

## Maps of Kernel-Based Metropolitan Regions (KBMRs)

“A Better Delineation of U.S. Metropolitan Areas: Supplemental Materials.” Jordan Rappaport and McKenzie Humann. 2025. Federal Reserve Bank of Kansas City. Mendeley Data, V1, doi: 10.17632/pg64w4hkjh.1 (<https://data.mendeley.com/datasets/pg64w4hkjh/1>)

“A Better Delineation of U.S. Metropolitan Areas.” Jordan Rappaport and McKenzie Humann. 2025. Federal Reserve Bank of Kansas City. Research Working Paper no. 25-01. doi: doi.org/10.18651/RWP2025-01 (Forthcoming, *Journal of Urban Economics*)

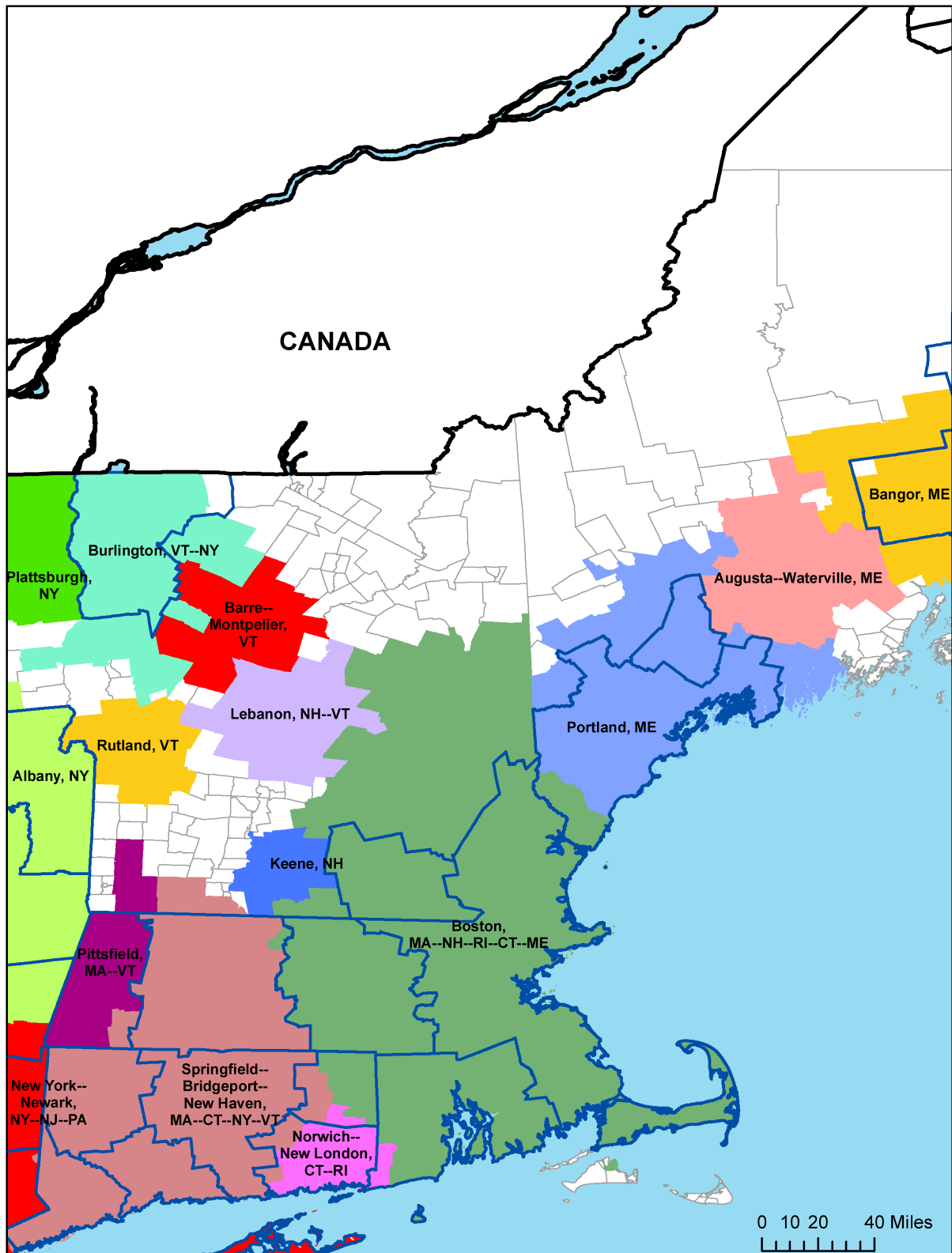
The paper broadly defines metropolitan areas as unions of built-up locations near each other with combined population of at least moderate scale and among which a significant share of residents and workers travel on a day-to-day basis between places of residence, places of employment, and places of consumption. A wide range of parameterizations of our delineation algorithm are arguably consistent with this broad definition.

Kernel-Based Metropolitan Areas (KBMA), our preferred parameterization, are likely to be appropriate for most questions and purposes. They balance encompassing commuting flows with excluding locations that are farther away or less densely settled. Kernel-Based Metropolitan Regions (KBMRs) are an alternative benchmark that emphasizes encompassing commuting flows and so are considerably more expansive than KBMA.

