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Demographics, Employment, Income, and Networks: Differential Characteristics of Rural Populations

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Demographics, Employment, Income, and Networks: Differential Characteristics of Rural Populations

Ray D. Bollman, PhD
William Reimer, PhD

ABSTRACT. This paper reviews the key demographic, employment, income, and social capital features of rural Canada. Rural populations have different characteristics that are typically a direct result of “rurality”—i.e., long distances and low population density. Jobs that require a high-density population (such as a professional hockey player) are not available to individuals who live at a distance from a metro center. Rural Canada may have an agricultural landscape (or a forestry or mining landscape) but the vast majority of rural workers do not work in primary sectors. Manufacturing employment is larger. Rural Canada is competitive in manufacturing—rural areas are gaining a larger share of Canada’s manufacturing workforce. Rural incomes are lower, on average. But lower living costs mean that the rural incidence of low incomes is similar to urban. In rural communities, the existence of social networks does not always imply that these networks are used. Networks are complementary—one network does not always substitute for another. However, local strength in one network can be used to build capacity in another network.

KEYWORDS. Demography, employment, income, rural, social capital

INTRODUCTION

What is “rural”? Analytically, rural is distance and density—lots of the former and little of the latter.

To situate your community, consider a matrix where one dimension ranks communities by population density—from high density to low density. In the other dimension, rank communities by the distance dimension—from short distance to long distance. (The “distance” to be evaluated depends upon the issue. For a discussion of daycare services, the “distance” dimension would be different than for a discussion of marketing new skate blades to

NHL hockey teams.) In general, rural communities are in cells with long distance and low density. However, we find communities scattered throughout all possible cells.

A community with a low density but close to a metro center would be small (everyone who showed up would make the high school basketball team) and if your spouse was a brain surgeon, he or she could live there and commute to a metro hospital. Alternatively, a community with a high population density (i.e., a bigger town) but is a long distance to metro would have two competitive high school basketball teams, but if you took your spouse to this town, the only jobs would be small-town jobs. No

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Statistics Canada opportunities for a professor or medical specialist as it would be too far to commute to a job.

In the end, du Plessis and colleagues¹ argue that the choice of the distance and density criteria should be determined by the policy or research question being addressed.

A final introductory question is: What is the rural challenge?

The earliest European settlers established subsistence (essentially internally sustainable) rural communities. Later, rural areas were settled to export commodities (whale oil, cod fish, lumber, wheat, coal, nickel, etc.). Thus, most rural communities in Canada were never “internally” sustainable.

One constant in economic history has been the ongoing “increasing value of human time.”² Specifically, as Bollman³ shows, the price of labor is increasing relative to the price of capital (i.e., machines). Thus, for farms and other businesses that export from rural Canada, there is an ongoing incentive to substitute machines for labor. Many communities are suffering declines in their workforce—and many communities have been unable to find a new good or service to produce to maintain employment levels. This continues to be the challenge for “rural development.”

The words of Mrs. Skinner, during the protest of the closure of the town hospital, are key:

*“In time, we realized the truth – that we did in fact have a hand in making that decision. Fifty years of complacency had allowed our community to shrink in population, economic viability and regional importance.”*⁴

Mrs. Skinner realized that saving the hospital would not save the town. Rather, they needed to save the town in order to save the hospital. Community citizens need to grow their town to justify the infrastructure—not vice versa.

Within this context, this paper portrays key aspects of the demography, employment, income, and social capital networks of rural Canada.

DEMOGRAPHY

To portray rural Canadians, we follow du Plessis and colleagues¹ and adopt the distance and density criteria of the “rural and small town” (RST) definition. This is the population living in centers of less than 10,000 *and* who live outside the commuting zone of “larger urban centers” (LUCs) (i.e., outside Census Metropolitan Areas and Census Agglomerations). LUCs have an urban core of 10,000 or more and include the population of all neighboring towns and municipalities where more than 50% of the workforce commutes to the urban core.

