

# West Chester Area School District

# Henderson High School Renovation Project Enrollment Projections Preliminary Report

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# Timeline and Issues for Henderson Renovation

# TIMELINE FOR HENDERSON HIGH SCHOOL RENOVATION

7/9/98

|  | 7/9/96   |                        |  |
|--|--|------------------------|--|
| TASK   | By:  | TIMELINE               |  |
| Prepare/Update Feasibility Study   | Gilbert Architects<br>Central Office Administration  | Aug. 1998 - Jan. 1999  |  |
| Develop Enrollment Projections   | Mrs. Moore<br>Gilbert Architects<br>Board Members  | Aug. 1998 - Sept. 1998 |  |
| Review & Finalize Educational Specifications for High Schools                        | High School Principals Supervisors Dept. Chairpersons Central Office Administration        | Sept. 1998 - Oct. 1998 |  |
| Develop Educational Alternatives to Accommodate Enrollment Projections               | Central Office Administration High School Principals Board Members Gilbert Architects      | Oct. 1998 - Nov. 1998  |  |
| Prepare Cost Analysis of Alternatives  | Gilbert Architects O'Brien-Kreitzberg Central Office Administration                        | Dec. 1998              |  |
| Select Educational Alternative to Accommodate Enrollment Projections                 | Central Office Administration Board Members  | Jan. 1998              |  |
| Develop Schematic Design & Prepare<br>Cost Analysis for Henderson H.S.<br>Renovation | Gilbert Architects O'Brien-Kreitzberg  | Feb. 1999              |  |
| Hold Act 34 Meeting  | Gilbert Architects Central Office Administration Public Financial Management Board Members | June 1999              |  |
| Award Construction Bids for Henderson H.S.   | Gilbert Architects O'Brien-Kreitzberg Central Office Administration Board Members          | Oct. 1999              |  |

# **HENDERSON RENOVATION ISSUES**

# **EDUCATIONAL SPECIFICATIONS**

- Status
  - Completed as of June 30, 1998: Input from Henderson teachers and building administration
  - Planned: Input from supervisors, East High School, Central Office Administration, and Board members
- Educational specifications must reflect our curriculum at both schools.
- Educational specifications must reflect current and future teaching strategies.
- Do we want to be innovative or status quo in determining educational specifications?
- Accommodation of enrollment growth will impact educational specifications.

# PLANCON ISSUES

- Reimbursement is based on classroom size. (see attached PLANCON-A08 Schedule)
- Reimbursement is limited to one time per 20-year period.

# **ENROLLMENT**

- Verify projections from District, Demographic Committee, Waetzman Study, and PDE.
- Accommodating enrollment increases alternatives
  - School expansion: mega-high schools, third high school or temporary classrooms
  - Grade realignment
  - Increase class size
  - Other

# **PLANNING**

- Administration seeks Board input and parameters <u>before</u> critical decisions are made. (see timeline)
- Preliminary schedule for the Henderson renovation per the June, 1997 Capital Plan Update:
  - Summer 1998 Phase A Construction
  - Summer 1999 Phase B Construction
  - Summer 2000 Phase C Construction
  - Summer 2001 Phase D Construction

PLANCON Reimbursement Phases

- Based on decisions regarding educational specifications, PLANCON, and enrollment projections, construction planned over 4 summers (8 months of total construction) may not be enough time to complete the renovation.
  - If decisions warrant additional renovations or classroom additions using phased construction, the District would not meet the preliminary completion date (September, 2001).
  - Year-round construction allows construction over an 18-24 month period vs. phasing over the remaining 3 or 4 summers. Renovation would be completed by September, 2001.
- More planning is required by the Construction Manager and the District for year-round construction.