This file includes maps of KBMRs, based on commuting flows in 2000, for each of the following regions:

1. New England
2. New York City to Virginia Beach
3. North and South Carolina
4. Louisville to Atlanta
5. Florida
6. Cleveland to Chicago
7. Minneapolis to Omaha
8. Saint Louis to Kansas City
9. Texas
10. Mountain States
11. Southern California
12. Northern California
13. Pacific Northwest

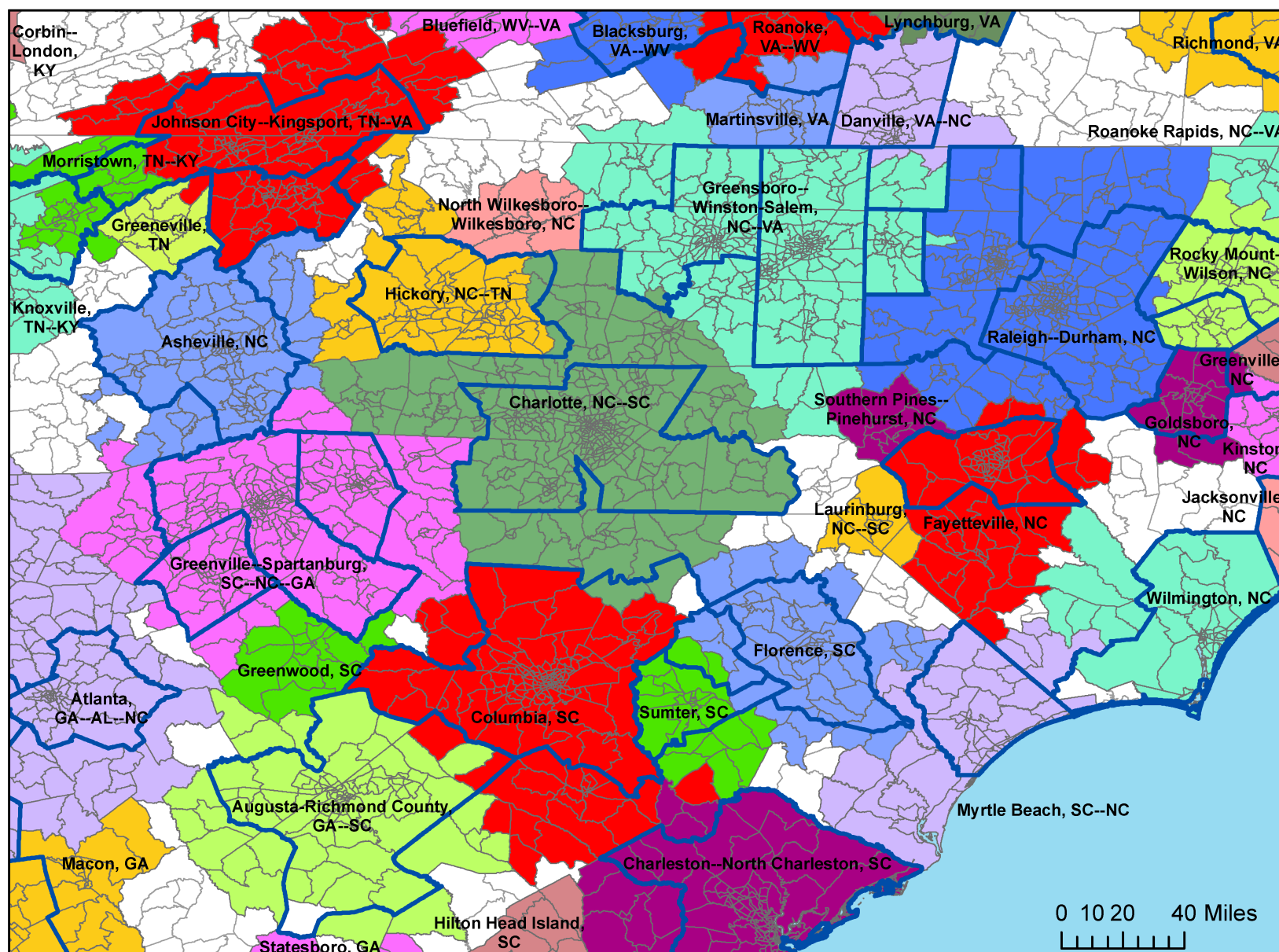
In addition to the archive of supplemental materials cited above, enumerations, maps, and workbooks for KBMA, KBMRs, and a third benchmark can be individually downloaded from the working paper’s [webpage](#).