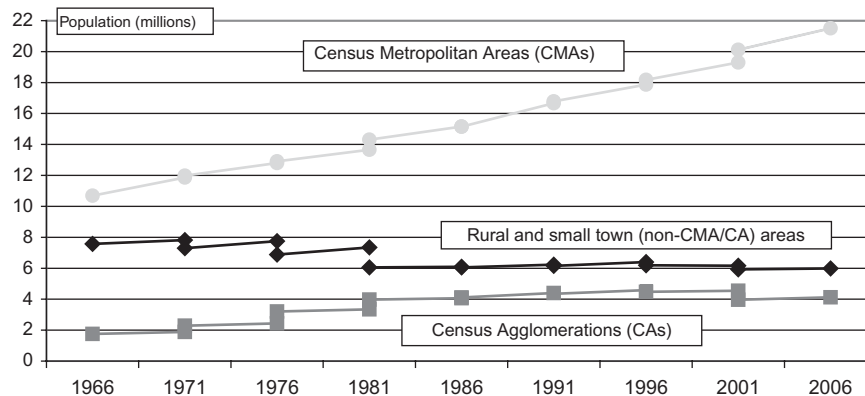
In 2006, about 6 million people resided in RST (just below 20% of Canada’s population) (Figure 1). This number has essentially been constant since 1981. This conclusion is nuanced by the re-classification of areas when their population grows beyond or falls below 10,000. In earlier years, there were up to 8 million RST Canadians. Between each census year, there has been RST population growth (except in the 1996 to 2001 period).¹ At each census year, however, Statistics Canada reclassified some towns and municipalities because they grow to (or fell below) the urban core density criteria or commuting patterns changed. Generally, fewer individuals were classified as living in RST areas. These reclassifications have lowered the RST population, even though the RST population is growing.

A constant RST population in the context of a growing population means that the RST share of Canada’s total population continues to decline.¹

The geographic mix within the RST population is also changing. The rural population is growing around cities (typically, young adults with at least one member of the family commuting to the city) and the rural population is growing around lakes and mountains—a preferred landscape for early retirees. In fact, Rothwell¹ shows RST areas as a whole attract more individuals than they lose in each age group from 25 to 69 years of age.

There was continuous rural-to-urban net migration up to the 1970s. In the 1970s there was a turnaround when more individuals moved to rural areas compared to the number

FIGURE 1. In 2006, 6 million individuals were living in rural and small town areas.



Note: In 2006, Census Metropolitan Areas (CMAs) have 50,000 or more inhabitants in the urban core with a total population of 100,000 or more and Census Agglomerations (CAs) have 10,000 or more in the urban core. Both CMAs and CAs include surrounding towns and municipalities where 50% or more of the workforce commutes to the urban core. Rural and small town (RST) refers to the population outside Census Metropolitan Areas (CMAs) and outside Census Agglomerations (CAs). The two data points for each year show the adjusted population count (due to reclassification) in order to make comparisons over time within constant boundaries.
Source: Statistics Canada. Census of Population, 1966 to 2006. Quoted in Bollman, Ray D. and Heather A. Clemenson (2008) Structure and Change in Canada's Rural Demography: An Update to 2006 with Provincial Detail (Ottawa: Statistics Canada, Agriculture and Rural Working Paper No. 90, Catalogue no. 21-601-MIE) (www.statcan.gc.ca/cgi-bin/downpub/listpub.cgi?catno=21-601-MIE).

leaving. Then there was a turnaround of the turnaround (i.e., the net migration pattern reverted to rural-to-urban net migration).^{1,5-7}

As noted by Alasia and colleagues,³ communities dependent upon primary production (agriculture, forestry, fishing, and mining) have been declining.

“Agglomeration economies” is a key concept for understanding rural and regional development. There are many advantages of “agglomeration economies.” One is the low price for transferring tacit knowledge. Information can be written down. However, tacit knowledge is attained by interaction with an expert who can demonstrate or explain the nuances, either by working with the expert or meeting the expert at a cocktail party. The population density of metro areas provides the critical mass to keep costs low when exchanging tacit knowledge.

The economic advantage of agglomeration economies means, as noted by Bollman,³ that the closer a rural community is to a metro agglomeration, the higher the rate of population growth. The role of distance is confirmed when all other variables are held constant.⁸

Most immigrants go to metro centers. Within Canada's largest cities, immigrants (i.e., individuals born outside Canada) comprise over

one-quarter of the population, whereas, as noted by Beshiri,¹ immigrants make up about 6% of the RST population.