# Summary of Enrollment Projections

# **WEST CHESTER AREA SCHOOL DISTRICT**

8/12/98

| 8/12/98                                 |               |                |              |       |  |  |
|---|---------------|----------------|--------------|-------|--|--|
| ENI                                     | ROLLMENT PROJ | <u>ECTIONS</u> |              |       |  |  |
| 1997-98                                 | TOTAL         | <u>K-5</u>     | <u>6-8</u>   | 9-12  |  |  |
| WPG (1)                                 | 11,861        | 5,872          | 2,634        | 3,355 |  |  |
| ACTUAL                                  | 11,486        | 5,698          | 2,529        | 3,259 |  |  |
|   | ]             |                |              | _,    |  |  |
| 1998-99                                 | TOTAL         | <u>K-5</u>     | 6-8          | 9-12  |  |  |
| WPG (1)                                 | 12,161        | 5,908          | 2,760        | 3,493 |  |  |
| DEMOGRAPHICS COMMITTEE (2)              | 11,904        | 5,750          | 2,718        | 3,436 |  |  |
| GILBERT ARCHITECTS (3)                  | 11,671        | 5,628          | 2,668        | 3,375 |  |  |
| 10 YR AVG - COHORT SURVIVAL (4)         | 11,731        | 5,660          | 2,683        | 3,388 |  |  |
| 10 TH AVG - COHORT SURVIVAL (4)         | 11,731        | 3,000          | 2,003        | 3,366 |  |  |
| 1999-2000                               | TOTAL         | <u>K-5</u>     | 6-8          | 9-12  |  |  |
| WPG (1)                                 | 12,358        | 5,901          | 2,902        | 3,555 |  |  |
| DEMOGRAPHICS COMMITTEE (2)              | 12,219        | 5,747          | 2,947        | 3,525 |  |  |
| GILBERT ARCHITECTS (3)                  | 11,833        | 5,616          | 2,841        | 3,325 |  |  |
| 1 ' '                                   | f             | i I            |              |       |  |  |
| 10 YR AVG - COHORT SURVIVAL (4)         | 11,818        | 5,540          | 2,866        | 3,412 |  |  |
| 2000-01                                 | TOTAL         | <u>K-5</u>     | 6-8          | 9-12  |  |  |
| WPG (1)                                 | 12,385        | 5,753          | 2,997        | 3,635 |  |  |
| DEMOGRAPHICS COMMITTEE (2)              | 12,640        | 5,828          | 3,097        | 3,715 |  |  |
| GILBERT ARCHITECTS (3)                  | 11,997        | 5,590          | 2,945        | 3,462 |  |  |
| 10 YR AVG - COHORT SURVIVAL (4)         | 12,009        | 5,503          | 2,975        | 3,531 |  |  |
| OFFICE (4)                              | , 2,009       | 3,555          | 2,070        | 0,001 |  |  |
| 2001-02                                 | TOTAL         | <u>K-5</u>     | <u>6-8</u>   | 9-12  |  |  |
| WPG (1)                                 | 12,357        | 5,622          | 3,002        | 3,733 |  |  |
| DEMOGRAPHICS COMMITTEE (2)              | 12,755        | 5,830          | 3,125        | 3,800 |  |  |
| GILBERT ARCHITECTS (3)                  | 12,149        | 5,527          | 2,987        | 3,635 |  |  |
| 10 YR AVG - COHORT SURVIVAL (4)         | 12,147        | 5,403          | 3,016        | 3,728 |  |  |
| ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |               | -,             | -,           |       |  |  |
| 2002-03                                 | TOTAL         | <u>K-5</u>     | <u>6-8</u>   | 9-12  |  |  |
| WPG (1)                                 | 12,264        | 5,428          | 3,041        | 3,795 |  |  |
| DEMOGRAPHICS COMMITTEE (2)              | 11,950        | 5,700          | 3,000        | 3,250 |  |  |
| GILBERT ARCHITECTS (3)                  | 12,276        | 5,515          | 2,984        | 3,777 |  |  |
| 10 YR AVG - COHORT SURVIVAL (4)         | 12,257        | 5,347          | 3,016        | 3,894 |  |  |
| (,)                                     | , ,           | -,             | , .          | , ,   |  |  |
| 2003-04                                 |               |                |              |       |  |  |
| WPG (1)                                 | 12,240        | 5,362          | 2,935        | 3,943 |  |  |
| DEMOGRAPHICS COMMITTEE (2)              | 12,530        | 5,550          | 2,990        | 3,990 |  |  |
| GILBERT ARCHITECTS (3)                  | 12,442        | 5,599          | 2,904        | 3,939 |  |  |
| 10 YR AVG - COHORT SURVIVAL (4)         | -             | N/A            | N/A          | N/A   |  |  |
| 2004-05                                 |               |                |              |       |  |  |
| WPG (1)                                 | 12,105        | 5,269          | 2,830        | 4,006 |  |  |
| DEMOGRAPHICS COMMITTEE (2)              | 12,580        | 5,400          | 2,950        | 4,230 |  |  |
| GILBERT ARCHITECTS (3)                  | 12,568        | 5,679          | 2,791        | 4,098 |  |  |
| 10 YR AVG - COHORT SURVIVAL (4)         | 12,500        | N/A            | 2,751<br>N/A | N/A   |  |  |
| IN THAVE OUTDING SURVIVAL (4)           |               | 11/7           | 13/73        | 13/7  |  |  |

<sup>(1)</sup> WPG IS THE WAETZMAN PLANNING GROUP FACILITIES PLANNING AND UTILIZATION STUDY COMPLETED IN FEBRUARY 1995

<sup>(2)</sup> DEMOGRAPHICS COMMITTEE STUDY DATED MARCH 1998 - STARTING WITH 2000-01, PROJECTIONS ARE TAKEN FROM GRAPHS IN THE REPORT, THEREFORE NUMBERS MAY NOT BE EXACT.

