



Briefing Rooms

Measuring Rurality: Rural-Urban Commuting Area Codes

2000 Rural-Urban Commuting Area Codes

The Rural-Urban commuting area (RUCA) codes, a detailed and flexible scheme for delineating sub-county components of the U.S. settlement system, have been updated using data from the 2000 decennial census. RUCA codes are based on the same theoretical concepts used by the Office of Management and Budget (OMB) to define county-level [metropolitan](#) and [micropolitan](#) areas. We applied similar criteria to measures of population density, urbanization, and daily commuting to identify urban cores and adjacent territory that is economically integrated with those cores. We adopted OMB's metropolitan and micropolitan terminology to highlight the underlying connectedness between the two classification systems. However, the use of census tracts instead of counties as building blocks for RUCA codes provides a different and more detailed geographic pattern of settlement classification.

Census tracts are used because they are the smallest geographic building block for which reliable commuting data are available. The classification contains 10 primary and 30 secondary codes. Few, if any, research or policy applications need the full set of codes. Rather, the system allows for the selective combination of codes to meet varying definitional needs.

The 10 whole numbers shown in [Table 1](#) below refer to the primary, or single largest, commuting share. Metropolitan cores (code 1) are defined as census tract equivalents of [urbanized areas](#). Micropolitan and small town cores (codes 4 and 7, respectively) are tract equivalents of [urban clusters](#). Tracts are included in urban cores if more than 30 percent of their population is in the urbanized area or urban cluster.

High commuting (codes 2, 5, and 8) means that the largest commuting share was at least 30 percent to a metropolitan, micropolitan, or small town core. Many micropolitan and small town cores themselves (and even a few metropolitan cores) have high enough out-commuting to other cores to be coded 2, 5, or 8; typically these areas are not job centers themselves but serve as bedroom communities for a nearby, larger city. Low commuting (codes 3, 6, and 9) refers to cases where the single largest flow is to a core, but is less than 30 percent. These codes identify "influence areas" of metro, micropolitan, and small town cores, respectively, and are similar in concept to the "nonmetropolitan adjacent" codes found in other ERS classification schemes ([Rural-Urban Continuum Code](#), [Urban Influence Code](#)). The last of the general classification codes (10) identifies rural tracts where the primary flow is local or to another rural tract.

These 10 codes offer a relatively straightforward and complete delineation of metropolitan and nonmetropolitan settlement based on the size and direction of primary commuting flows. However, the settlement world is not that simple. The primary RUCA codes are further subdivided to identify areas where settlement classifications overlap, based on the size and direction of the secondary, or second largest, commuting flow. For

example, 1.1 and 2.1 codes identify areas where the primary flow is within or to a metropolitan core, but another 30 percent or more commute to a larger metropolitan core. Similarly, 10.1, 10.2, and 10.3 identify rural tracts for which the primary commuting share is local, but more than 30 percent also commute to a metropolitan, micropolitan, or small town core, respectively.

Influence areas for urban cores extend far beyond the relatively small number identified on the basis of primary flows (codes 3, 6, and 9). Codes 4-10 were subdivided to identify micropolitan, small town, and rural tracts with secondary flows of 10 to 30 percent to larger urban cores. This strategy identifies important, potentially urbanizing zones within current nonmetropolitan territory.

RUCA codes are many, but permit stricter or looser delimitation of metropolitan, micropolitan, and small town commuting areas. This classification scheme provides an alternative to county-based systems for situations where more detailed geographic analysis is feasible. It identifies areas of emerging urban influence and areas where settlement classifications overlap, thus providing an exhaustive system of statistical areas for the country.

Table 1. Rural-Urban Commuting Areas (RUCAs), 2000

- 1 Metropolitan area core: primary flow within an urbanized area (UA)
 - 1.0 No additional code
 - 1.1 Secondary flow 30% to 50% to a larger UA
- 2 Metropolitan area high commuting: primary flow 30% or more to a UA
 - 2.0 No additional code
 - 2.1 Secondary flow 30% to 50% to a larger UA
- 3 Metropolitan area low commuting: primary flow 5% to 30% to a UA
 - 3.0 No additional code
- 4 Micropolitan area core: primary flow within an Urban Cluster of 10,000 to 49,999 (large UC)
 - 4.0 No additional code
 - 4.1 Secondary flow 30% to 50% to a UA
 - 4.2 Secondary flow 10% to 30% to a UA
- 5 Micropolitan high commuting: primary flow 30% or more to a large UC
 - 5.0 No additional code
 - 5.1 Secondary flow 30% to 50% to a UA
 - 5.2 Secondary flow 10% to 30% to a UA
- 6 Micropolitan low commuting: primary flow 10% to 30% to a large UC
 - 6.0 No additional code
 - 6.1 Secondary flow 10% to 30% to a UA
- 7 Small town core: primary flow within an Urban Cluster of 2,500 to 9,999 (small UC)
 - 7.0 No additional code
 - 7.1 Secondary flow 30% to 50% to a UA
 - 7.2 Secondary flow 30% to 50% to a large UC
 - 7.3 Secondary flow 10% to 30% to a UA
 - 7.4 Secondary flow 10% to 30% to a large UC
- 8 Small town high commuting: primary flow 30% or more to a small UC
 - 8.0 No additional code
 - 8.1 Secondary flow 30% to 50% to a UA
 - 8.2 Secondary flow 30% to 50% to a large UC
 - 8.3 Secondary flow 10% to 30% to a UA

- 8.4 Secondary flow 10% to 30% to a large UC
- 9 Small town low commuting: primary flow 10% to 30% to a small UC
 - 9.0 No additional code
 - 9.1 Secondary flow 10% to 30% to a UA
 - 9.2 Secondary flow 10% to 30% to a large UC
- 10 Rural areas: primary flow to a tract outside a UA or UC
 - 10.0 No additional code
 - 10.1 Secondary flow 30% to 50% to a UA
 - 10.2 Secondary flow 30% to 50% to a large UC
 - 10.3 Secondary flow 30% to 50% to a small UC
 - 10.4 Secondary flow 10% to 30% to a UA
 - 10.5 Secondary flow 10% to 30% to a large UC
 - 10.6 Secondary flow 10% to 30% to a small UC

A ZIP code approximation of the RUCA codes is also available. It is based on an overlay of ZIP code areas on census tracts and not on a separate analysis of population and commuting data unique to the ZIP code geographic unit.

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[Download the 2000 or 1990 Rural-Urban Commuting Area Codes](#)

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