In Canada's rural northern regions, 35% of the population reports an Aboriginal identity. In Manitoba and Saskatchewan, individuals with an Aboriginal identity are projected to represent about 20% of the provincial population in 2017.⁹ Growth of the Aboriginal population is expected to follow the previous trends of strong growth “on reserves” and strong growth in larger cities. In absolute numbers, more Aboriginals live in Ontario than in any other province. A higher Aboriginal birth rate means that they are relatively younger than the average Canadian. In 2017, Aboriginals are expected to provide 30% of the new workers in the province of Saskatchewan.

Statistics Canada has assigned a MIZ (Metropolitan Influenced Zone) code to each census subdivision in RST areas, as explained by du Plessis and colleagues,¹ to measure the degree of linkages to a LUC.¹ In 2006, 4% of Canadians (1.4 million) lived in Strong MIZ. Harris and colleagues¹ note that this population generally exhibits the characteristics of a bedroom community with long commutes to a LUC. In 2006, 46% of the Strong MIZ population lived in Ontario. This

population has excellent development opportunities with a relatively easy access to LUC jobs and LUC markets. In all parts of Canada, the Strong MIZ population is growing due to the pressure (and opportunities) from the neighbouring LUCs.

About equal shares of Canadians live in Moderate MIZ (7%) and Weak MIZ (6%). They form the core of RST residents in all provinces (to a much lesser extent in Ontario). In Newfoundland and Labrador and in Nova Scotia, 23% of their provincial population resides in Weak MIZ. Although weakly linked to a LUC, these areas, generally, are strongly linked to a regional service center with a population less than 10,000. Only 1% of Canadians live in No MIZ—and 27% of all No MIZ residents in Canada live in Saskatchewan.

Another important point is to note that 49% of RST Canadians live in Ontario and Quebec. To the extent that federal expenditures for rural is based on a per capita formula, Ontario and Quebec would expect 49% of the funds.

Geographic patterns are certainly evident. The map provided by Beshiri and Bollman³ of continuously growing and declining communities for the 1981 to 1996 period is essentially the same map that you would see today. The typology developed by Hawkins³ is essentially the same pattern as you would see today. (A color version of this map is presented in Hawkins and Bollman.¹⁰) Alasia³ has mapped patterns of socioeconomic performance across Canada, and Alasia and colleagues³ have mapped patterns of community vulnerability to population decline. All these maps portray a broadly consistent pattern.

Importantly, as Bollman³ shows, not all communities in any region follow the regional pattern. No matter how communities are grouped, some communities in each group have grown consistently and some communities have declined consistently. Rural communities are diverse.

EMPLOYMENT

Overall, there has been a dramatic shift within the rural population from farming to

nonfarm activities. The landscape may still be agricultural. The rural people-scape is decidedly nonagricultural.

Before World War II, about two-thirds of rural Canadians lived on a census-farm. Today, less than 10% of rural Canadians live on a census-farm. At one time, agricultural policy would have had a significant impact on rural. Today, 20% of agricultural policy misses RST areas because 20% of agriculture takes place in LUCs.^{11,12} When the 80% of agricultural policy arrives in RST areas, it is received by less than 10% of RST Canadians. The other 90% are not directly involved in agriculture. Bollman³ concluded there is a weak (demographic) overlap between agriculture and rural.

In 2007, nearly 3 million RST residents were employed (Table 1). Most were living and working in RST areas. About 0.4 million live in RST and work in LUC and about 0.2 million live in LUC and work in RST.¹ Most of this exchange involves Strong MIZ regions.

Among the 3 million workers, 8% were employed in agriculture. In 2007, 13% of the RST workforce was employed in manufacturing. Manufacturing in RST areas was the second major RST industrial sector among the groups in Table 1. Manufacturing was the first RST sector in New Brunswick and Quebec and tied for first in Ontario. Only in RST areas of Manitoba and Saskatchewan do we see that agriculture is the main employment sector. If you were to establish a secretariat at the federal or provincial level to manage rural affairs, in which ministry would you place the secretariat?

David Freshwater¹³ suggests that manufacturing may be the only pillar for rural development in many communities. Primary sector production is shedding labor and thus is not contributing to job creation. Most service sector jobs are located in larger cities, which act as regional service centers. Admittedly, some communities are lucky and have a Niagara Falls or a Whistler ski slope in their backyard that can be valorized to create rural jobs. However, for unlucky communities, the only proactive strategy may be manufacturing.

