September 30, 2006
Enrollment Projection and Accuracy Report

Windsor Mill MS Chorus performing for school ribbon-cutting ceremony October 16, 2006

Prepared by the Baltimore County Public Schools
Office of Strategic Planning, November 2006
BCPS School Inventory

BCPS now operates:

103 Elementary Schools
27 Middle Schools
24 High Schools
9 Centers
4 Special Education Schools
2 Programs
Performance Indicator 8.5

“The student enrollment projections will have a 99% accuracy rate.”

• BCPS met this goal for September 30 2006 (99.14% accuracy)

• The five year average accuracy rate is 99.25%
# Enrollment Projection Accuracy

<table>
<thead>
<tr>
<th>Year</th>
<th>Projection</th>
<th>Official Enrollment</th>
<th>+/- Projection</th>
<th>Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>107,440</td>
<td>108,604</td>
<td>1164</td>
<td>98.93%</td>
</tr>
<tr>
<td>2003</td>
<td>108,850</td>
<td>108,792</td>
<td>-58</td>
<td>99.95%</td>
</tr>
<tr>
<td>2004</td>
<td>109,230</td>
<td>108,015</td>
<td>-1215</td>
<td>98.89%</td>
</tr>
<tr>
<td>2005</td>
<td>108,140</td>
<td>107,386</td>
<td>-754</td>
<td>99.30%</td>
</tr>
<tr>
<td>2006</td>
<td>107,100</td>
<td>106,182</td>
<td>-918</td>
<td>99.14%</td>
</tr>
</tbody>
</table>

![Enrollments and Projections 2002 - 2006](chart.png)
Projection Timeline

- Projections are based on official September 30 enrollment data.

- Timeline
  - July through September – Monitor enrollments weekly.
  - October – Receive September 30 enrollments, map students in Geographic Information System (GIS), reconcile enrollments to prior year projection
  - November - Develop countywide and preliminary one year enrollments by school, obtain input from Area Assistant Superintendents, finalize.
  - December – Develop 10 year projections by school.
Projection Methodology

• Projections are in total headcount, not Full Time Equivalency (FTE).

• **Cohort Survival Model** is the foundation for student enrollment projections:
  - Detailed history for more than 10 years by school.
  - Only known LEA to obtain birth data by elementary school boundary.
  - Analysis of trends to project student movement through grades.
  - Detailed feeder school pattern data for accurate projection of moving grades (5-6 and 8-9).
Projection Methodology, Continued

- Linear regression and cluster analysis used to proof projections.
- Projections analyzed from both a top-down and bottom-up perspectives.
- Input solicited from principals via the Area Assistant Superintendents to fine-tune one year projections.
- Program movement and other factors that impact enrollments are considered.
- Growth trends and student yield factor analysis considered.
- Projections reconciled with Maryland Office of Planning projections each spring to ensure capital agenda alignment.
BCPS Historical Enrollment Trend

BCPS Historical Enrollment

Peak: 134,042
Low: 80,630
Peak: 108,792

Year

Peak: 1984/1985
Low: 1986/1987
Peak: 2004/2005
Enrollment by Administrative Areas


- 2005 Project
- 2005 Enroll
- 2006 Project
- 2006 Enroll
Enrollment By Grade Groups

BCPS 10 Year History by Grade Groups

- Elementary Pre-K Through 5
- Middle 6 Through 8
- High 9 Through 12
Birth Data

Baltimore County Births and Kindergarten Enrollments

- Static birth rates are anticipated for the near future. Growth will come from mobility and migration.
Next Steps

The Office of Strategic Planning will:

- Meet with each Area Assistant Superintendent to discuss enrollments, projections, capacities, and identify strategies to address concerns.
- Analyze student population distribution, demographics, and capacity with GIS.
- Develop enrollment projections for 2007 – 2016 in December.