<sup>(3)</sup> GILBERT ARCHITECT'S ENROLLMENT PROJECTIONS 8/98

<sup>(4)</sup> BUSINESS OFFICE 10/97 ENROLLMENT PROJECTIONS USING COHORT SURVIVAL METHOD

# Detail of Enrollment History and Gilbert Projections

# WEST CHESTER AREA SCHOOL DISTRICT STUDENT ENROLLMENT PROJECTIONS

# DATA ELEMENTS IN PROJECTION CALCULATION

# **KNOWN DATA ELEMENTS**

- History and trends of prior year births
- History and trends of building permit activity
- History and trends of enrollment increases/decreases
- Currently planned residential building projects
- Current residential "build out" percentages of townships
- "First blush" enrollments for the 1998-99 school year

# **UNCERTAIN DATA ELEMENTS**

- History and future of demographic changes to District residential population
- Projection of future building projects/building permit activity
  - Specific impact to building activity as a result of current residential "build out" percentages of townships
- Projection of future birth rates
- Projection of future economic factors affecting building activity, birth rates, and enrollment projections

# West Chester Area School District and Gilbert Architects

District Enrollment Data (Grades K -12)

|             | District    | Difference       | Percentage       | Avg. Yearly          | Diet            | Residential         |
|-------------|-------------|------------------|------------------|----------------------|-----------------|---------------------|
| School      | Enrollments | from             | rercentage<br>of | Progression<br>Ratio | Birth<br>Rates* | Building<br>Permits |
| Terms       | (October)   | Prior Year       | Change           | (school term)        |                 | (calendar year)     |
| History     | ( )         |                  |                  | Toomoor restrict     | (Carcinadi yii) | (balendar year)     |
| 1975-76     |             |                  |                  |                      | 860             |                     |
| 1976-77     |             |                  |                  |                      | 858             |                     |
| 1977-78     |             |                  |                  |                      | 905             |                     |
| 1978-79     |             |                  |                  |                      | 931             |                     |
| 1979-80     |             |                  |                  |                      | 877             |                     |
| 1980-81     | 10,026      |                  |                  |                      | 947             | 409 (1980)          |
| 1981-82     | 9,668       | -358             | -3.57            | 0.9643               | 1,020           | 267 (1981)          |
| 1982-83     | 9,401       | -267             | -2.76            | 0.9724               | 1,044           | 202 (1982)          |
| 1983-84     | 9,204       | -197             | -2.10            | 0.9790               | 953             | 657 (1983)          |
| 1984-85     | 9,097       | -107             | -1.16            | 0.9884               | 1,002           | 749 (1984)          |
| 1985-86     | 8,992       | -105             | -1.15            | 0.9885               | 1,060           | 1,292 (1985)        |
| 1986-87     | 9,190       | 1 <del>9</del> 8 | 2.20             | 1.0220               | 1,137           | 1,658 (1986)        |
| 1987-88     | 9,370       | 180              | 1.96             | 1.0196               | 1,241           | 1,349 (1987)        |
| 1988-89     | 9,449       | 79               | 0.84             | 1.0084               | 1,223           | 1,135 (1988)        |
| 1989-90     | 9,621       | 172              | 1.82             | 1.0182               | 1,209           | 1,018 (1989)        |
| 1990-91     | 9,754       | 133              | 1.38             | 1.0138               | 1,248           | 358 (1990)          |
| 1991-92     | 9,835       | 81               | 0.83             | 1.0083               | 1,163           | 569 (1991)          |
| 1992-93     | 10,195      | 360              | 3.66             | 1.0366               | 1,152           | 512 (1992)          |
| 1993-94     | 10,497      | 302              | 2.96             | 1.0296               | 1,120           | 678 (1993)          |
| 1994-95     | 10,704      | 207              | 1.97             | 1.0197               | 1,185           | 423 (1994)          |
| 1995-96     | 11,012      | 308              | 2.88             | 1.0288               | 1,160           | 508 (1995)          |
| 1996-97     | 11,283      | 271              | 2.46             | 1.0246               | 1,183           | 521 (1996)          |
| 1997-98     | 11,489      | 206              | 1.83             | 1.0183               | 1,182           | 1,182 (1997)        |
| Projections |             |                  |                  |                      |                 |                     |
| 1998-99     | 11,671      | 182              | 1.58             | 1.0158               | 1,202           |                     |
| 1999-2000   | 11,833      | 162              | 1.39             | 1.0139               | 1,222           |                     |
| 2000-01     | 11,997      | 164              | 1.39             | 1.0139               | 1,242           |                     |
| 2001-02     | 12,149      | 152              | 1.27             | 1.0127               | 1,263           |                     |
| 2002-03     | 12,276      | 127              | 1.05             | 1.0105               | 1,283           |                     |
| 2003-04     | 12,442      | 166              | 1.35             | 1.0135               | 1,303           |                     |
| 2004-05     | 12,568      | 126              | 1.01             | 1.0101               | 1,323           |                     |
| 2005-06     | 12,596      | 28               | 0.22             | 1.0022               | 1,344           |                     |

<sup>\*</sup>These data were provided by the Division of Health Statistics, Pennsylvania Department of Health, Harrisburg, Pennsylvania. The Department specifically disclaims responsibility for any analyses, interpretations or conclusion:

# West Chester Area School District and Gilbert Architects

**Elementary Enrollment Data (Kdg. - Grade 5)** 

|             | MICHIC      |            | Millionic Bu. | Avg. Yearly    | 1440 07                                     | Residential                  |
|-------------|-------------|------------|---------------|----------------|---|------------------------------|
|             | District    | Difference | Percentage    | Progression    | Birth                                       | Building                     |
| School      | Enrollments | trom       | of            | Ratio          | Rates*                                      | Permits                      |
| Terms       | (October)   | Prior Year | Change        | (school term)  |   | (calendar year)              |
| History     | 100:00:7    | 11101 1001 |               | 1001100110111) | (32,34,34,34,34,34,34,34,34,34,34,34,34,34, |                              |
| 1975-76     |             |            |               |                | 860   |                              |
| 1976-77     |             |            |               |                | 858   |                              |
| 1977-78     |             |            |               |                | 905   |                              |
| 1978-79     |             | . ,        |               |                | 931   |                              |
| 1979-80     |             |            |               |                | 877   |                              |
| 1980-81     | 4,258       |            |               |                | 947   | 409 (1980)                   |
| 1981-82     | 3,994       | -264       | -6.20         | 0.9380         | 1,020                                       | 267 (1981)                   |
| 1982-83     | 3,841       | -153       | -3.83         | 0.9617         | 1,044                                       | 202 (1982)                   |
| 1983-84     | 3,771       | -70        | -1.82         | 0.9818         | 953   | 657 (1983)                   |
| 1984-85     | 3,703       | -68        | -1.80         | 0.9820         | 1,002                                       | 749 (1984)                   |
| 1985-86     | 3,830       | 127        | 3.43          | 1.0343         | 1,060                                       | 1,292 (1985)                 |
| 1986-87     | 4,071       | 241        | 6.29          | 1.0629         | 1,137                                       | 1,658 (1986)                 |
| 1987-88     | 4,294       | 223        | 5.48          | 1.0548         | 1,241                                       | 1,349 (1987)                 |
| 1988-89     | 4,518       | 224        | 5.22          | 1.0522         | 1,223                                       | 1,135 (1988)                 |
| 1989-90     | 4,700       | 182        | 4.03          | 1.0403         | 1,209                                       | 1,018 (1989)                 |
| 1990-91     | 4,820       | 120        | 2.55          | 1.0255         | 1,248                                       | 358 (1990)                   |
| 1991-92     | 4,928       | 108        | 2.24          | 1.0224         | 1,163                                       | 569 (1991)                   |
| 1992-93     | 5,081       | 153        | 3.10          | 1.0310         | 1,152                                       | 5 <b>1</b> 2 (1 <b>992</b> ) |
| 1993-94     | 5,276       | 195        | 3.84          | 1.0384         | 1,120                                       | 678 (1993)                   |
| 1994-95     | 5,325       | 49         | 0.93          | 1.0093         | 1,185                                       | 423 (1994)                   |
| 1995-96     | 5,479       | 154        | 2.89          | 1.0289         | 1,160                                       | 508 (1995)                   |
| 1996-97     | 5,659       | 180        | 3.29          | 1.0329         | 1,183                                       | 521 (1996)                   |
| 1997-98     | 5,702       | 43         | 0.76          | 1.0076         | 1,182                                       | 1,182 (1997)                 |
| Projections |             |            |               |                |   |                              |
| 1998-99     | 5,628       | -74        | -1.30         | 0.9870         | 1,202                                       |                              |
| 1999-2000   | 5,616       | -12        | -0.21         | 0.9979         | 1,222                                       |                              |
| 2000-01     | 5,590       | -26        | -0.46         | 0.9954         | 1,242                                       |                              |
| 2001-02     | 5,527       | -63        | -1.13         | 0.9887         | 1,263                                       |                              |
| 2002-03     | 5,515       | -12        | -0.22         | 0.9978         | 1,283                                       |                              |
| 2003-04     | 5,599       | 84         | 1.52          | 1.0152         | 1,303                                       |                              |
| 2004-05     | 5,679       | 80         | 1.43          | 1.0143         | 1,323                                       | •                            |
| 2005-06     | 5,726       | 47         | 0.83          | 1.0083         | 1,344                                       |                              |
| 1           |             |            |               |                |   |                              |

<sup>\*</sup>These data were provided by the Division of Health Statistics, Pennsylvania Department of Health, Harrisburg, Pennsylvania. The Department specifically disclaims responsibility for any analyses, interpretations or conclusions.

