redirect markets to rural communities and when such intervention is warranted.[284] In laying the foundation for his proposed framework for regulating infrastructure, Rahman explains that "a variety of tools" including "oversight, structuralist regulations, and public options" should be considered in the arsenal of

278. Rahman, *supra* note 17, at 914 (suggesting that legal historians have recently revived interest in the public utility tradition to regulate infrastructure).

279. Rahman, *supra* note 51, at 1641–45.

280. Rahman, *supra* note 17, at 915.

281. *Id.*

282. *Id.* at 932.

283. As mentioned in the Introduction, there are of course a variety of policy approaches for attempting to overcome the handicap of economies of scale. The approaches discussed here are not intended to be mutually exclusive with those options. *See* ORG. FOR ECON. COOP. & DEV., *supra* note 4, at 38–40 (discussing consolidation, co-location, merging, remote delivery, and other approaches to services to help enhance and expand rural service provision); Eisenberg, *supra* note 2, at 218–39 (discussing potential policy approaches to struggles of rural local governments to effectively tackle problem of widespread vacant, abandoned, and dilapidated properties).

284. Rahman, *supra* note 17, at 932.

approaches for regulating infrastructure today.[285] These tools should then be applied to sectors with certain infrastructure-like characteristics.

Rahman's framework includes three analytical steps to determine the optimal approach to a given question about whether and how to regulate a sector as "infrastructure." The first step is to diagnose what counts as "infrastructure." He defines infrastructural goods and services as having three defining characteristics. The first is that "infrastructure arises where there might be some form of economies of scale in production."[286] The second factor "is the degree to which the good or service unlocks a wide range of downstream uses."[287] And the third is "the risk of vulnerability to private power or domination."[288]

Once a good or service is categorized as infrastructure, the second step is to draw from "a flexible range of tools" in order to assure fair and equal access to that good or service.[289] These tools do include the regulatory oversight typically associated with the old regulatory regime. Describing this approach as among the "central legacies" of utilities regulation, Rahman characterizes it as imposing "affirmative obligations to provide services to marginalized or overlooked constituencies, or to comply with legal standards of nondiscrimination."[290] But other tools should be considered as well. Rahman proposes "structuralist regulation" as one option, meaning "attempts to transform the corporate structures of the firms themselves providing these infrastructural goods as a way to preempt exploitative or exclusionary treatment by reducing potential conflicts of interest."[291] A third main tool Rahman highlights is the possibility of public options, in which "public actors themselves directly provide the good or service in question."[292]

The third and final step is to "develop a governance regime that assures that such utility-style regulation is itself administered in an accountable and public-interested manner."[293] Rahman proposes that policymakers today should design regulatory bodies and public utility agencies "in ways that institutionalize more systematic—and flexible—internal checks and balances."[294] In other words, a modern reconceptualization of infrastructure governance should seek to overcome the issues of the old regime that

285. *Id.*
286. *Id.* at 926.
287. *Id.*
288. *Id.* at 927.
289. *Id.* at 915.
290. *Id.* at 928.
291. *Id.* at 929.
292. *Id.* at 930.
293. *Id.* at 915.
294. *Id.* at 932.

undermined its accountability and legitimacy with constituents and detractors.

Rahman's framework reveals a few important points for considering the rural relationship to infrastructure. The first is that a good or service that might not be considered "infrastructure" in an urban setting might count as infrastructure in a rural one. Take, for example, a remote town's last grocery store, perhaps a Walmart or a Dollar Store. In an urban setting, such a store would be unlikely to meet the conditions under Rahman's first step characterizing infrastructure. The Walmart's "scale" would be of little significance. Although food deserts certainly exist in urban settings, local consumers would have alternative options within some municipal geographic range for buying their necessities if the Walmart left. This means the Walmart's departure would have finite effects on downstream uses, although it could of course create substantial problems for people. And because of local residents' alternative options, even if inconvenient, their vulnerability to the abuse of private power by the Walmart would also be finite.