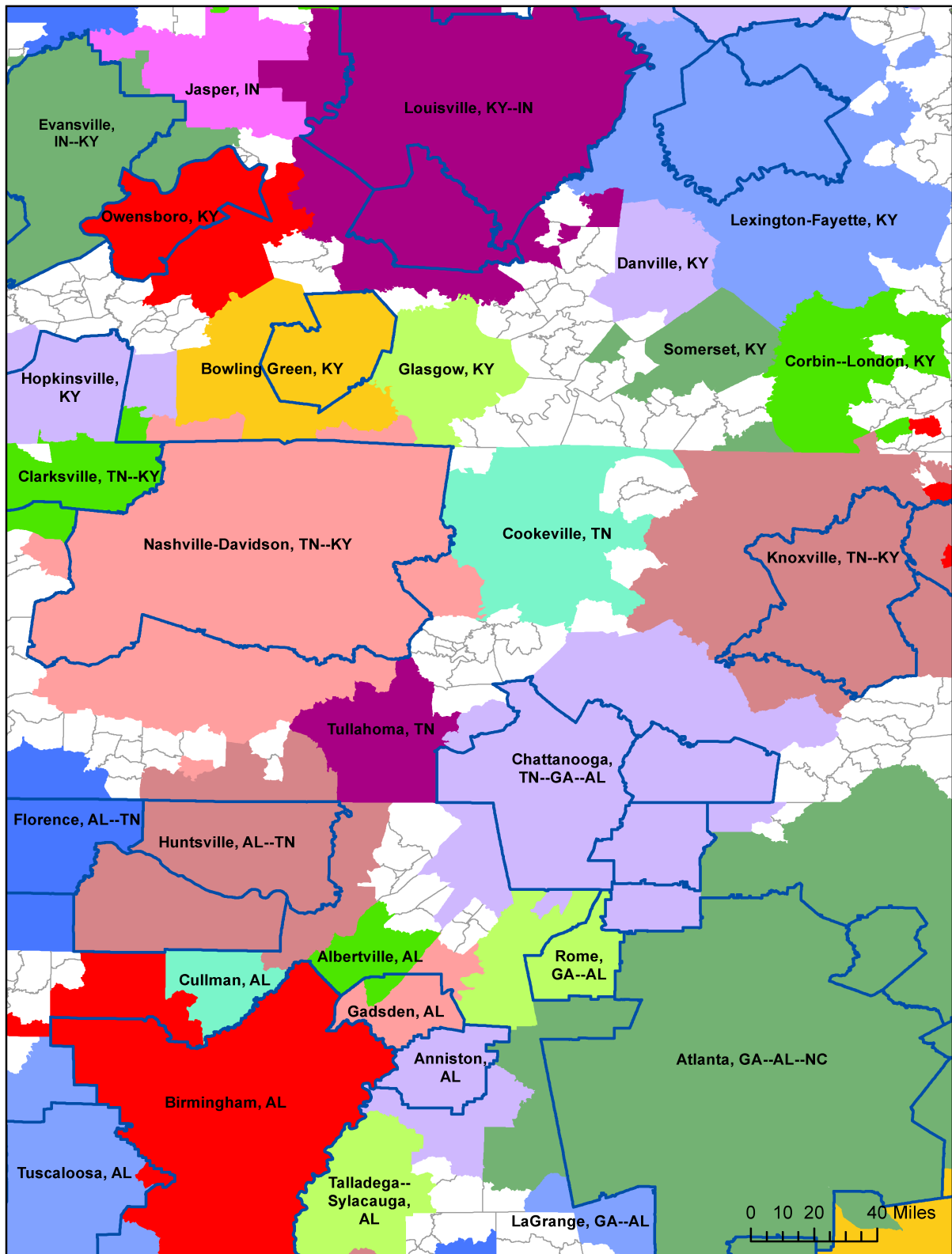
**KBMRs in New England.** Blue lines demarcate the borders of metropolitan CBSAs. Gray lines demarcate tract borders. Delineations are based on commuting flows in 2000.



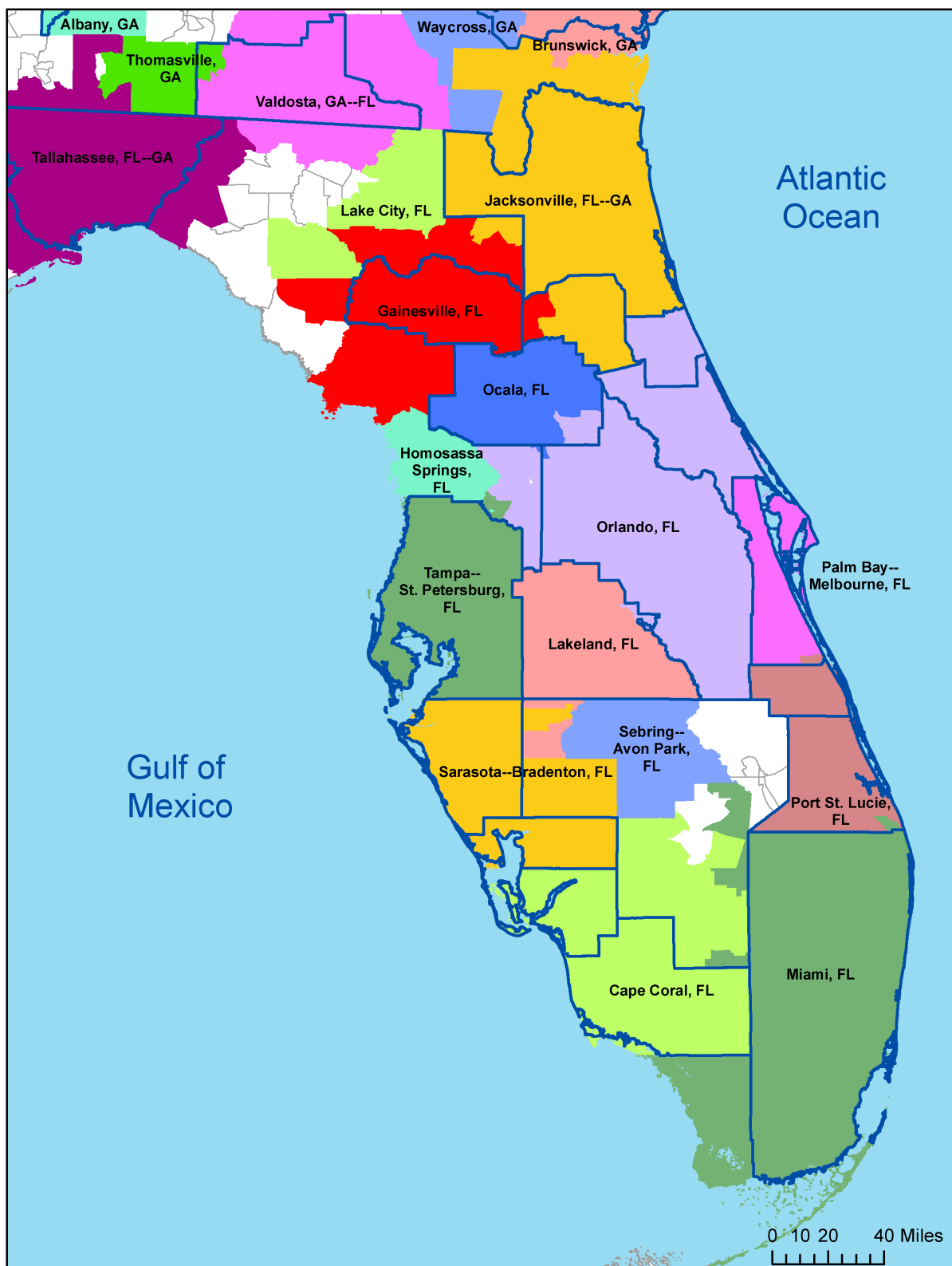
**KBMRs from New York City to Virginia Beach.** Blue lines demarcate the borders of metropolitan CBSAs. Gray lines demarcate tract borders. Delineations are based on commuting flows in 2000.