# West Chester Area School District and Gilbert Architects Middle School Enrollment Data (Grades 6-8)

|             |                                       |               |               | Avg. Yearly   |                | Residential     |
|-------------|---------------------------------------|---------------|---------------|---------------|----------------|-----------------|
| i           | District                              | Difference    | Percentage    | Progression   | Birth          | Building        |
| School      | Enrollments                           | from          | of            | Ratio         | Rates*         | Permits         |
| Terms       | (October)                             | Prior Year    | Change        | (school term) | (calendar yr.) | (calendar year) |
| History     | · · · · · · · · · · · · · · · · · · · |               |               |               |                |                 |
| 1975-76     |                                       |               |               |               | 860            |                 |
| 1976-77     |                                       |               |               |               | 858            |                 |
| 1977-78     |                                       |               |               |               | 9 <b>0</b> 5   |                 |
| 1978-79     |                                       |               |               |               | 931            |                 |
| 1979-80     |                                       |               |               |               | 877            |                 |
| 1980-81     | 2,431                                 |               |               |               | 947            | 409 (1980)      |
| 1981-82     | 2,382                                 | -49           | -2.0 <b>2</b> | 0.9798        | 1,020          | 267 (1981)      |
| 1982-83     | 2,305                                 | -77           | -3.23         | 0.9677        | 1,044          | 202 (1982)      |
| 1983-84     | 2,228                                 | -77           | -3.34         | 0.9666        | 953            | 657 (1983)      |
| 1984-85     | 2,150                                 | -78           | -3.50         | 0.9650        | 1,002          | 749 (1984)      |
| 1985-86     | 2,002                                 | -148          | -6.88         | 0.9312        | 1,060          | 1,292 (1985)    |
| 1986-87     | 1,982                                 | -20           | -1.00         | 0.9900        | 1,137          | 1,658 (1986)    |
| 1987-88     | 2,014                                 | 32            | 1.61          | 1.0161        | 1,241          | 1,349 (1987)    |
| 1988-89     | 2,066                                 | 52            | 2.58          | 1.0258        | 1,223          | 1,135 (1988)    |
| 1989-90     | 2,053                                 | -13           | -0.63         | 0.9937        | 1,209          | 1,018 (1989)    |
| 1990-91     | 2,106                                 | 53            | 2.58          | 1.0258        | 1,248          | 358 (1990)      |
| 1991-92     | 2,147                                 | 41            | 1.95          | 1.0195        | 1,163          | 569 (1991)      |
| 1992-93     | 2,237                                 | 90            | 4.19          | 1.0419        | 1,152          | 512 (1992)      |
| 1993-94     | 2,354                                 | 117           | 5.23          | 1.0523        | 1,120          | 678 (1993)      |
| 1994-95     | 2,447                                 | 93            | 3.95          | 1.0395        | 1,185          | 423 (1994)      |
| 1995-96     | 2,502                                 | 55            | 2.25          | 1.0225        | 1,160          | 508 (1995)      |
| 1996-97     | 2,496                                 | <del>-6</del> | -0.24         | 0.9976        | 1,183          | 521 (1996)      |
| 1997-98     | 2,528                                 | 32            | 1.28          | 1.0128        | 1,182          | 1,182 (1997)    |
| Projections |                                       |               |               |               |                |                 |
| 1998-99     | 2,668                                 | 140           | 5.54          | 1.0554        | 1,202          |                 |
| 1999-2000   | 2,841                                 | 173           | 6.48          | 1.0648        | 1,222          |                 |
| 2000-01     | 2,945                                 | 104           | 3.66          | 1.0366        | 1,242          |                 |
| 2001-02     | 2,987                                 | 42            | 1.43          | 1.0143        | 1,263          |                 |
| 2002-03     | 2,984                                 | -3            | -0.10         | 0.9990        | 1,283          |                 |
| 2003-04     | 2,904                                 | -80           | -2.68         | 0.9732        | 1,303          |                 |
| 2004-05     | 2,791                                 | -113          | -3.89         | 0.9611        | 1,323          |                 |
| 2005-06     | 2,782                                 | -9            | -0.32         | 0.9968        | 1,344          |                 |
| 1           |                                       |               |               |               |                |                 |

<sup>\*</sup>These data were provided by the Division of Health Statistics, Pennsylvania Department of Health, Harrisburg, Pennsylvania. The Department specifically disclaims responsibility for any analyses, interpretations or conclusions.

