

## 2023 Pre-K for PA Fact Sheet and Map Data Sources and Methodology Pennsylvania Partnerships for Children

### Source

- Population: U.S. Census Bureau, Population Division, 2021 Vintage Estimates (2/21/2023) (state)  
U.S. Census Bureau, 2010 Decennial Census (county, district)
- Poverty: U.S. Census Bureau, 2017-2021 American Community Survey 5-Year Estimates (B17024)
- Enrollment: PA Department of Education, Division of Data Quality (2021-22 private academic nursery schools, school district pre-kindergarten, school district administration)  
PA Departments of Education and Human Services, Office of Child Development and Early Learning (distinct enrollment in Child Care Works at a Keystone STARS 3-4 location, Pre-K Counts and/or Head Start Supplemental Assistance Program on October 31, 2022, by geography, and listing of pre-k providers, received 1/10/2023)  
U.S. Department of Health & Human Services, Administration for Children and Families, Office of Head Start and PA Head Start grantees (2022-23 federal preschool Head Start funded slots by location, collected 11/29/2022-2/7/2023)  
City of Philadelphia, Mayor's Office of Children and Families (2022-23 PHLpreK funded slots by location, received 1/11/2023)
- Accreditation: Association of Christian Schools International (ASCI) (11/1/2022)  
Montessori Accreditation (AMS) (11/1/2022)  
Montessori Recognition (AMI) (11/1/2022)  
National Association for the Education of Young Children (NAEYC) (11/1/2022)  
National Association for Family Child Care (NAFCC) (11/1/2022)  
National Early Childhood Program Accreditation (NECPA) (11/1/2022)
- 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 (2023)

**NOTE: Due to the early care and education staffing crisis, many locations may serve less children than the number of funded slots.**

### Methodology

Estimates of the number of eligible children ages three and four were derived by multiplying the percent of children under six years living in families with incomes below 300 percent of the U.S. poverty threshold, as issued by the U.S. Census Bureau, by the decennial census count of children ages three and four years. This was completed for the state school districts and counties.

The files containing the providers were combined. Each provider was identified by program type(s)/funding stream(s) to separate into high-quality, publicly funded (HQPF) programs and eligible providers not receiving public funds for pre-kindergarten. Relative/neighbor providers, out-of-state

providers and child care providers not serving children in Child Care Works (CCW) and not at a Keystone STAR 3 or 4 level were removed from the dataset. Accreditation was added to the appropriate provider location data. Unique identifiers were applied to each provider address. 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 in the file.

Federal-funded preschool Head Start funded slots, school district pre-k enrollment and PHLpreK funded slots in locations that are Keystone STAR 3-4 were aggregated by geography and combined with the distinct enrollment file already aggregated by county, legislative district and school district. School district pre-k enrollment was decreased by the count of Pre-K Counts (PKC) and/or Head Start slots since school districts are to report these children in their pre-k enrollment. HQPF enrollment includes the unduplicated count of children ages 3-4 in PKC, Head Start Supplemental Assistance Program (HSSAP) and children participating in CCW at a Keystone STAR 3-4 center or group, federal preschool Head Start, school district pre-kindergarten and PHLpreK.

Using the eligibility and aggregated enrollment data, estimates for unmet need, percent of eligible population served, percent unserved and the number of additional classrooms needed were calculated for each geography. Note: the additional classrooms needed assumes 20 children per classroom and was calculated by dividing the unmet need by 20. It does not take into consideration whether the estimated enrollment of current classrooms is full. For example, if a district currently serves 10 children and 4 more children are eligible, the calculation for additional classrooms needed is 1 even though the 4 children could be added to the existing classroom.

Eligible pre-k provider locations were imported into ArcGIS for Desktop and added as a map layer by their eligibility type. This includes federal- and state-funded Head Start, Keystone STAR 3-4 centers and groups that serve preschool age children, licensed nursery schools, and school districts. Another layer was created based on public funding sources. This includes federal- and state-funded Head Start, Keystone STAR 3-4 centers and groups that serve preschool-age children through the CCW subsidy program, PKC providers, school districts with pre-k programs and high-quality PHLpreK providers.

Using ArcGIS for Desktop, district and county poverty and enrollment tables were joined to boundary layers. Spatial joins were performed using the provider layers and district/county boundaries to calculate the number of eligible (including publicly funded) physical locations in each geography.

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