But in a rural setting, it is possible that a single remaining Walmart in a town otherwise devoid of grocery stores should in fact be considered infrastructure. The scale of the Walmart does matter in a rural context: are there enough local residents and consumers to justify the expenses associated with operating the Walmart? In a sense, the Walmart does need to be "at scale" or it will consider leaving. Second, in a rural setting, the Walmart unlocks downstream uses just as much as a more traditional form of infrastructure such as clean water or electricity; if there is no reasonably close alternative way to procure food, people will be unable to live in the rural locality at all. Finally, the risk of vulnerability to private domination in this context is heightened due to the imbalance of power between the Walmart and the residents. The Walmart can leave and incur relatively minimal losses in the spectrum of considerations for the Walmart corporation. The rural town losing its Walmart, by contrast, stands to unravel completely with the Walmart's closure, as was the case when this happened in the former coal-mining community of McDowell County, West Virginia, in 2016.[295]

As this example illustrates, policymakers seeking to address the problem of rural infrastructure and diseconomies of scale may need to expand their understanding of what constitutes infrastructure. That is, infrastructure does

295. Ed Pilkington, *What Happened When Walmart Left*, THE GUARDIAN (July 9, 2017, 12:55 PM), https://www.theguardian.com/us-news/2017/jul/09/what-happened-when-walmart-left [https://perma.cc/JQT5-QTJ7]; Jessica Lilly & Roxy Todd, *What Happens When Walmart Closes in One Coal Community?*, W. VA. PUB. BROAD. (Aug. 26, 2016), https://www.wvpublic.org/post/what-happens-when-walmart-closes-one-coal-community#stream/0 [https://perma.cc/7L58-YKEA].

not necessarily need to involve multimillion-dollar projects that will take years to complete. State or federal legislatures could intervene in this particular infrastructural sector by making it harder for a resource like a Walmart to abandon its constituents, so to speak. This idea is not as novel and radical as it may sound. Social scientists have recently argued, consistent with Rahman's framework and this analysis, that state-run grocery stores should be considered an option for meeting national food needs.[296] The authors point to state-run alcohol stores as an illustration of the fact that our legal-economic traditions do already account for such an approach.[297] The authors also acknowledge that such an initiative would require a thicker conception of the role for policy to intervene into markets and recalibrate the balance between private interests and public ones, shifting the scale more towards the latter.[298]

Thus, an initial step for understanding the role for economic regulation in rural America is that rural diseconomies of scale mean that the concept of "infrastructure" may need to take up more space than it would in a place with higher population density, depending upon how one wants to define whether a particular sector needs to operate "at scale"—which, in a sense, any profit-making enterprise does. Other examples of goods and services that should be considered infrastructure in a rural setting may include access to primary care physicians and lawyers, access to a gas station within a reasonable distance, and access to a pharmacy. Of course, rural communities are already challenged to access the goods and services widely accepted as traditional infrastructure, including building code enforcement, police protection, schools, libraries, and clean water.[299] These conditions alone suggest the need for more robust intervention into these sectors in order to ensure that residents' basic needs are met. Some today would argue that policy does not have a role to play in meeting basic needs anymore. But this Article's discussion highlights the fact that such a view is in fact the novel and radical one, while economic regulation with a view to the public interest has far deeper and more longstanding roots in the U.S. legal tradition.[300]

How might we apply Rahman's framework to the more traditional, national-network sectors of telecommunications and transportation as they concern rural communities today? Both clearly meet the conditions to

296. *See* Justin Sean Myers & Christine C. Caruso, *Towards a Public Food Infrastructure: Closing the Food Gap Through State-Run Grocery Stores*, 72 GEOFORUM 30 (2016).

297. *Id.* at 32.

298. *Id.*; *cf.* Anthony V. Alfieri, *Black, Poor, and Gone: Civil Rights Law's Inner-City Crisis*, 54 HARV. C.R.-C.L. L. REV. 629, 651 (2019) (describing grocery stores as "key institutions" in contrast to "infrastructure systems").

299. *See* Eisenberg, *supra* note 2, at 210.

300. *See* Boyd, *supra* note 15, at 750–68.

constitute "infrastructure": both require scale; both are fundamental gateways to almost unquantifiable downstream uses; and both may be influenced by private caprice or domination.[301] Thus, in this context, the trickier question lies in the choices among the tools: what role is there for regulatory oversight, structural regulation, or a public option—or perhaps other approaches—for addressing the urban/rural digital divide and the gap in access to affordable, reliable transportation?

