



ENROLLMENT PROJECTION MODEL

Overview

The enrollment projection model used by the Pennsylvania Department of Education (PDE) is designed as a combination of a Grade Progression model and a modified Enrollment Rate model. Projection models of this nature are based on the concept that students progress routinely from one grade to another and that any internal policies and external factors that influenced grade progression in the past will continue to influence the progression of students from grade to grade in the future.

The PDE model uses enrollment data reported annually by all local education agencies (LEA) to the Data Quality Office in the Pennsylvania Information Management System (PIMS) during the October 1 Enrollment Collection. Resident live birth data is provided by the Pennsylvania Department of Health. Grade progression is determined by calculating retention rates for grades 2 through 12 using the most recent five years of enrollment data. Enrollment rates for kindergarten are determined by births five years earlier and for first grade from births six years earlier. These rates are evaluated to determine if a pattern is discernable, or if any retention rates are unusual. If a pattern is found, the pattern is continued in making the projections. Unusual retention rates are discarded, and the average of the remaining rates is used in making the projections. Non-graded elementary and secondary students are prorated across grades before retention rates are calculated. Because of that proration, the number of students shown in various grades will differ from the number of students reported. The total number of students may also differ slightly.

Basic Limitations

Internal policy changes that can affect the accuracy of projections:

- how old a child must be before being admitted into kindergarten and first grade
- when and how a student is evaluated for special education services
- how many students the area vocational-technical school is to receive
- who provides full-time special education programs
- scholastic retention and acceleration

External factors that can affect the accuracy of projections:

- the opening or closing of a non-public school
- a significant increase or decrease in new home building
- a shift in migration patterns

Other Considerations

- Enrollment projections for school districts with less than 1,000 students tend to be less reliable.
- Actual live birth data for the most recent year are added annually. However, enrollment projections beyond five years are subject to errors in the lower grades resulting from inconsistencies between actual and projected live births and should be reviewed closely.