# West Chester Area School District and Gilbert Architects

**High School Enrollment Data (Grades 9-12)** 

| School           | District<br>Enrollments | Difference<br>from | Percentage of | Avg. Yearly<br>Progression | Birth          | Residential<br>Building     |
|------------------|-------------------------|--------------------|---------------|----------------------------|----------------|-----------------------------|
| Terms            | (October)               | Prior Year         | Change        | Ratio<br>(school term)     | Rates*         | Permits                     |
| History          | (ODIODOI)               | Thoi real          | Change        | (Scripor term)             | (calendar yr.) | (calendar year)             |
| 1975-76          |                         |                    |               |                            | 860            |                             |
| 1976-7 <b>7</b>  |                         |                    |               |                            | 858            | •                           |
| 1977-78          |                         |                    |               |                            | 905            |                             |
| 197 <b>8-7</b> 9 |                         |                    |               |                            | 931            |                             |
| 1979-80          |                         |                    |               |                            | 877            |                             |
| 1980-81          | 3,337                   |                    |               |                            | 947            | 409 (1980                   |
| 1981-82          | 3,292                   | -45                | -1.35         | 0.9865                     | 1,020          | 267 (1981                   |
| 1982-83          | 3,255                   | -37                | -1.12         | 0.9888                     | 1,044          | 202 (1982                   |
| 1983-84          | 3,205                   | -50                | -1.54         | 0.9846                     | 953            | 657 (1983                   |
| 1984-85          | 3,244                   | 39                 | 1.22          | 1.0122                     | 1,002          | 749 (1984)                  |
| 1985-86          | 3,160                   | -84                | -2.59         | 0.9741                     | 1,060          | 1,292 (1985                 |
| 1986-87          | 3,137                   | -23                | -0.73         | 0.9927                     | 1,137          | 1,658 (1986                 |
| 1987-88          | 3,062                   | <b>-</b> 75        | -2.39         | 0.9761                     | 1,241          | 1,349 (1987                 |
| 1988-89          | 2,865                   | -197               | -6.43         | 0.9357                     | 1,223          | 1,135 (1988)                |
| 1989-90          | 2,868                   | 3                  | 0.10          | 1.0010                     | 1,209          | 1,018 (1989)                |
| 1990-91          | 2,828                   | -40                | -1.39         | 0.9861                     | 1,248          | 358 (1990)                  |
| 1991 <b>-</b> 92 | 2,760                   | -68                | -2.40         | 0.9760                     | 1,163          | 569 (1991)                  |
| 1992-93          | 2,877                   | <b>11</b> 7        | 4.24          | 1.0424                     | 1,152          | 5 <b>1</b> 2 (1 <b>99</b> 2 |
| 1993-94          | 2,867                   | -10                | -0.35         | 0.9965                     | 1,120          | 678 (1993)                  |
| 1994-95          | 2,932                   | <b>6</b> 5         | 2.27          | 1.0227                     | 1,185          | 423 (1994)                  |
| 1995-96          | 3,031                   | 99                 | 3.38          | 1.0338                     | 1,160          | 508 (1995)                  |
| 1996-97          | 3,128                   | 97                 | 3.20          | 1.0320                     | 1,183          | 521 (1996)                  |
| 1997-98          | 3,259                   | 131                | 4.19          | 1.0419                     | 1,182          | 1,182 (1997)                |
| Projections      |                         |                    |               |                            |                |                             |
| 1998-99          | 3,375                   | 116                | 3.56          | 1.0356                     | 1,202          |                             |
| 1999-2000        | 3,376                   | 1                  | 0.03          | 1.0003                     | 1,222          |                             |
| 2000-01          | 3,462                   | 86                 | 2.55          | 1.0255                     | 1,242          |                             |
| 2001-02          | 3,635                   | 173                | 4.997         | 1.04997                    | 1,263          |                             |
| 2002-03          | 3,777                   | 142                | 3.91          | 1.0391                     | 1,283          |                             |
| 2003-04          | 3,939                   | 162                | 4.29          | 1.0429                     | 1,303          |                             |
| 2004-05          | 4,098                   | 159                | 4.04          | 1.0404                     | 1,323          |                             |
| 2005-06          | 4,088                   | -10                | -0.24         | 0.9976                     | 1,344          |                             |

<sup>\*</sup>These data were provided by the Division of Health Statistics, Pennsylvania Department of Health, Harrisburg, Pennsylvania. The Department specifically disclaims responsibility for any analyses, interpretations, or conclusions

# **Birth Rate Calculations**

# West Chester Area School District and Gilbert Architects Projecting Birth Rates, cont.

# Birth Rates to the Year 2005

1. Births per 1000 Population

|        | Births* | Population ** | Ratio   | Births per 1,000 Population |
|--------|---------|---------------|---------|-----------------------------|
| 1993 - | 1,120 / | 90,547        | 0.01237 | 12.37                       |
| 1994 - | 1,185 / | 91,713        | 0.01292 | 12.92                       |
| 1995 - | 1,160 / | 93,262        | 0.01244 | 12,44                       |
| 1996 - | 1,183 / | 94,296        | 0.01255 | 12.55                       |

\*Birth Rates from PA Dept. of Education Projections (5/98)

- 2. Average (1993, 1994, 1995, 1996) Births per 1,000 population 12.57
- 3. Birth Rate for 2005
- Average rate x (Estimated total population for 2005)

12.57 x (106,887 / 1,000)

 $12.57 \times 106.89 = 1343.6073$ 

4. Birth Rates for 1998 - 2005

Birth Rate for 2005 - Birth Rate for 1997

1344-1182 = 162

Birth Rate increments (each year for 8 years) = 20.25

Birth Rates to 2005

Birth Rate for.

1998 = 1997 + 20.25 = 1202.25

1999 = 1998 + 20.25 = 1222.50

2000 = 1999 + 20.25 = 1242.75

2001 = 2000 + 20.25 = 1263

2002 = 2001 + 20.25 = 1283.25

2003 = 2002 + 20.25 = 1303.50

2004 = 2003 + 20.25 = 1323.75

2005 = 2004 + 20.25 = 1344

<sup>\*\*</sup>Population Data - U.S. Census Data

# West Chester Area School District and Gilbert Architects Projecting Birth Rates

| Municipalities                 | Population Data* |             |            |              |                       |            |          |
|--------------------------------|------------------|-------------|------------|--------------|-----------------------|------------|----------|
|                                | 1990             | 1991        | 1992       | 1993         | 1994                  | 1995       | 1996     |
| East Bradford Twp.             | 6,440            | 6,663       | 6,762      | 7,011        | 7,349                 | 7,693      | 7,898    |
| East Goshen Twp.               | 15,138           | 15,606      | 15,715     | 15,847       | 15,967                | 16,117     | 16,236   |
| Thombury Twp. (Chester Co.)    | 1,131            | 1,136       | 1,154      | 1,195        | 1,265                 | 1,334      | 1,377    |
| Thombury Twp. (Delaware Co.)   | 4,728            | 4,745       | 4,853      | 4,997        | 4,955                 | 5,074      | 5,157    |
| West Goshen Twp.               | 18,082           | 18,346      | 18,460     | 18,589       | 18,800                | 19,126     | 19,379   |
| Westtown Twp.                  | 9,937            | 10,018      | 10,506     | 10,913       | 10,978                | 11,108     | 11,155   |
| West Whiteland Twp.            | 12,403           | 13,184      | 13,550     | 13,879       | 14,317                | 14,843     | 15,136   |
| West Chester Borough           | 18,041           | 18,051      | 17,813     | 18,107       | 18,082                | 17,967     | 17,958   |
| TOTALS                         | 85,900           | 87,749      | 88,813     | 90,547       | 91,713                | 93,262     | 94,296   |
| (*1990 - Decennial Census; 199 | 1-1996 Estimated | Population: | s. The Pop | ulation of I | <sup>2</sup> ennsviva | nia Munici | palities |

