

**Child Care Works in Pennsylvania, 2018**  
**Data Sources and Methodology**  
**Pennsylvania Partnerships for Children**

Source

- Population: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates (B01001)
- Poverty: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates (B17024)
- Parental Employment: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates (B23008)
- Enrollment: PA Departments of Education and Human Services, Office of Child Development and Early Learning (October 2017 Child Care Works enrollment by provider and distinct counts by legislative district, county and state received 1/24/2018)
- Provider: PA Departments of Education and Human Services, Office of Child Development and Early Learning (October 2017 Child Care Works enrollment by provider received 1/24/2018)  
PA Departments of Education and Human Services, Office of Child Development and Early Learning (September 30, 2017 OCDEL Public Data File downloaded 11/22/2017)
- Accreditation: National Association for the Education of Young Children  
National Association for Family Child Care  
Montessori Accreditation
- Geocoding: PA Departments of Education and Human Services, Office of Child Development and Early Learning  
<https://www.doogal.co.uk/BatchGeocoding.php>
- Map boundary: Pennsylvania Department of Transportation via Pennsylvania Spatial Data Access (2018)

Methodology

Estimates of the number of children under 5 years needing care were derived by multiplying the percent of children under 6 years who have all available parents in the workforce by the estimate of children ages 0-4. This number was then multiplied by the percent of children under 6 years living in families with incomes below 200 percent of the U.S. poverty threshold, as issued by the U.S. Census Bureau, to estimate the number of children eligible for Child Care Works (CCW).

Child care providers serving only school-age children were removed from the enrollment file. Addresses using a post office box were researched and replaced with the street address of the physical provider location. Latitude and longitude coordinates with a score of 7 or higher were used (i.e. accuracy at the street-level). Coordinates with lower scores were manually researched and corrected based on the physical provider location. If missing, the county of physical provider locations and capacity were researched and entered into the file.

Providers with Keystone STAR 3 or 4 designation or certified by an OCDEL-recognized accreditation were defined as high-quality (HQ). All remaining providers did not yet meet high-quality standards. Infant, toddler and preschool CCW enrollment counts were combined to determine the total CCW enrollment of children under 5 years by provider. Enrollment totals greater than capacity (due to timing of enrollment) were reduced to equal

capacity. Note: Although this analysis is based on CCW enrollment of children under 5 years, the capacity may include space to serve school-age children.

Statewide, district and county high-quality distinct counts were increased by the CCW enrollment totals for provider locations that did not have Keystone STAR 3 or 4 designations but were accredited by one of the OCDEL-recognized accreditations listed above. Pivot tables were used to total capacity and provider counts for each legislative district and county. The percent of CCW enrollment and capacity in HQ and not in HQ were calculated.

High-quality child care provider locations were imported into ArcGIS for Desktop and added as a map layer by their provider type. Another layer was created based on the providers not yet meeting high-quality standards.

Using ArcGIS for Desktop, legislative district and county eligibility and enrollment data were joined to boundary layers. New fields were added to the layers to calculate the percent of CCW-eligible children enrolled, the number and percent of unserved CCW-eligible children, the percent of capacity filled by CCW enrollment, the percent of HQ capacity filled by HQ CCW enrollment, and the number and percent of HQ capacity that is needed to serve all children needing child care.

All data was imported into ArcGIS Online to create the interactive mapping application.