**KBMRs in North and South Carolina.** Blue lines demarcate the borders of metropolitan CBSAs. Gray lines demarcate tract borders. Delineations are based on commuting flows in 2000.



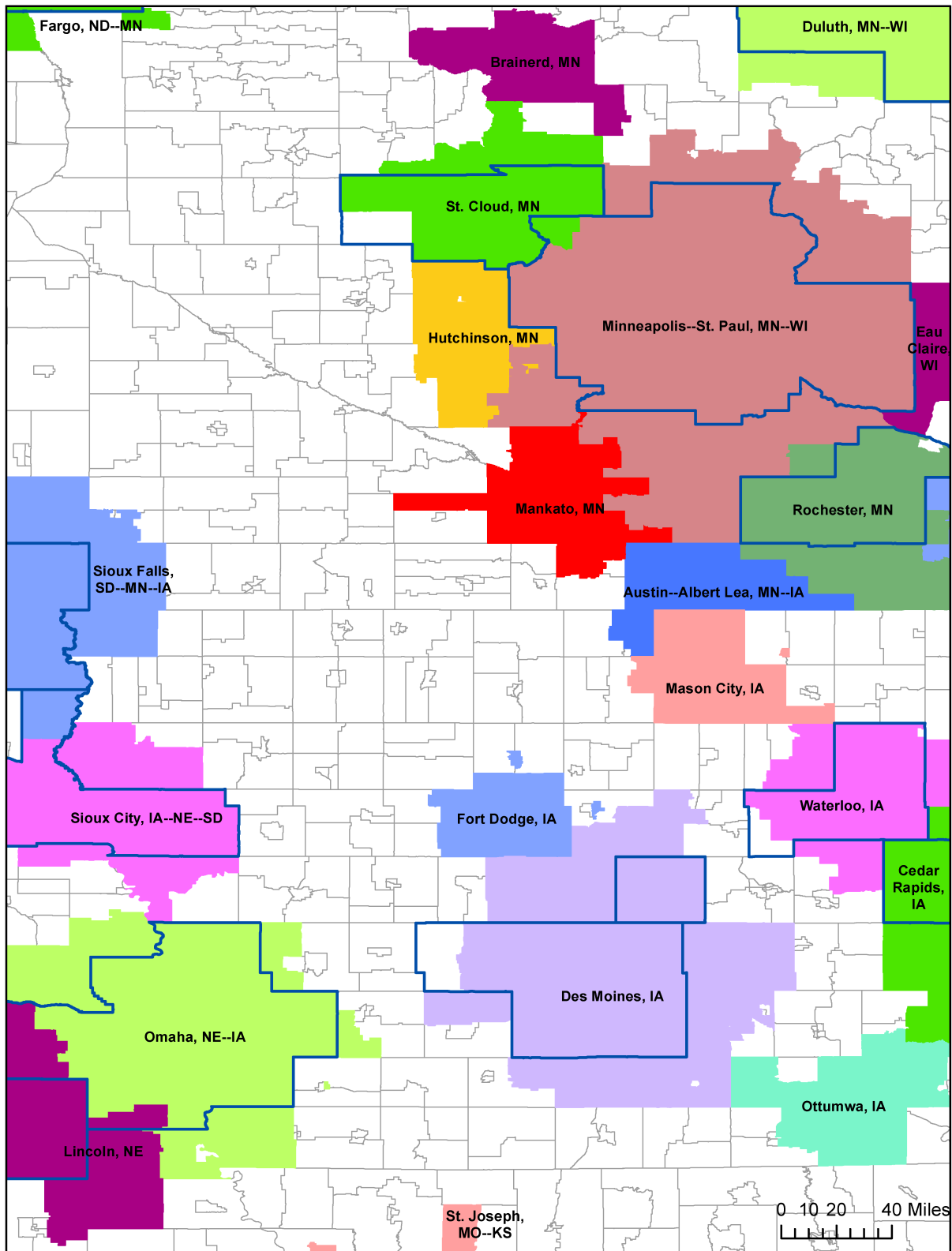
**KBMRs from Louisville to Atlanta.** Blue lines demarcate the borders of metropolitan CBSAs. Gray lines demarcate tract borders. Delineations are based on commuting flows in 2000.



**KBMRs in Florida.** Blue lines demarcate the borders of metropolitan CBSAs. Gray lines demarcate tract borders. Delineations are based on commuting flows in 2000.

