BALTIMORE COUNTY PUBLIC SCHOOLS

DATE:      May 24, 2005
TO:        BOARD OF EDUCATION
FROM:      Dr. Joe A. Hairston, Superintendent
SUBJECT:   PUPIL YIELD FACTOR STUDY
ORIGINATOR: J. Robert Haines, Deputy Superintendent, Business Services

RESOURCE PERSON(S): Don Dent, Executive Director, Department of Planning and Support Operations
Ghassan Shah, Planning Administrator, Office of Strategic Planning
Matthew Cropper, GIS Manager, DeJong Incorporated
Dunbar Brooks, Data Development Manager, Baltimore Metropolitan Council

RECOMMENDATION

That the Board of Education approve the recommended Pupil Yield Factors.

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A pupil yield factor is a number used to approximate how many BCPS school-age children may be expected from a new housing development. The current yield factors were developed in 1993.

In May 2004, DeJong Incorporated and the Baltimore Metropolitan Council were hired to update pupil yield factors for the Baltimore County Public Schools. Using modern technology, an analysis of pupil yield factors was completed for new and existing housing developments in Baltimore County.

Once approved, by the Board, the yield factors will be provided to the Baltimore County Office of Planning, to support the Adequate Public Facilities Ordinance.

JRH/dd
Baltimore County Public Schools

Student Yield Factor Updates

Prepared by:
DeJong & Associates
Baltimore Metropolitan Council
Baltimore County Public Schools Office of Strategic Planning
Definition

• A student yield factor is a number used to approximate how many BCPS school-aged children may be expected from a new housing development.
Student yield factors are:

- Specific to elementary, middle, and high school students
- Specific to housing type (single family detached [SFD], single family attached [SFA], multifamily, condominium, apartment)
- Calculated in Baltimore County based on the 15 election districts
- Provided to the Baltimore County Office of Planning by the Baltimore County Public Schools as per Baltimore County Adequate Public Facilities legislation
Caveats

• All housing types do not exist in each election district
• High density does not necessarily mean high student yield
• Yield factors are not time-dependant
  • There is no way to know when children will arrive
  • Projects can encounter permit, environmental, and construction delays
• Due to improved methodology and different development samples, old yield factors cannot be compared to new yield factors
Household Development Patterns Before 1900
Household Development Patterns up to 1940
Household Development Patterns up to 1960
Household Development Patterns up to 1980
Household Development Patterns through 2000
## New Yield Factors by Election District

### 2004 Pupil Yield Factors

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A development in Owings Mills may be proposed for 50 single-family homes (sold to own).

The District 4 yield for single family homes (owned) is:

- Elementary: .173
- Middle: .081
- High: .100

Multiply the proposed units by the yield:

- Elementary: $50 \times .173 = 8.65 \text{ rounded to } 9$
- Middle: $50 \times .081 = 4.05 \text{ rounded to } 4$
- High: $50 \times .100 = 5$

This development would likely yield 9 elementary students, 4 middle students, and 5 high school students at full buildout.
Next Steps

• Yield factors shared with Baltimore County Office of Planning

• Developers must use these yield factors when applying for permits through the Office of Planning