# Estimated Population for 2005

1990 - 85,900

1996 - 94,296

1. Growth between 1990 and 1996

94,296 - 85,900 = 8,396

- 2. Average growth per year = 1399.33
- 3. Projected population in 2005-2006

1996 population + (average growth per year x 9 years)

 $94.296 + (1399 \times 9) = 106,887$ 

**Building Activity** 

# WEST CHESTER AREA SCHOOL DISTRICT

HOUSING UNITS DURING FIVE-YEAR BUILD-OUT

| Developments        | Type of Homes (Approx. Value Pla |     | No. to be Built   | Tent. Completion |
|---------------------|----------------------------------|-----|-------------------|------------------|
| EAST GOSHEN*        |                                  |     |                   | <b>F</b>         |
| 1. Clocktower Woods | S.F.(\$380-400,000)              | 157 | 75                | 2001             |
| 2. Rossmere         | S.F.(\$400-550,000)              | 67  | 30                | 2000             |
| 3. Brandolini       | S.F.(\$280-300,000)              | 27  | 27                | 2002             |
| 4. Fox Run          | S.F.(\$380-400,000)              | 24  | 24 **             | 2003             |
| 5. Sherman          | S.F. (\$500,000)                 | 34  | 34 **             | 2003             |
| (now Gamboni)       |                                  |     |                   |                  |
|                     | e e                              |     | **Plans submitted |                  |

<sup>\*</sup>EAST GOSHEN - REPORTED AN APPROX. 80% BUILD-OUT.

# WEST GOSHEN\*

| 1. Netherfield              | S.F.(Low \$300,000 | D)   | 12  | 6   | 1999 |
|-----------------------------|--------------------|------|-----|-----|------|
| 2. Pemberly                 | No submission      | 10** |     |     |      |
| 3. Idlewilde                | S.F. (\$280,000+)  |      | 82  | 65  | 2001 |
| 4. Applegate                | S.F. (\$300,000+)  |      | 121 | 102 | 2003 |
| <ol><li>Jerrichan</li></ol> | No submission      | 25** |     |     |      |

\*\*WCASD Committee Report

# **WEST WHITELAND\***

| 1. Evian               | T.H.(\$160-170,000  | ) 40         | 30            | 1999       |
|------------------------|---------------------|--------------|---------------|------------|
| 2. Coach Hill Court    | T.H.(\$110-120,000  | ) 20         | 20            | 1998       |
| (Exton Station - Final | Court)              |              |               |            |
| 3. Ryerss Hunt         | S.F.(\$250-290,000) | 55           | 25            | 1999       |
| 4. Exton Crossing      | APTS.               | 400          | 300**         | 1999       |
|                        |                     | **To be occu | pied or built |            |
| 5. Whiteland Ridge     | S.F. (\$300,000+)   | 67           | 67            | 2000       |
| 6. Valley View         | T.H. (\$150.000 +)  | 152          | 152           | 2000       |
| 7. Swedesford Chase    | S.F. (\$300,000+)   | 192          | 192           | 2004       |
| 8. Whiteland Woods     | S.F. and T.H.       | 88 S.F. and  | 351 T.H.      | 1999 Start |
| 9. Kinbawn             | S.F. (\$300,000+)   | 6            | 6             | 1999       |
| 10. Hess               | S.F.                | 3            | 2             | 1998       |

<sup>\*</sup>WEST WHITELAND - REPORTED AN APPROX. 85% BUILD-OUT.

<sup>\*</sup>WEST GOSHEN- REPORTED AN APPROX. 90% BUILD-OUT.