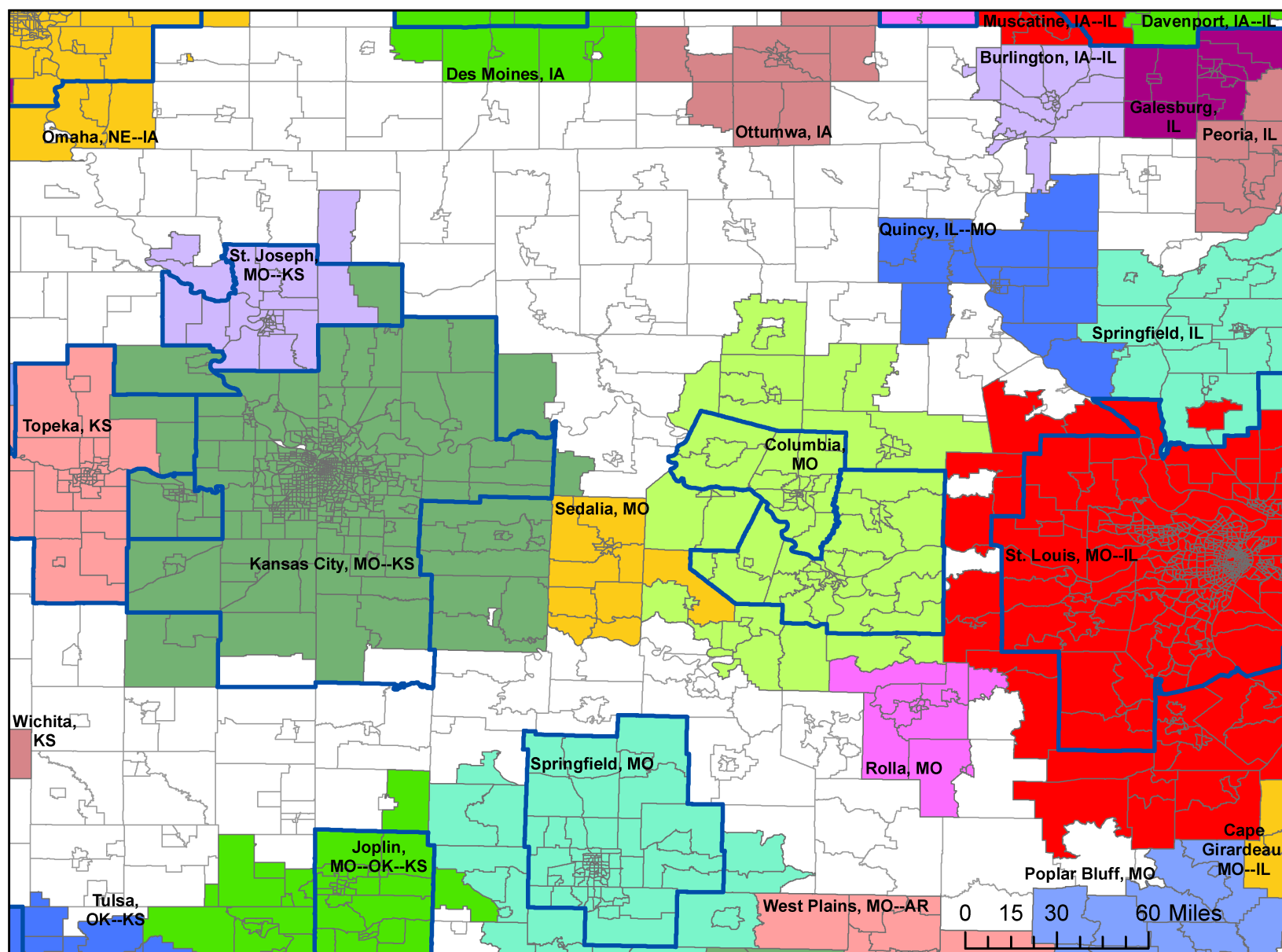




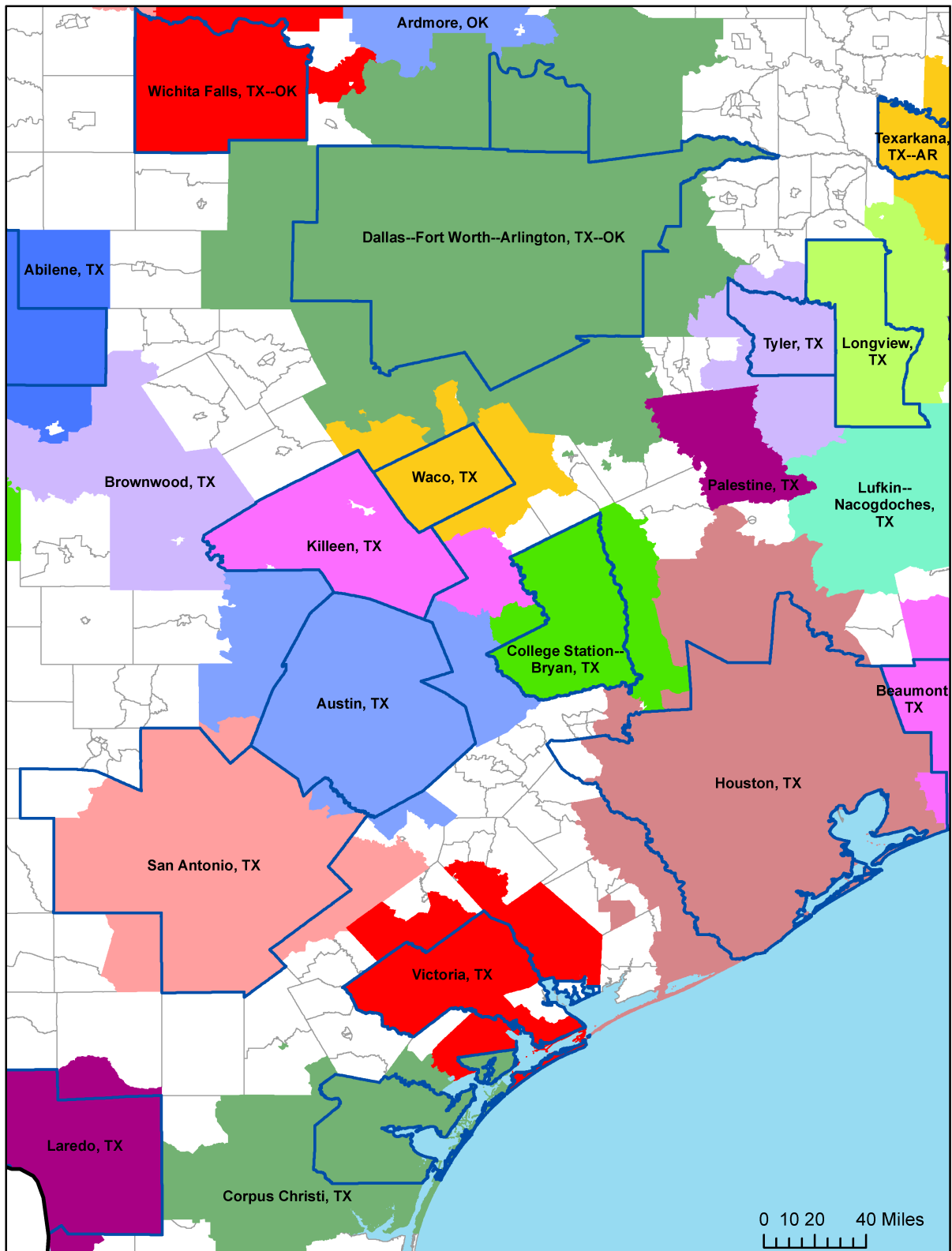


**KBMRs from Minneapolis to Omaha.** Blue lines demarcate the borders of metropolitan CBSAs. Gray lines demarcate tract borders. Delineations are based on commuting flows in 2000.