RST areas in Canada are competitive in manufacturing. We define “competitive” as increasing one’s market share. Bollman³ shows

TABLE 1. In 2007, 8% of Rural and Small Town Workers were Employed on Farms and 13% were Employed in Manufacturing

	Goods-producing sectors						Services-producing sectors										All sectors		
	Goods-producing sectors						Services-producing sectors												
	Agriculture	Forestry, fishing, mining, oil and gas	Utilities	Construction	Manufacturing	All goods-producing sectors	Wholesale and retail trade	Transportation and warehousing	Finance, insurance, real estate and leasing	Professional, scientific and technical services	Business, building and other support services	Educational services	Health care and social assistance	Information, culture and recreation	Accommodation and food services	Other services		Public administration	All services-producing sectors
Number employed in rural and small town areas in 2007 (.000)																			
Newfoundland and Labrador	1	10	1	7	9	27	16	5	2	2	3	6	13	2	5	4	5	62	89
Prince Edward Island	3	2	x	2	4	11	4	1	1	1	1	2	3	1	2	1	2	18	29
Nova Scotia	4	9	1	9	19	40	25	5	5	4	6	12	20	4	9	6	6	101	142
New Brunswick	5	8	1	12	23	48	21	9	5	4	6	11	20	4	9	7	8	103	152
Quebec	48	17	5	49	142	261	111	41	30	27	22	38	87	20	50	39	28	492	753
Ontario	46	10	17	66	122	261	122	44	28	30	32	52	89	29	50	32	38	545	806
Manitoba	25	4	1	12	18	60	24	9	6	3	3	12	21	4	7	7	8	104	163
Saskatchewan	37	13	1	11	9	71	25	8	7	4	2	12	20	4	9	7	6	103	173
Alberta	41	42	4	41	24	151	60	21	13	17	10	26	35	11	28	22	13	257	408
British Columbia	15	19	2	29	27	92	41	14	13	10	10	15	25	10	24	10	8	180	271
CANADA	225	133	31	237	395	1,021	447	158	109	100	93	185	333	90	194	136	119	1,964	2,985
Percent distribution of rural and small town employment with each province, 2007 (row percent)																			
Newfoundland and Labrador	1	11	1	8	10	31	18	6	2	2	3	7	15	2	6	5	5	69	100
Prince Edward Island	9	7	n.a.	8	12	37	13	4	3	2	3	6	12	3	7	4	6	63	100
Nova Scotia	3	6	0	6	13	28	17	4	3	3	4	8	14	3	6	4	4	71	100
New Brunswick	3	5	1	8	15	32	14	6	3	3	4	7	13	3	6	5	5	68	100
Quebec	6	2	1	7	19	35	15	5	4	4	3	5	12	3	7	5	4	65	100
Ontario	6	1	2	8	15	32	15	5	3	4	4	6	11	4	6	4	5	68	100
Manitoba	15	2	1	7	11	37	14	6	4	2	2	7	13	2	4	4	5	64	100
Saskatchewan	21	8	0	6	5	41	14	5	4	2	1	7	11	2	5	4	3	59	100
Alberta	10	10	1	10	6	37	15	5	3	4	2	6	9	3	7	5	3	63	100
British Columbia	6	7	1	11	10	34	15	5	5	4	4	6	9	4	9	4	3	66	100
CANADA	8	4	1	8	13	34	15	5	4	3	3	6	11	3	6	5	4	66	100

	0	8	2	3	2	Percent distribution of rural and small town employment within each industrial sector, 2007 (column percent)												3	4	3	3
						3	3	3	2	2	3	3	4	2	3	3	3				
Newfoundland and Labrador	1	2	n.a.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1
Prince Edward Island	2	6	2	4	5	4	6	3	4	4	6	6	6	5	5	4	5	5	5	5	5
Nova Scotia	2	6	3	5	6	5	5	6	4	4	6	6	6	5	5	5	5	5	6	5	5
New Brunswick	21	13	15	21	36	26	25	26	28	27	23	20	26	23	26	29	23	25	23	25	25
Quebec	20	8	54	28	31	26	27	28	25	29	34	28	27	32	26	23	32	28	32	27	27
Ontario	11	3	4	5	5	6	5	6	5	3	3	7	6	4	4	5	6	5	6	5	5
Manitoba	16	10	3	5	2	7	6	5	6	4	2	6	6	5	4	5	5	5	5	5	6
Saskatchewan	18	32	11	17	6	15	13	14	12	17	11	14	11	13	15	16	11	13	11	13	14
Alberta	7	14	5	12	7	9	9	9	12	10	11	8	7	11	12	8	7	9	7	9	9
British Columbia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CANADA	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