# **EAST BRADFORD\***

| Brandywine River     Estates       | S.F. (\$600,000+)   | 52        | 31 | Nov. 1999 |
|------------------------------------|---------------------|-----------|----|-----------|
| 2. Marshallton Chase               | S.F. (\$400,000+)   | 48        | 36 | Jun. 2000 |
| 3. Sagamore                        | T.H. (\$100,000+)   | 68        | 37 | Jan. 1999 |
| 4. Heritage at                     | S.F. (\$500,000+)   | 34        | 22 | Dec. 1999 |
| Parke Farm                         |                     |           |    |           |
| 5. Sussex                          | S.F. (\$1 million+) | 18        | 17 |           |
| 6. Steeple Chase at                | S.F. (High \$300 to | 29        | 27 |           |
| Bradley Run                        | mid \$400,000)      |           |    |           |
| 7. Kenmara                         | S.F. (\$200,000+)   | 63        | 61 | 2001      |
| 8. Tall Trees                      | S.F. (\$300,000+)   | 9         | 9  |           |
| 9. Folke Manor                     | S.F. (\$300,000+)   | 18        | 14 | 2001      |
| 10. Blue Rock Rd.                  | S.F. (High \$300 to | 30        | 30 | 2001      |
|                                    | low \$400,000)      |           |    |           |
| 11. West Glen                      | S.F.(Mid \$300,000) | 6         | 6  |           |
| 12. Birmingham/                    | S.F. (High \$300 to | 5         | 5  |           |
| Allegiance                         | mid \$400,000)      |           |    |           |
| (Lynchberger prop.)                |                     |           |    |           |
| 13. Tigue Road                     | S.F. (\$300,000+)   | 2         | 1  | 1998      |
| <ol><li>14. Lenape Ridge</li></ol> | S.F. (\$300,000+)   | 4         | 2  | 1999      |
| 15. Across from                    | S.F. (\$300,000+)   | l in Twp. | 1  | 1999      |
| River Bend                         |                     |           |    |           |
| 16. Roz Abrams Prop.               | ?                   | 20        | 20 | Hearing   |
| 17 Singer Prop.                    | ?                   | 150 acres |    |           |
| 18. Tigue Prop.                    | ?                   | 180 acres |    |           |

<sup>\*</sup>EAST BRADFORD TOWNSHIP -REPORTED AN APPROX. 90% BUILD- OUT. (Some land has been placed in a conservancy.)

# THORNBURY TOWNSHIP (DELAWRE CO.)\*

| 1. Concorde Chase              | S.F. (\$350.0000) | 25  | 25  | 1999      |
|--------------------------------|-------------------|-----|-----|-----------|
| 2. Glen Mills Schools          | Housing for Staff | 54  | 54  |           |
| 3. Ridley Tract                | T.H. (\$225,000+) | 236 | 236 | 2001-2003 |
| 4. Patterson Tract             | S.F. (\$300,000+) | 160 | 160 | 2001-2003 |
| <ol><li>Bonner Tract</li></ol> | Sketch Plans only | 16  | 16  |           |

THORNBURY TOWNSHIP (DE.) -REPORTED AN APPROX. 75% BUILD-OUT.

### THORNBURY TOWNSHIP (CHESTER CO.)\*

| <ol> <li>Brandywine at</li> </ol> | T.H. (Avg. \$170,000)      | 194 | 170 | 1999 |
|-----------------------------------|----------------------------|-----|-----|------|
| Thornbury                         | S.F. (\$250-350,000)       | 102 | 87  | 1999 |
| a. Springhouse                    | Apts. (Single Bdrm. \$950) | 212 | 170 | 1999 |
| at Brandywine                     | (Triple Bdrm. \$1350)      |     |     |      |
| b. Thornbury Wood                 | S.F. (\$400,000+)          | 9   | 9   | 1999 |
| 2. Oak Knoll                      | S.F. (High \$400,000)      | 4   | 4   | 1998 |
| 3. Thorncraft Woods               | S.F. (\$450-550,000)       | 8   | 4   | 1999 |
| 4. Echo Hill II                   | S.F. (\$450,000)           | 6   | 6   | 2000 |
| 5. Greens at Penn                 | T.H. (\$250-Low            | 70  | 58  | 2000 |
| Oaks                              | 300,000)                   |     |     |      |

THORNBURY TOWNSHIP (CHESTER) - REPORTED AN APPROX. 80% BUILD-OUT.

### **WESTTOWN TOWNSHIP\***

| 1. East Pleasant | S.F. (\$250,000 +) | 16 | 16 | (Construction |
|------------------|--------------------|----|----|---------------|
| Grove            |                    |    |    | not started)  |
| 2. Avonlea       | S.F. (\$500,000 +) | 34 | 9  | 1998          |
| 3. Wild Goose    | S.F. (\$170,000)   | 15 | 15 | (Slower sales |
|                  | •                  |    |    | predicted.)   |

4. Sketch plan submitted for adult (55+) community (500 units).

### WEST CHESTER BOROUGH - REPORTED A BUILD-OUT.

# **SUMMARY**

- 1. Single Family Homes = 1410 (X .29\* = 409 students)
- 2. Town Houses = 1054 (X.15\*\* = 158 students)
- 3. Apartments = 470 (X.11\*\* = 52 students)

# Total of Estimated New Students Due to New Housing Units = 619

- \*Chester Co. Planning Commission uses this number from 1990 U.S. Census
- \*\*Number reported by the WCASD's Demographic Committee

# Caution: Managing Change in Chester County -1996 to 2020, July 12, 1996

"The residential development of the 1980's and 1990's has been accompanied by a a different type of family household than that of the 1960's. The more recent households are characterized by older occupants, fewer dependent children, and a higher household income level. The age groups that increased the most were 35 to 49 years and 65 to 75 years and older." (Rationale for recording students per household as .29, .15 and .11)

August-1998 (Gilbert Architects)

<sup>\*</sup>WESTTOWN TOWNSHIP REPORTED AN APPROX. 80% BUILD-OUT (Estimate - 3 tracks remain with the possibility of 650 additional homes.)