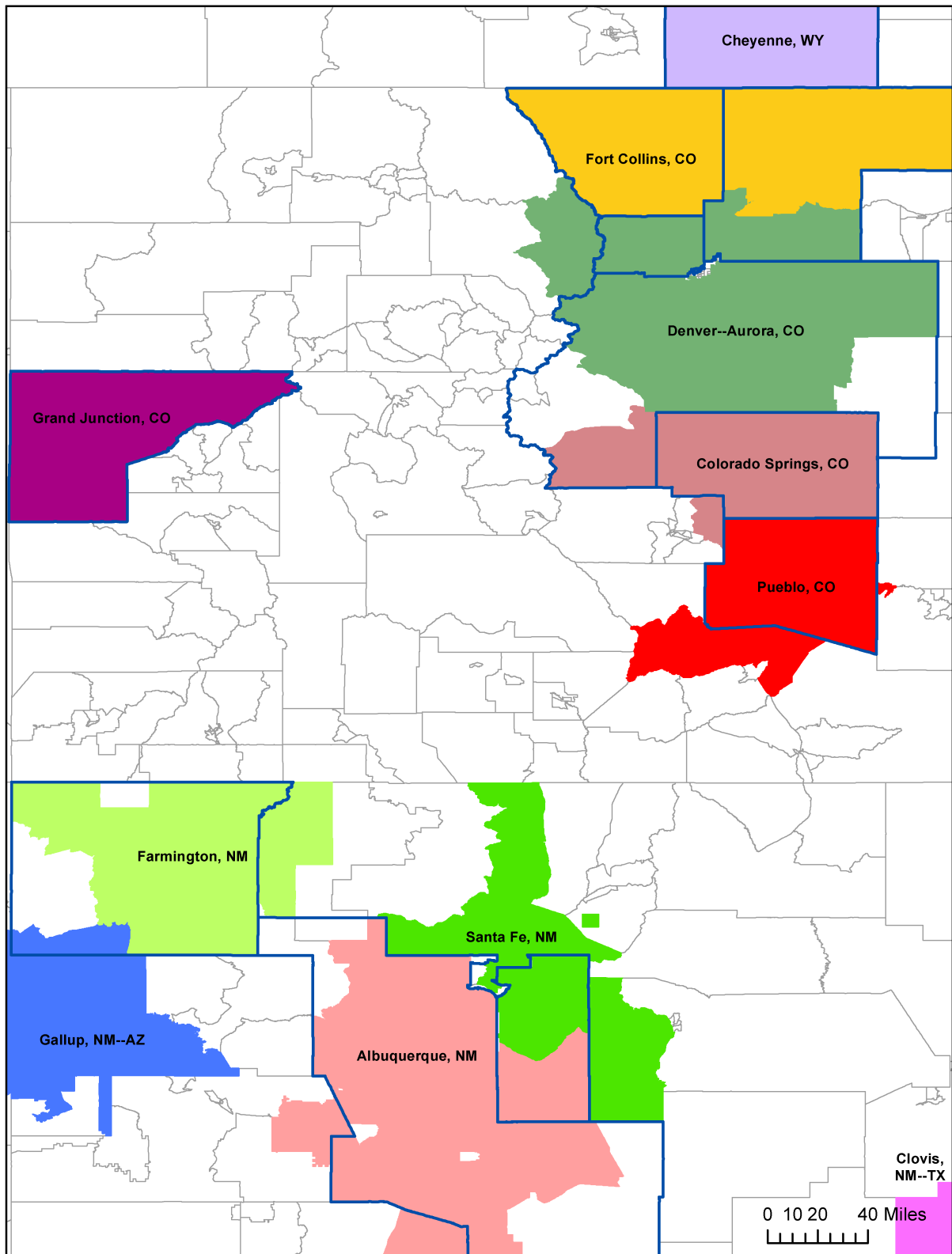




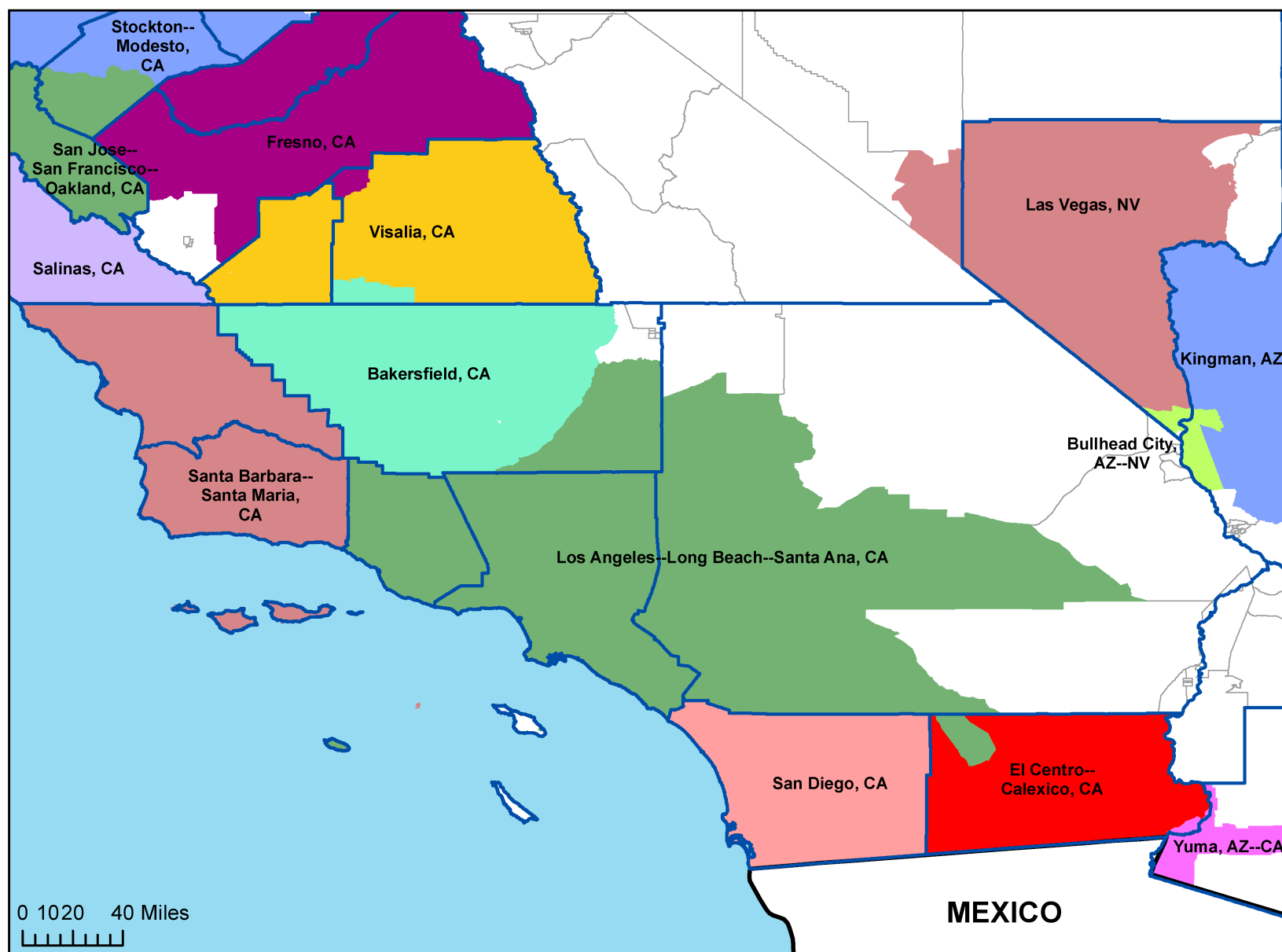
**KBMRs from Saint Louis to Kansas City.** Blue lines demarcate the borders of metropolitan CBSAs. Gray lines demarcate tract borders. Delineations are based on commuting flows in 2000.