x. Data suppressed to meet the confidentiality requirements of the Statistics Act.

Source: Statistics Canada. Labour Force Survey, CANSIM Table 282-0095 (<http://cansim2.statcan.ca/cgi-win/CNSMCGI.PGM>).

that RST areas in Canada have been increasing their share of Canada's total manufacturing workforce at a slow but steady pace since 1976.

There is a slow restructuring of skills within each industry. Alasia and Magnusson¹ find that higher-skilled jobs are concentrating in urban centers and lower-skilled jobs are concentrating in rural areas. Universities are located in the big(ger) cities and rural youth are less likely to attend university. However, community colleges fill the gap.^{14,15} As a result, rural youth are just as likely to pursue postsecondary education as urban youth.

Rural communities face a dilemma when trying to improve community educational attainment levels. Alasia³ notes that if there are no local jobs for a given skill, there is less incentive for individuals to attain this skill. If there is a potential to lose skilled workers, there is less incentive for communities to invest in upgrading skills in the community.

INCOME

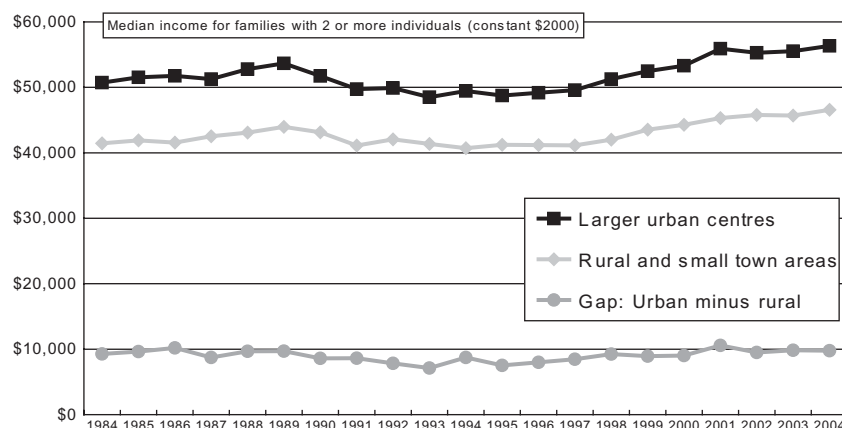
In the 20-year period from 1984 to 2004, the median income of rural and small town families (with 2+ members) varied between \$40,700 in 1994 and \$46,600 in 2004 (in constant \$2000).

The income gap between rural and urban families has been about \$10,000 (\$2000) (Figure 2). This gap was unchanged over two decades.^{2,3,16} Perhaps this is an equilibrium due to the lower cost of rural living and the desire of people to live rural.

The incidence of low incomes (using the low income cut-off (LICO)) was higher in rural Canada up to the mid-1980s but is now lower than in urban areas. The LICO is adjusted for urbanization class—which gives a lower rural LICO to reflect lower living costs (largely, the cost of housing). This is part of the reason why a lower proportion of RST individuals are below the LICO.

Different ways of measuring the incidence of low income gives different results. Using the “low income measure” (LIM) (i.e., household income less than half of the national median income, adjusted for household size), Rupnik and colleagues³ show that rural people have a higher incidence of low incomes because there is no adjustment for cost of living differences. A third measure, the “market basket measure” (MBM), includes transportation costs in its calculation. Higher transportation costs in localities without public transit generates a higher MBM. The result is a rural incidence of low income that is similar to urban.¹⁶

FIGURE 2. The median income of families in rural and small town areas is \$10,000 less than in larger urban centres.



