

E. Employment Composition: Variation Across States and Metropolitan Areas

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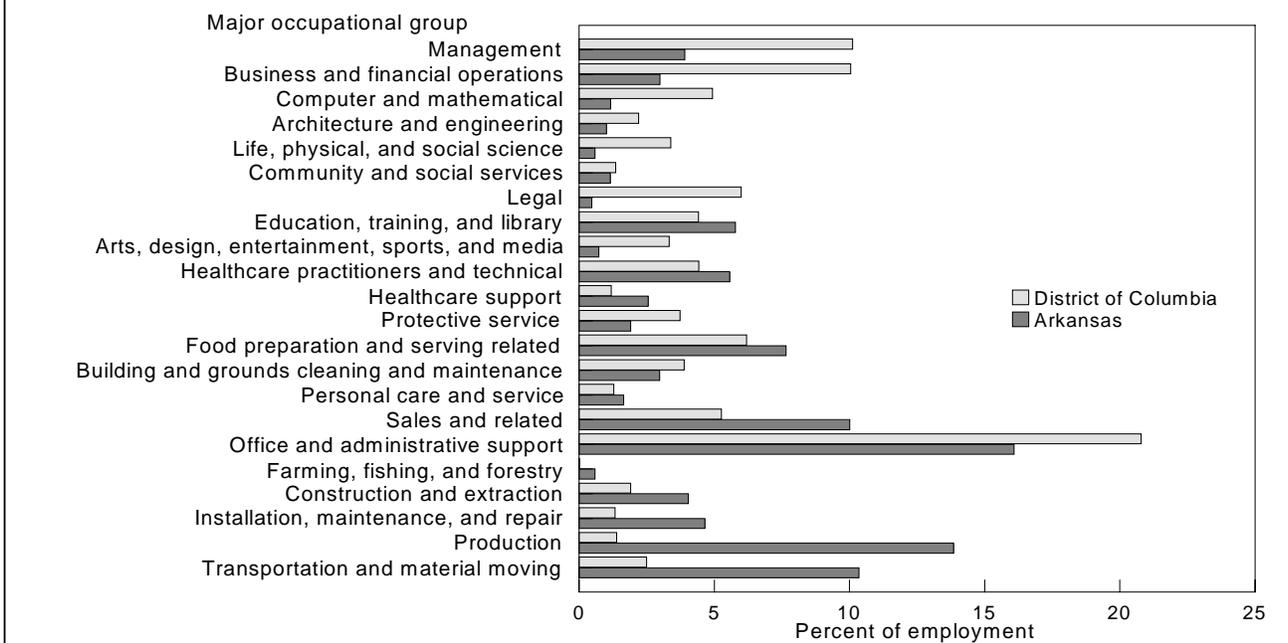
The distribution of employment by occupation in a geographic area reflects the history and industrial and economic composition of the area. As a result, certain occupations may be more concentrated in particular States or metropolitan areas. This article examines areas with different staffing patterns to demonstrate the variability in occupational composition among states. It also uses maps to show how the concentration of occupations and occupational groups varies by area. The maps show the relative importance of occupations in each area.

The national distribution of employment by occupation was presented in chart A1, in the first article of this publication. Occupational composition of State and metropolitan

area workforces, though, can look quite different. For example, the Nation's capital, the District of Columbia, has an economic structure that does not resemble that of any State. Chart E1 displays the District's occupational employment distribution, along with that of Arkansas. As in the Nation as a whole, the largest occupational group in both the District of Columbia and Arkansas is office and administrative support occupations; among the smallest in both is farming, fishing, and forestry. However, the similarity of the distributions ends at their extreme points. The concentrations of the District's employment in 7 of the 22 occupational groups are higher than those of any State in the Nation. They are legal; business and financial operations; management; life, physical, and social science; arts, design, entertainment, sports, and media; computer and mathematical; and protective service occupations. At the other extreme, the concentrations of employment in eight major occupational groups are lower

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Chart E1. Employment distribution in the District of Columbia and in Arkansas, by major occupational group, May 2004



than those of any State. They are sales and related; production; transportation and material moving; healthcare practitioners and technical; construction and extraction; installation, maintenance, and repair; food preparation and serving related; and farming, fishing, and forestry occupations.

While the District of Columbia is unique, in part due to its small size, urban nature, and government-dominated economic sector, divergence from the national occupational composition also can be seen for States. For example, chart E1 also shows the employment distribution for Arkansas. Arkansas has a much higher than average share of its employment in transportation and material-moving occupations and production occupations, and among the lowest shares of employment in architecture and engineering occupations and personal care and service occupations.

Chart E2 depicts the variation in occupational employment concentrations among the 50 States. For each occupational group, there is a shaded band. The left edge of that band represents the minimum concentration of State employment in the occupational group, while the right edge of the band shows the maximum employment concentration in that occupational group. The dividing line inside each band shows the mean State concentration.