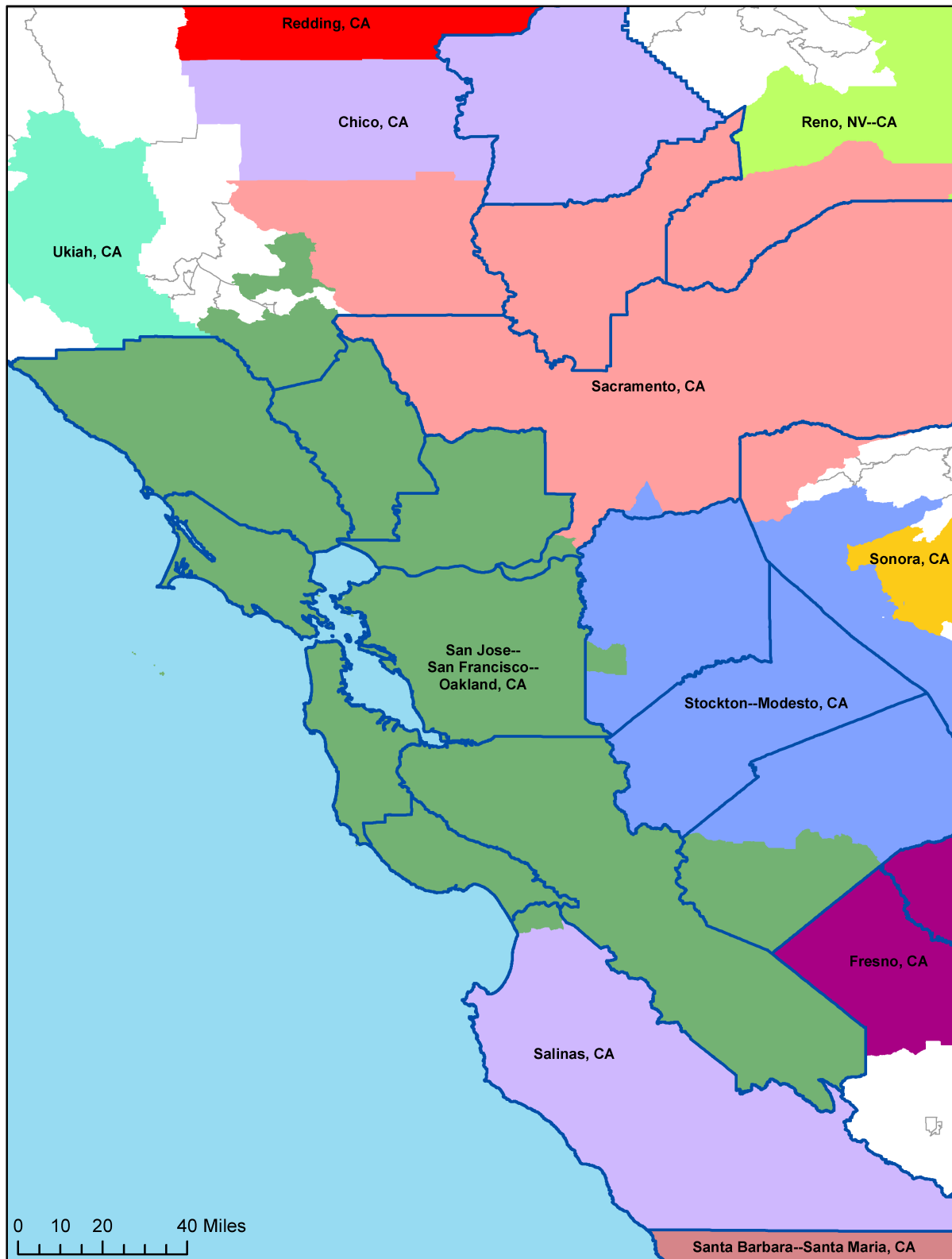
**KBMRs in Texas.** Blue lines demarcate the borders of metropolitan CBSAs. Gray lines demarcate tract borders. Delineations are based on commuting flows in 2000.



