

Detailed Description of Forecast Methodology
PK-12 Full-Time Equivalent (FTE) Student Membership
Years 2009-10, 2010-11, 2011-12

1. *The forecast for grade FTE enrollment was done in a similar manner as the Capital Outlay FTE enrollment adopted on July 2, 2008.*

Both series use a modified cohort survival methodology. The cohort survival method forecasts the grade level for each school district by moving each grade of students up one grade each year using historical relationship of the size of the groups (cohorts) of students as they move through the grades. Thus, an unusually large (or small) enrollment in a particular grade will forecast an unusually large (or small) enrollment in the next grade the following year.

2. *The cohort methodology was modified to control for nonpromotion, to provide a more sensitive estimate for kindergarten cohort ratio, and to use more historical years in calculating the cohort ratios when the forecast horizon is increased.*

- a. Adjusting the cohort ratios to control for the changes in nonpromotion policy over time. Thus, the forecast is initially done assuming that all students are promoted to the next grade each year. Then the nonpromoted students are estimated and the grade level adjusted to reflect expected nonpromotion level.
- b. Decomposition of the 2007-08 computed kindergarten cohort ratio. The computed ratio is a composite of the effects of factors over a six-year period. The decomposition estimates annual effects during this six-year period.
- c. Increasing the number of years used in calculating historical cohort ratios when the forecast horizon was increased...
 - i. 2009-10: The use of the most recent available (2007-08) ratios.
 - ii. 2010-11: Weighted average of the 2007-08 ratio with the ten year average ratio with weights of .9 and .1, respectively.
 - iii. 2011-12: Weighted average of the 2007-08 ratio with the ten-year average ratio with weights of .8 and .2, respectively.

3. *After the grade forecasts were obtained, each grade was allocated into the programs appropriate for that grade.*

- a. Programs 111, 112, 113, 130, 254, and 255: The forecast was obtained by averaging the results of two methods.¹
 - i. Component-Share Method: Each grade was broken down into the programs appropriate for it by the historical share of that program

¹Except for programs 111, 112, 113, 254, and 255 in Miami-District District. When discussing the further adjustment of the Exceptional Student Education Programs (111-113, 254-255) in section 4 below, the conference decided to use the component-share method alone for these programs for Miami-Dade District due to the presence of reporting errors in the historical data which would bias the cohort method.

in the grade. For example, if historically, 1% of grade five FTE have been reported historically in Program 254, then 1% of the grade five forecast was allocated to Program 254. Each program's forecast was obtained by summing the grades allocated to that program.

- ii. Cohort Method: A cohort survival calculation was done for each program. Due to the small values in some cells, the calculated values less than the first quartile or greater than the third quartile were "trimmed".
 - b. Program 300: The Component-Share Method was used.
 - c. Programs 101, 102, and 103: The amounts forecasted by grade were calculated by subtracting the other programs by grade from the respective grade totals.
4. *Further adjustments were made for Miami-Dade School district Exceptional Student Education (ESE), Program 130 – English for Speaker of Other Languages (ESOL), and the Florida Virtual School.*
- a. Miami-Dade: In spring 2008, Miami-Dade School District discovered that the levels of services provided to many Exceptional Student Education (ESE) students exceeded the levels of service appropriate for these students' current classification. For example, an ESE student might be reported as in Program 113, but be receiving services consistent with Program 254.

By July 2008 the District had reclassified 1,010 students for the 2007-08 Full-Time Equivalent (FTE) survey 3. These reclassifications resulted in net shifts from lower ESE levels of services to higher ESE levels. There remain 7,290 ESE students whose levels of services provided and reported will be reevaluated during the 2008-09 school year. The District estimates that 20% of the students to be reevaluated (1,458 of 7,290) will be reclassified to a different ESE program. These shifts will generally be from programs 111-113 to programs 254-255 with some shifts possible from Program 254 to Program 255.

The Public Schools K-12 Conference reviewed the information provided by Miami-Dade District and decided to adjust the demographic model 2009-10 forecast for Miami-Dade ESE programs only for the students reclassified as of July 10, 2008. The Conference decided that the results of the upcoming reevaluation of the 7,290 ESE students were too speculative to be considered at this time. The Conference will continue to monitor the FTE reported in upcoming FEFPS Surveys in these programs to determine the impact on subsequent enrollment projections.

- b. Program 130 – ESOL: Due to the anticipated changes in the program exit criteria over the next several years, the component share of this program is

expected to decrease for several districts. The districts with exit criteria expected to exceed the recommended exit criteria were identified. These were the only districts adjusted. The timetable for implementation of standard exit criteria and the precise effects of the implementation are unknown. Thus, these districts' ESOL forecasts for years 2009-10, 2010-11, and 2011-12 were held to the lower of the computed forecast from above or the appropriated 2008-09 level. The districts adjusted were Bay, Broward, Calhoun, Charlotte, Collier, Dixie, Gadsden, Glades, Hamilton, Highlands, Jefferson, Lee, Leon, Levy, Nassau, Okaloosa, Orange, Palm Beach, Pasco, Sumter, Volusia, and Walton.

- c. Florida Virtual School: The planning staff of the school provided the forecasts for all three years.