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Methodology Statement: 2020/2025 Esri Age Dependency Ratios

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Methodology Statement: 2020/2025 Esri Age Dependency Ratios

Introduction The Age Dependency Ratio (ADR) is a relative measure of the working-age population supporting the nonworking population and the potential economic burden associated with such support. This measure is used to express the relationship between three age groups within a population: 0–17, 18–64, and 65+. Dependent populations are defined as children aged 0–17 and seniors aged 65+. The population aged 18–64 is considered the working-age population.

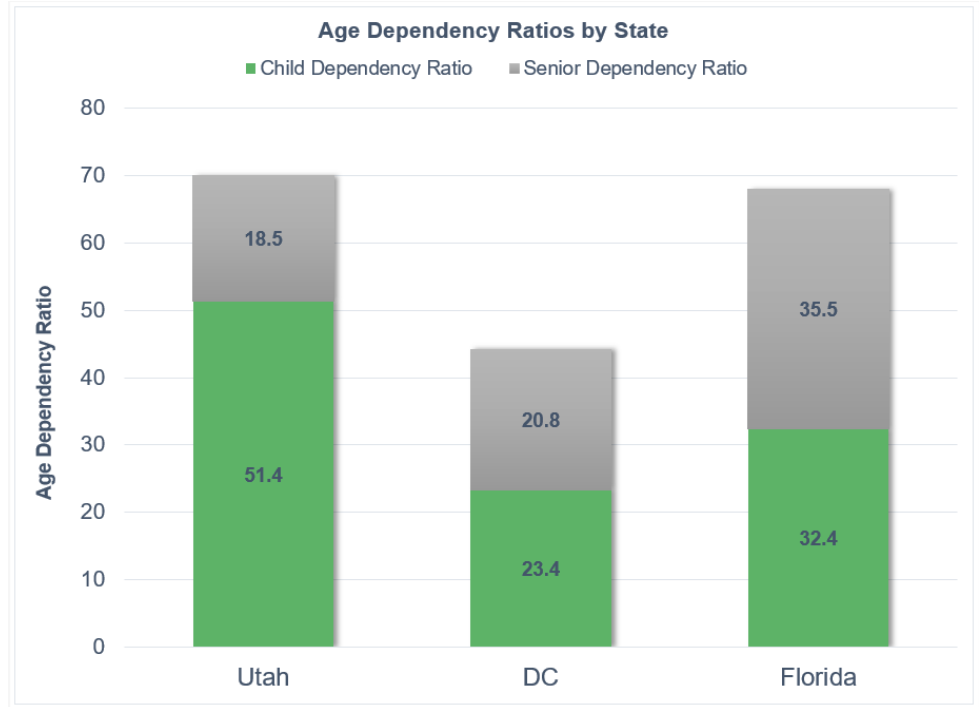
Calculations Three separate ratios are calculated: The Child Dependency Ratio (CDR) is the population aged 0–17 divided by the working-age population aged 18–64. The Senior Dependency Ratio (SDR) is the population aged 65+ divided by the working-age population aged 18–64. The ADR is the sum of the population aged 0–17 and 65+ divided by the working-age population aged 18–64. All ratios are then multiplied by 100.

Higher ratios indicate a greater level of dependency on the working-age population. The US ADR is 62.8 for 2020, or roughly 63 dependents for every 100 workers. Correspondingly, the US CDR and SDR are 35.8 and 27, respectively. This reveals that children represent a larger share of the dependent population than seniors at the national level.

Note that these traditionally defined measures are approximations based solely on age and not adjusted by labor force participation by age. The ratios assume the entire working-age population aged 18–64 participate in the civilian labor force. Moreover, a portion of the dependent child and senior populations are participating in the labor force while the ratio assumes they are not.

Age Dependency Ratios are a quick and valuable tool for understanding the age distribution within an area. These measures are also powerful comparative tools. Looking at chart 1 below, we can learn that Utah and Florida both have high Age Dependency Ratios with values of 69.9 and 67.9, respectively. However, the age group contributions to the total ADR are quite different. Utah has a very young population with 51.4 of the 69.9 dependents (74%) coming from the child population. On the other hand, Florida has an older population with a relatively even split between child and senior dependents. By contrast, the District of Columbia (DC) has a low Age Dependency Ratio. DC has only 44.2 dependents per 100 persons of the working-age population, and 53 percent of those dependents are children aged 0–17.

Chart 1



Esri's Data Development Team

Led by chief demographer Kyle R. Cassal, Esri's data development team has a 35-year history of excellence in market intelligence. The team's economists, statisticians, demographers, geographers, and analysts produce independent small-area demographic and socioeconomic estimates and forecasts for the United States. The team develops exclusive demographic models and methodologies to create market-proven datasets, many of which are now industry benchmarks such as Tapestry™ Segmentation, Consumer Spending, Market Potential, and annual Updated Demographics. Esri® demographics powers ArcGIS® through dynamic web maps, data enrichment, reports, and infographics.



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