Far more attention of late has focused on the question of deploying broadband internet to rural areas than the question of rural transportation access. The legal framework today is still based on the Telecommunications Act of 1996, which established the general mandate to "promote competition and reduce regulation in order to secure lower prices and higher quality services" and "encourage the rapid deployment of new telecommunications technologies."[302] Under the Act, the FCC regulates two types of entity: (1) telecommunications carriers and (2) information-service providers. This distinction is quite important; telecommunications services are still bound by the Communications Act of 1934's regulations for common carriers, involving more stringent obligations to strive for universal service at just and reasonable rates.[303] Although the FCC categorized broadband as an information service in a controversial 2000 decision, it reversed course in 2015, a decision which broadband service providers unsuccessfully challenged.[304]

These developments may have seemed like they were going in the right direction for rural access. But in 2018, the Trump administration's FCC published its rule repealing net neutrality and recategorizing broadband as an information service.[305] Significantly for rural communities, this repeal reversing broadband's status as a public utility minimized its importance to the public.[306] Advocates of rural development emphasized rural

301. *See, e.g.*, Johanna D. Hollingsworth, Note, *Is There a Doctor in the House? How Dismantling Barriers to Telemedicine Practice Can Improve Healthcare Access for Rural Residents*, 62 HOW. L.J. 653, 656 (2019) (discussing downstream uses stemming from broadband access); Amie Alexander, Note, *Utility Law—All Hands on Deck: Bringing Broadband Home to Rural Arkansas*, 40 U. ARK. LITTLE ROCK L. REV. 401, 401–03 (2018) (discussing downstream uses stemming from broadband access).

302. Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56.

303. Nat'l Cable & Telecomms. Ass'n v. Brand X Internet Servs., 545 U.S. 967, 975 (2005).

304. *Id.* at 977–78; Protecting and Promoting the Open Internet, 30 FCC Rcd. 5601, 5610 (2015) (finding that broadband Internet access service is a "telecommunications service" and therefore subject to regulations within Title II of Communications Act protecting consumer access); s*ee also FCC Releases Open Internet Order*, FCC (Mar. 12, 2015), https://www.fcc.gov/document/fcc-releases-open-internet-order [https://perma.cc/XSR3-2EH8]; U.S. Telecom Ass'n v. FCC, 825 F.3d 674, 700 (D.C. Cir. 2016) (upholding Open Internet Order).

305. Restoring Internet Freedom, 83 Fed. Reg. 7,852 (Feb. 22, 2018) (to be codified at 47 C.F.R. pts. 1, 8, 20).

306. Alexander, *supra* note 301, at 410.

communities' particular vulnerability to higher rates dictated by "a cash-driven internet." [307] This change placed rural small businesses at a competitive disadvantaged and made it more likely for local, independent service providers to be priced out of competition.[308]

Thus, the obvious choice in the context of broadband infrastructure is that broadband must be considered just that: infrastructure, or in other words, a public utility. But it is not clear that arguably outdated common carrier standards would go far enough to ensure adequate rural access. The most ambitious legislative proposal to date arguably embodies Rahman's third tool, or placing more of infrastructure provision directly into public hands. The proposed Rural Broadband Improvement Act of 2007 would have amended the Rural Electrification Act of 1936 to create an Office of Rural Broadband Initiatives within the U.S. Department of Agriculture, established an Undersecretary for Rural Broadband Initiatives, and conducted nationwide outreach to rural areas with a view to marshaling federal resources to achieve deployment. [309] This, perhaps is what a modernized vision for rural infrastructure looks like, drawing on past models based on today's needs and resources.

In the transportation context, Lisa Pruitt has consistently argued that inequitable access to transportation is a critical, underappreciated aspect of rural marginalization.[310] But few have examined the legal structures shaping today's rural transportation networks. This may be because modern transportation law is relatively esoteric and technical. Legislation passed in recent, post-deregulation decades—including the Intermodal Surface Transportation Efficiency Act, the Transportation Equity Act for the 21st Century, and the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century—established frameworks for statewide planning for the first time in the history of national transportation law.[311] The most recent development in this area is the U.S. Department of Transportation's rule on Statewide and Nonmetropolitan Transportation Planning and Metropolitan Transportation Planning, finalized and published in May 2016, which provided guidance to Rural Transportation Planning Organizations. [312]

307. *Id.*

308. *Id.*

309. Rural Broadband Improvement Act, H.R. 2035, 110th Cong. (2007).

310. *See* Lisa R. Pruitt, *Gender, Geography & Rural Justice*, 23 BERKELEY J. GENDER, L. & JUST. 338, 365–66 (2008); Lisa R. Pruitt, *Toward a Feminist Theory of the Rural*, 2007 UTAH L. REV. 421, 433–34; Janet L. Wallace & Lisa R. Pruitt, *Judging Parents, Judging Place: Poverty, Rurality, and Termination of Parental Rights*, 77 MO. L. REV. 95, 125–30 (2012); Pruitt & Showman, *supra* note 4, at 486; *see also* Edward W. De Barbieri, *Community Engagement and Transportation Equity*, 44 FORDHAM URB. L.J. 1103 (2017).