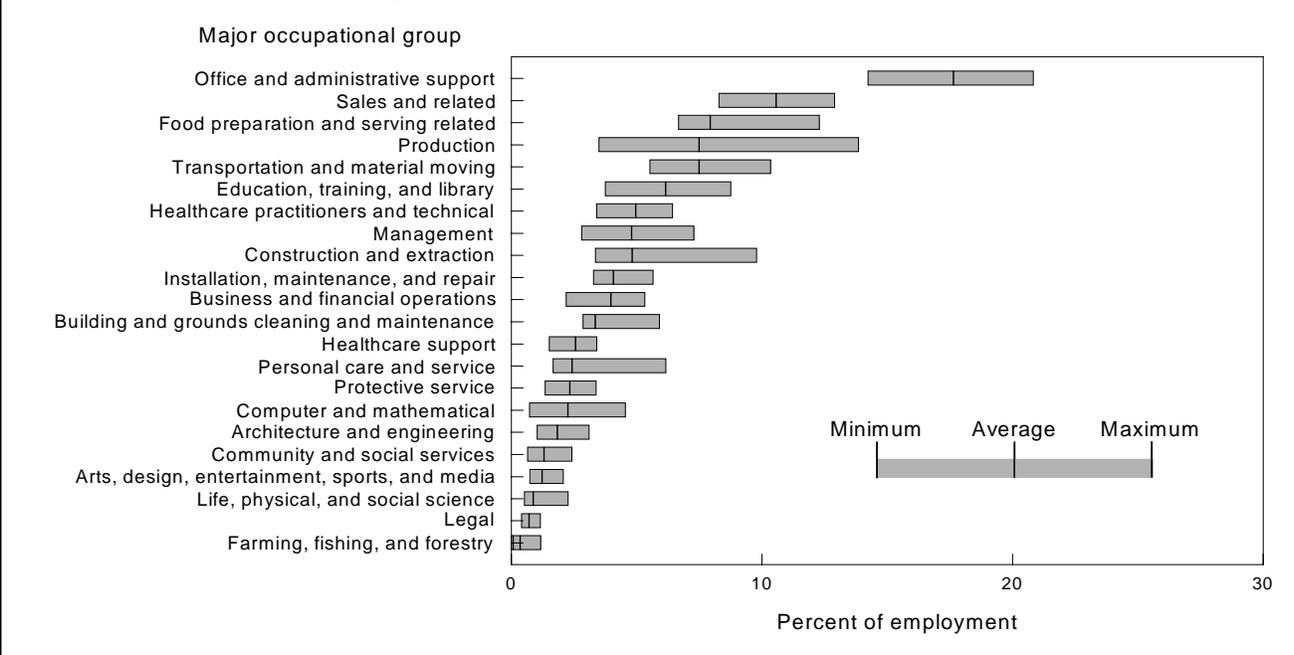
For instance, the left edge of the band for office and administrative support occupations indicates that employment in this group accounts for 14 percent of employment in the State with the lowest concentration of this occupational group (in this case, Wyoming). The right edge of the band shows that, in the State with the highest employment concentration of office and administrative support occupations (Delaware, in this case), 21 percent of the workforce is found in this group.

The bands in chart E2 encapsulate the variation in occupational concentrations among the 50 States. The chart shows that office and administrative support occupations account for the highest concentration of employment in all 50 States: the left edge of the band representing office and administrative support occupations is to the right of the right edge of any other bar. Not discernable in chart E2 is the fact that, in 45 of the 50 States, farming, fishing, and forestry occupations account for the lowest concentration of employment, and that legal occupations account for the second-lowest concentration of employment.

Chart E2 shows interstate variations in employment concentrations. Dividing the range for each group (maximum minus minimum) by the average reveals that the interstate variations in occupational concentration are lowest in office and administrative support occupations, followed by sales and related; installation, maintenance, and repair; healthcare practitioners and technical; transportation and material-moving; and food preparation and serving related occupations. At the other extreme, the interstate variations in occupational concentration are highest in the farming, fishing, and forestry occupational group, even though it is the smallest or second-smallest group in all 50 States. Employment concentrations also are highly variable in life, physical, and social science occupations; personal care and service occupations; computer and mathematical occupations; production occupations; community and social services occupations; and construction and extraction occupations.

The differences in occupational composition by State are best seen graphically. The maps on the following pages display the relative shares of each State's workforce in various occupational groups. For example, because of its size,

Chart E2. Minimum, average, and maximum employment concentrations among States by major occupational group, May 2004



California has one of the highest employment levels for healthcare practitioners and technical occupations, but it has one of the lowest concentrations of its workers in these occupations. As this article has demonstrated, there are some significant variations among States within certain groups. The maps show that some of the differences are regional. The States with the largest shares of production occupations, for instance, are primarily located in the North Central and Southeast regions of the country. Although the industries present in these States may vary, they employ similar numbers of production workers. In contrast, the share of workers in management occupations is highest in Virginia and Maryland. These differences by State affect each State's overall income level, at the same time that they reflect the State's history and economic structure.

The metropolitan area maps that follow the State maps provide similar information. They show concentrations of

workers in specific occupations by metropolitan area rather than by State. For some of the most common detailed occupations, such as retail salespersons and registered nurses, the highest concentration of these workers appears in smaller metropolitan areas with less diverse staffing patterns than bigger cities. In contrast, some industry-specific occupations are largely found in the metropolitan areas in which those industries are concentrated. For example, the map of lawyers identifies several Eastern metropolitan areas, particularly the District of Columbia, as having the heaviest concentrations of lawyers. Similarly, restaurant cooks are found in greater numbers in metropolitan areas that are major tourist destinations. In many cases, the cities that have the largest employment in a given occupation are not among those with a high share of employment in that occupation, simply because there are many workers in a greater range of occupations in large cities. ■