2018-19 Start Strong PA Fact Sheet and Map Data Sources and Methodology
Pennsylvania Partnerships for Children

<u>Source</u>

Population: U.S. Census Bureau, 2010 Decennial Census

Poverty: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates (B17024)

Parental Employment: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates (B23008)

Enrollment: PA Departments of Education and Human Services, Office of Child Development and Early Learning (October 2018 Child Care Works enrollment by provider and distinct counts by legislative district, county and state received 3/19/2019)

Provider: PA Departments of Education and Human Services, Office of Child Development and Early Learning (October 2018 Child Care Works enrollment by provider received 3/21/2019)

Accreditation: Association of Christian Schools International (ASCI) (10/31/18)
Montessori Accreditation (AMS) (10/31/18)
Montessori Recognition (AMI/USA) (10/31/18)
National Association for the Education of Young Children (NAEYC) (10/31/18)
National Association for Family Child Care (NAFCC) (10/31/18)
National Early Childhood Program Accreditation (NECPA) (10/31/18)

Geocoding: PA Departments of Education and Human Services, Office of Child Development and Early Learning
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 (2019)

<u>Methodology</u>

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 estimate 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).

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 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 five years by provider. In cases where enrollment by care level was suppressed, algorithms were used to estimate enrollment. Enrollment totals greater than capacity (due to part-time or non-traditional care) were reduced to equal capacity. Note: Although this analysis is based on CCW enrollment of children under five years, the capacity may include space to serve school-age children.

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 for each geography.

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 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.