311. 49 U.S.C. §§ 5301–5310.

312. Statewide and Nonmetropolitan Transportation Planning; Metropolitan Transportation Planning, 81 Fed. Reg. 34,050 (May 27, 2016) (to be codified at 49 C.F.R. pt. 613).

Overall, the modern trend has been toward devolved, coordinated planning at the regional, state, and local level. One federal report described the rural transportation system as "really a system of disparate parts" and "very decentralized," with "actual operations . . . primarily a local responsibility."[313]

On its face, this seems problematic from the perspective of national infrastructure. Although avenues for local input are certainly desirable,[314] national networks such as highways, airlines, and trains are unlikely to be managed well or with a view to equitable access if they are navigating (literally) differing patchworks of laws across jurisdictions.[315] This need for uniformity, consistency, and contemplation of transportation infrastructure beyond local and regional transit speaks to the need for heavier federal involvement. It seems, therefore, as if Rahman's first tool—the legacy approach of increased regulatory oversight—would be the appropriate approach in the transportation context.

Interestingly, at least two of Rahman's tools start to emerge as steps in a decision-making flowchart: where private markets or devolved decision-making are failing, as in the transportation context, increased federal regulatory oversight is a natural first step. Where regulatory oversight has been failing, as in the telecommunications context, increased direct public involvement in service provision seems like a natural second step. Both reveal points on a spectrum of beginning to tilt the scale, as it becomes clear that such tilting is needed, in the direction of the public interest over private interests.

In any case, these three examples—telecommunications, transportation, and grocery stores—illustrate some of the many forms of infrastructure that rural communities need but cannot necessarily access organically through market operations. Service providers would, of course, bear additional costs associated with increased service provision for rural communities, which would likely be less profitable than urban operations. The political tensions of the prior regulatory era would be revived if attempts to rein in private power were pursued, or if public providers increased competition with private ones, as has been shown with modern litigation over broadband standards. The question of how to approach rural diseconomies of scale thus raises fundamental questions about the role of government and policy in shaping daily life; these questions are ultimately questions about what our

313. FED. HIGHWAY ADMIN., PLANNING FOR TRANSPORTATION IN RURAL AREAS 8 (2001).

314. *Id.* at 40 (outlining benefits of involving local stakeholders, such as better-informed plans and increased trust in government).

315. *Cf. id.* at 10 ("[T]ransportation investments with the highest returns appear to be those that can produce what are called 'network effects' . . . [which] raise the productivity of the system as a whole.").

collective priorities are. In light of the widespread suffering outside the country's urban centers today, the answer simply cannot be that the balance that has been struck today is the correct one, either morally or pragmatically.

CONCLUSION

The past several decades have revealed that rural communities are not self-sustaining. But the natural handicap posed by rural diseconomies of scale does not necessitate that rural communities are *unsustainable*. Rural communities are unique. They are at the forefront of most livelihoods that deal in large stretches of land and engage with natural resources. Many of those livelihoods are in the business of producing or protecting public necessities, including food, fibers, energy, wildlife, and ecosystem management. Rural communities are also part of a national political ecosystem with an interconnected fate. Thus, we neglect, isolate, and unravel rural communities to our own collective detriment.

The prior regulatory era showed that market interventions to overcome the challenge posed by diseconomies of scale bore fruit in the form of better-served, more prosperous rural communities. Rural communities today are not necessarily under-served by all markets providing services that would fall under the label of "infrastructure." But rural isolation from national transportation and telecommunications networks today, in light of ongoing rural importance and harm to rural consumers, should be considered a series of market failures. Rural isolation can go even deeper than this, too; abandonment by a grocery store can be the nail in the coffin of a particular community's fate. Thus, a broader conception of infrastructure and the role for economic regulation is warranted if we are to understand and meet the needs of rural America. While reviving the exact models of the past may be unrealistic or undesirable, this analysis establishes that modernized interventions must be considered in order to weave rural communities back into the national fabric of the networks that connect us.