

## 2022 Start Strong PA Fact Sheet and Map Data Sources and Methodology Pennsylvania Partnerships for Children

### Source

- Population: U.S. Census Bureau, 2010 Decennial Census
- Poverty: U.S. Census Bureau, 2015-2019 American Community Survey 5-Year Estimates (B17024)
- Parental Employment: U.S. Census Bureau, 2015-2019 American Community Survey 5-Year Estimates (B23008)
- Enrollment: PA Departments of Education and Human Services, Office of Child Development and Early Learning (October 2021 Child Care Works distinct enrollment counts by legislative district, school district, county and state received 12/23/2021, updated 1/6/2022)
- Provider: PA Departments of Education and Human Services, Office of Child Development and Early Learning (provider listing with yes/no Child Care Works enrollment received 12/23/2021)
- Accreditation: Association of Christian Schools International (ASCI) (11/1/2021)  
Montessori Accreditation (AMS) (11/1/2021)  
Montessori Recognition (AMI) (11/1/2021)  
National Association for the Education of Young Children (NAEYC) (11/1/2021)  
National Association for Family Child Care (NAFCC) (11/1/2021)  
National Early Childhood Program Accreditation (NECPA) (11/1/2021)
- Geocoding: <https://www.google.com/maps>, <http://www.findlatitudeandlongitude.com>, and <https://www.doogal.co.uk/BatchGeocoding.php>
- Map boundary: Pennsylvania Department of Transportation via Pennsylvania Spatial Data Access (2022)

### Methodology

Estimates of the number of children under five years needing care were derived by multiplying the percent of children under six years who have all available parents in the workforce by the decennial census count of children under five years. This number was then multiplied by the percent of children under six 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). These calculations were repeated using the decennial census count of children under three years.

Child care providers serving only school-age children were removed from the provider 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 was 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 do not yet meet high-quality standards.

Pivot tables were used to total capacity and provider counts, including those with CCW enrollment in October 2021, for each congressional district, legislative district, school district and county. Capacity by HQ and not yet HQ were calculated for each geography. The percent of CCW enrollment in HQ and not in HQ were calculated for each congressional district, legislative district, school district and county. Calculations were completed by each geography to determine 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. Calculations for CCW-eligible children under three years were completed for enrollment in HQ and not in HQ and the number and percent of unserved infants and toddlers.

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 all providers, including those not yet meeting HQ standards.

Using ArcGIS for Desktop, congressional district, legislative district, school district and county eligibility and enrollment data were joined to boundary layers.

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