

# Where is the Center of Knox County's Population?

**Date:**

September 1994

**For more  
information:**

**MPC Publications:**

- 1990 Census of Population and Housing, Statistics by Sector
- 1990 Census of Population and Housing, Census Tract Profiles

**MPC contact person:**

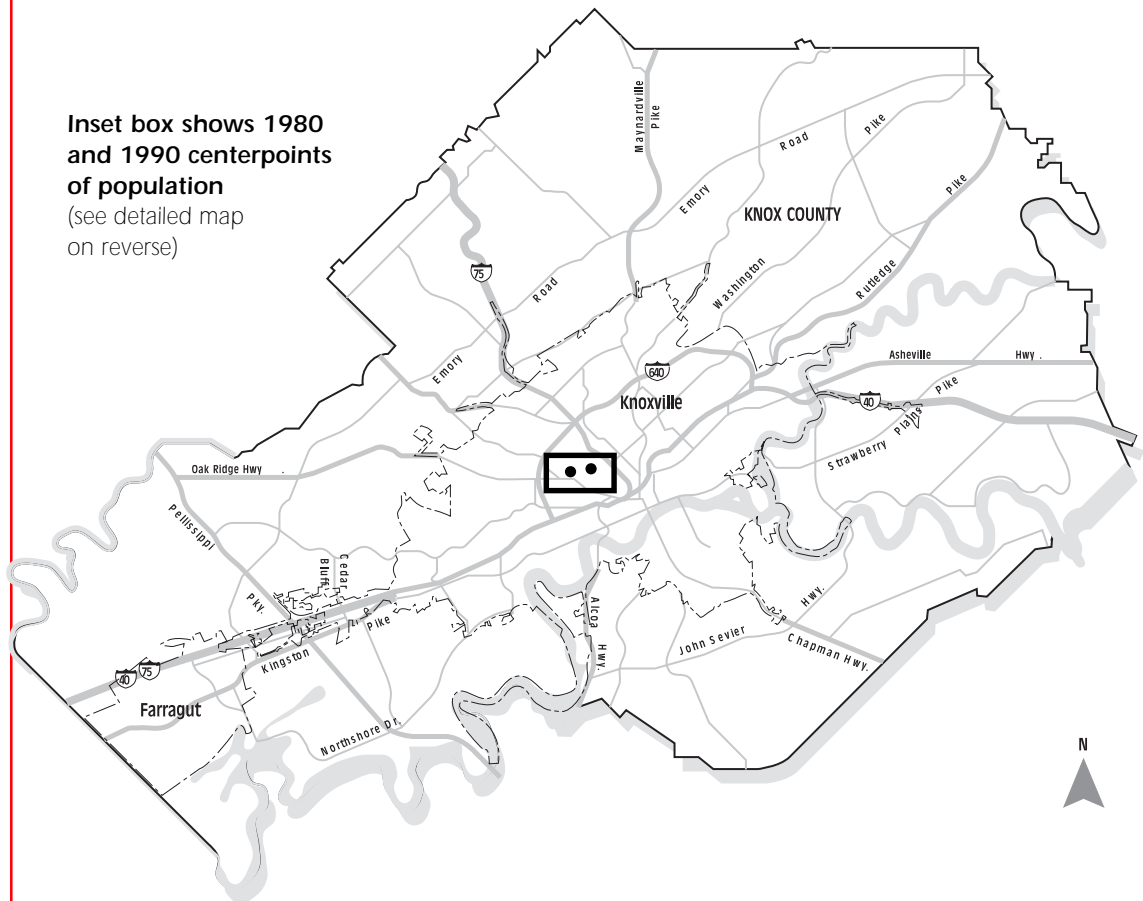
- Gretchen Beal

This report summarizes the measurement of the geographical center of population in Knoxville and Knox County.

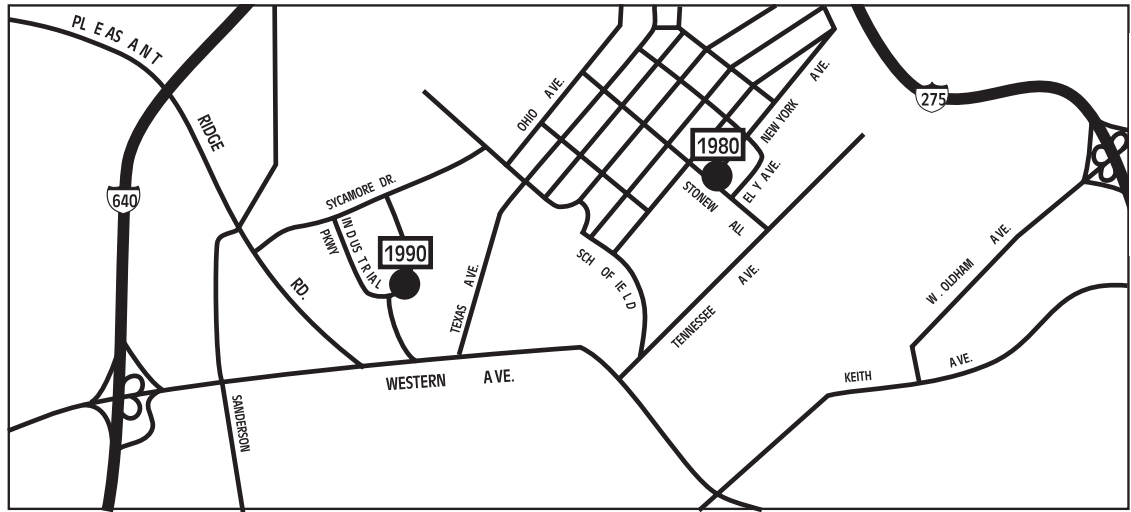
In 1980, 319,694 people lived in all of Knox County. By 1990, that number grew to 335,749. Looking at a map of the city and county, one might guess that the population is centered somewhere in the heart of the city because of the dense pattern of development. However, it is quite well documented that west Knox County has seen the greatest rate of new development and population growth over the past several years, leading others to speculate that the center is somewhere in the west.

So, where is the center of local population? In 1990, it was located near East Industrial Parkway, a short distance northeast of the intersection of Western Av-

**Inset box shows 1980 and 1990 centerpoints of population**  
(see detailed map on reverse)



**1980 and 1990 Centers of Population** (inset map from other side)



SOURCE: Calculated by MPC from 1980 and 1990 census data.

venue and Pleasant Ridge Road, inside the I-640 beltway in northwest Knoxville. The 1990 center represents a westward shift from the 1980 location, which was a point 0.7 miles away, near the intersection of Stonewall Street and Ely Avenue in Lonsdale.

**Methodology**

A simple technique is used to find the center of local population. The measure, specifically, is the mean center of gravity, which represents a composite of several smaller area population centers, averaged across the county. To derive this value, the center of population in each of the 79 census tracts of Knoxville and Knox County is marked on a map on which a horizontal axis has been drawn along the lower boundary of the county, and a vertical axis along the western edge. The distances from the center of each tract to the

horizontal axis are measured, and the population in each tract is multiplied by its associated distance. Once this is done for each tract, the products for all are summed. The total of the products is then divided by the entire population of the city and county.

Similarly, the distances from the center of each census tract to the vertical axis are measured, the populations of each are multiplied by the distances, the products are summed, and the total is divided by the overall population. The resultant pair of values from these calculations is the distance that the vertical and horizontal axes must be moved east and north respectively, and the point at which the axes intersect marks the mean center of gravity, or the population center of Knoxville and Knox County.