Source: Statistics Canada. Survey of Labour and Income Dynamics (and the Survey of Consumer Finances for earlier years) (<http://www.statcan.gc.ca/bsolc/lolc-cel/olc-cel?lang=eng&catno=75F0011X>)
Larger urban centres refers to CMAs (Census Metropolitan Areas) and CAs (Census Agglomerations). Rural and small town areas are non-CMA/CA areas.

When one looks at “low income” communities, Alasia¹ finds

- 1.2 million individuals (14% of all individuals residing in predominantly rural regions) lived in households with income from all sources below the LICO.
- However, only one-half (0.6 million) lived in “poverty-intensive” communities (with more than 15% of the population living below LICO).
- Thus, one-half of rural low-income individuals live in low-income communities—and one-half do not live in low-income communities.
- This is grist for the policy debate whether one should target “poverty” policy at individuals or at communities. (This is different than the discussion of the shift from a sector-based to a place-based policy.¹⁷ A place-based policy would focus on the best project in a place—with a focus on valorizing under-utilized assets in a place. A focus on investing in people in a place is part of a ‘place-based’ policy.)

Rural citizens pay less tax and receive more transfers per dollar of income than urban citizens.^{1,18} Less tax is paid because rural citizens have lower income levels. More transfers are received because

- unemployment rates are higher (i.e., higher benefits from the Employment Insurance program);
- a higher proportion of seniors generates relatively more old age pension income; and
- a higher proportion of children generates relatively more transfers from the Child Tax Credit program.

NETWORKS

The New Rural Economy project (<http://nre.concordia.ca>) identified four types of networks by focusing on the norms that guide them: market, bureaucratic, volunteer organization, and family networks. These network assets are

not always used, however. Reimer¹⁹ has shown that although both formal and informal networks often exist, some remain unused for economic development because they operate on norms that are unfamiliar or unwelcoming to entrepreneurs and business leaders. Communities that are able to bridge these differences open up innovative opportunities with significant economic implications.²⁰ A major objective of community development initiatives would be to find ways in which these unused social networks may be used for economic enhancement.

In addition, the networks are complementary—one cannot always substitute for another—but they are often used in concert. Thus, one network may not function as a safety net for the weakness of another but it may make the use of another possible. Using bureaucratic health services, for example, often requires the support of communal-based networks to overcome the intimidation of doctors, provide transportation, or free up the time by taking over child care demands. In many ways, local strength in one type of network can be used to build capacity in another.

Rothwell and Turcotte¹ show that social networks associated with voluntary groups, businesses, and government organizations are most likely to involve individuals with higher educational attainment. This places rural areas at a disadvantage since educational levels are relatively low. However, rural communities have traditionally had strong social networks based on kin, religious, and cultural commonalities. It may be in these domains that development initiatives can begin. In this case, the challenge is to build bridges to the market and bureaucratic-based networks that enhance access to economic resources.

CONCLUSION

“I’ve been telling my classes for some years now that urban versus rural is the most significant division facing the country,” says Hugh Segal, the former Progressive Conservative strategist who now teaches public policy at Queen’s University in Kingston,

Ont. "It's far more important than French and English, and far more important than East versus West." ²¹

Mr. Segal is now a Senator in the Canadian Parliament. He would know the stark urban-rural split among Members of Parliament. Most provincial legislatures have a similar split. Arguably, the stark urban-rural split among elected legislators encapsulates sharp urban-rural differences in views of a myriad of economic and social issues.

Bollman and Prud'homme¹ observe that the price of rurality (i.e., the price of overcoming distance) is changing:

- the price of communicating has fallen (except for the price of stamps!);
- the price of shipping goods by train or truck declined up to 2006; and
- the price of moving people declined from the mid-1950s to the late 1970s and increased throughout the 1990s and up to 2006. Although the relative price of purchasing a vehicle continues to fall, the price of insurance has increased and the price of gasoline has fluctuated, with recent relative increases.

There is an old saying among rural analysts—once you've seen one rural community, you've seen one rural community. No two rural communities are the same. Rural policy initiatives need flexibility to achieve desired outcomes. There is no average rural community—except in the charts on this article!

Rural is distance and density. One view of rural policy is to lower the price of distance and to lower the price (or cost) of the lack of density (i.e., the lack of agglomeration economies). A more general view of rural policy is to pursue the best project in a rural community or a rural region.

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