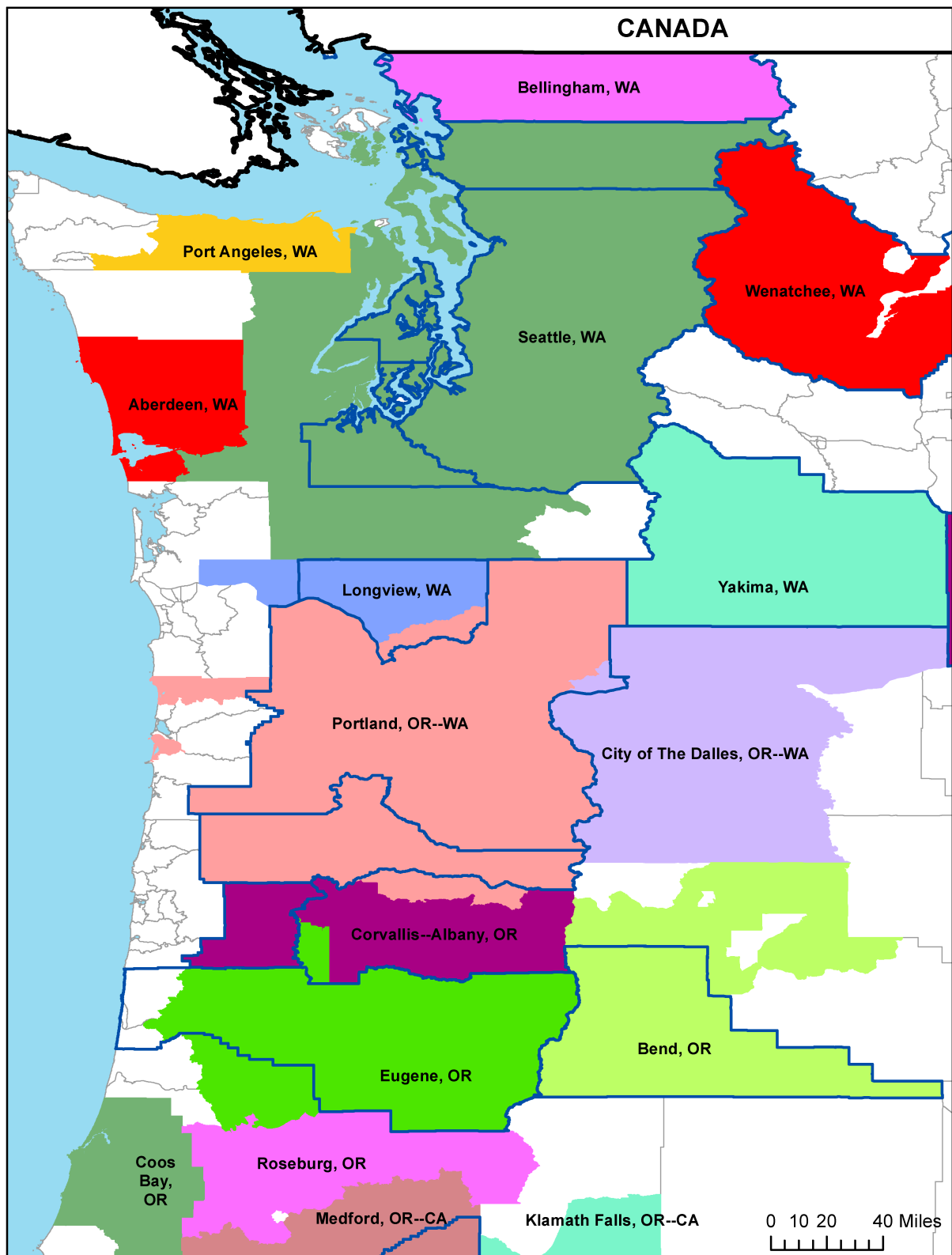
**KBMRs in Mountain States.** Blue lines demarcate the borders of metropolitan CBSAs. Gray lines demarcate tract borders. Delineations are based on commuting flows in 2000.



**KBMRs in Southern California.** Blue lines demarcate the borders of metropolitan CBSAs. Gray lines demarcate tract borders. Delineations are based on commuting flows in 2000. The inclusion of several Channel Islands in KBMRs reflects census tracts that have portions on the mainland.



**KBMRs in Northern California.** Blue lines demarcate the borders of metropolitan CBSAs. Gray lines demarcate tract borders. Delineations are based on commuting flows in 2000.



**KBMRs in the Pacific Northwest.** Blue lines demarcate the borders of metropolitan CBSAs. Gray lines demarcate tract borders. Delineations are based on commuting flows in 2000.