

Population Change

Average rural county population growth was high in the 1970's, tapered off to only 1 percent in the 1980's, and then rebounded in 1990-96. The actual average rural growth in the 1970's is underestimated as we used a constant 1983 definition of rural (nonmetro) for all the analyses: one consequence of rapid rural growth in the 1970's was a reclassification of many nonmetro counties as metro based on the 1980 census.

Rural county population change during 1970-96 has been highly uneven across counties (table 3). In any decade, while many counties lost population, others grew by a third or more. Over the past 25 years these differences have accumulated. The county with the greatest growth over the period, Flagler County, Colorado, had nine times as many people in 1996 as in 1970. It was classified as a metro county based on the 1990 Census of Population. The county with the greatest decline, Burke County, North Dakota, lost nearly half of its population during the same period.

The shape of the distribution of population change during 1970-96 is "log normal," generally rounded but with a tail to the right (fig. 2). The distributions for each period—1970-80, 1980-90, and 1990-96—have

similar if less pronounced patterns. For this reason, we used the natural log transformation of population change as the dependent variable in our statistical analyses.

Table 3—Population change statistics for nonmetro counties (N=2,358)

Statistics	Population change			
	1970-80	1980-90	1990-96*	1970-96
	<i>Percent</i>			
Mean	14.2	1.2	9.2	25.8
Standard deviation	20.8	14.5	15.1	55.5
Minimum	-44.5	-32.0	-37.5	-55.1
Maximum	232.0	163.0	132.8	846.2

*10-year rate.

Source: Calculated by author from Census of Population STF3 data tapes and Bureau of the Census 1996 population estimates.

Figure 2
Frequency distribution of 1970-96 population change

