THE ENROLLMENT PROJECTION MODEL

GENERAL

The enrollment projection model used by the Pennsylvania Department of Education (PDE) is patterned after projection models variously called educational progression or school retention. 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 to the Division of Data Services on the Public School Enrollment Report (ESPE). Resident live birth data is provided by the Pennsylvania Department of Health. Grade progression is determined by calculating retention rates for grades 2 to 12 using the most recent five years of enrollment data. Retention 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. Nongraded 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 OF THE MODEL

1. Internal policy changes that can affect the accuracy of projections
   a. policy on how old a child must be before being admitted into kindergarten and first grade
   b. policy on when and how a student is evaluated for special education services
   c. policy on how many students the area vocational-technical school is to receive
   d. policy on who provides full-time special education programs
   e. policy on scholastic retention and acceleration

2. External factors that can affect the accuracy of projections
   a. the opening or closing of a nonpublic school
   b. a significant increase or decrease in new home building
   c. a shift in migration patterns

3. Other considerations
   a. Enrollment projections for school districts with less than 1,000 students tend to be less reliable.
    b. 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.