September 22, 1998

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West Chester Area School District

Henderson High School Renovation Project Enrollment Projections

Final Report

Prepared by: Suzanne K. Moore, Director of Business Affairs
Dr. James Bowman, Gilbert Architects
Board Member Review Committee: Dr. Debra Arvanites and James B. Davison

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Timeline and Issues

for

Henderson Renovation

TIMELINE FOR HENDERSON HIGH SCHOOL RENOVATION

9/9/98

TASK	By:	TIMELINE
Prepare/Update Feasibility Study	Gilbert Architects Central Office Administration	Aug. 1998 - Jan. 1999
Develop Enrollment Projections	Mrs. Moore Gilbert Architects 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. 1999
Develop Schematic Design & Prepare Cost Analysis for Henderson H.S. 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 *before* 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

- continued -

- 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

Enrollment Projection Recommendation

On August 25, 1998, the sub-committee, including Debra Arvanites, Jim Davison, Jim Bowman, and Suzanne Moore met to review historical enrollment data and verify projections calculated by Gilbert Architects.

The sub-committee members agreed that the calculations provided by Gilbert Architects provided the most accurate projections. Gilbert Architects used the cohort survival method to calculate the projections. The projections reflect the average student growth activity during the past 10 years along with additional students as a result of an increase in birth rates.

By using the cohort survival method, we are assuming that the future building activity, economic conditions, and demographic/family changes in the District will be similar to the same factors impacting the prior ten years. After reviewing the historical data, current and future building activity, and economic conditions we concluded that this assumption was correct.

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

9/8/98

ENROLLMENT PROJECTIONS				
1997-98	TOTAL	K-5	6-8	9-12
WPG (1)	11,861	5,872	2,634	3,355
ACTUAL	11,486	5,698	2,529	3,259
1998-99	TOTAL	K-5	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
1999-2000	TOTAL	K-5	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	3,376
10 YR AVG - COHORT SURVIVAL (4)	11,818	5,540	2,866	3,412
2000-01	TOTAL	K-5	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)	11,998	5,591	2,945	3,462
10 YR AVG - COHORT SURVIVAL (4)	12,009	5,503	2,975	3,531
2001-02	TOTAL	K-5	6-8	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	K-5	6-8	9-12
WPG (1)	12,264	5,428	3,041	3,795
DEMOGRAPHICS COMMITTEE (2)	12,600	5,700	3,000	3,900
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	TOTAL	K-5	6-8	9-12
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	TOTAL	K-5	6-8	9-12
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)	-	N/A	N/A	N/A
2005-06	TOTAL	K-5	6-8	9-12
GILBERT ARCHITECTS (3)	12,596	5,726	2,782	4,088
2006-07	TOTAL	K-5	6-8	9-12
GILBERT ARCHITECTS (3)	12,631	5,807	2,834	3,990
2007-08	TOTAL	K-5	6-8	9-12
GILBERT ARCHITECTS (3)	12,694	5,886	2,885	3,923
2008-09	TOTAL	K-5	6-8	9-12
GILBERT ARCHITECTS (3)	12,739	5,982	2,882	3,875
2009-2010	TOTAL	K-5	6-8	9-12
GILBERT ARCHITECTS (3)	12,847	6,079	2,917	3,851

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

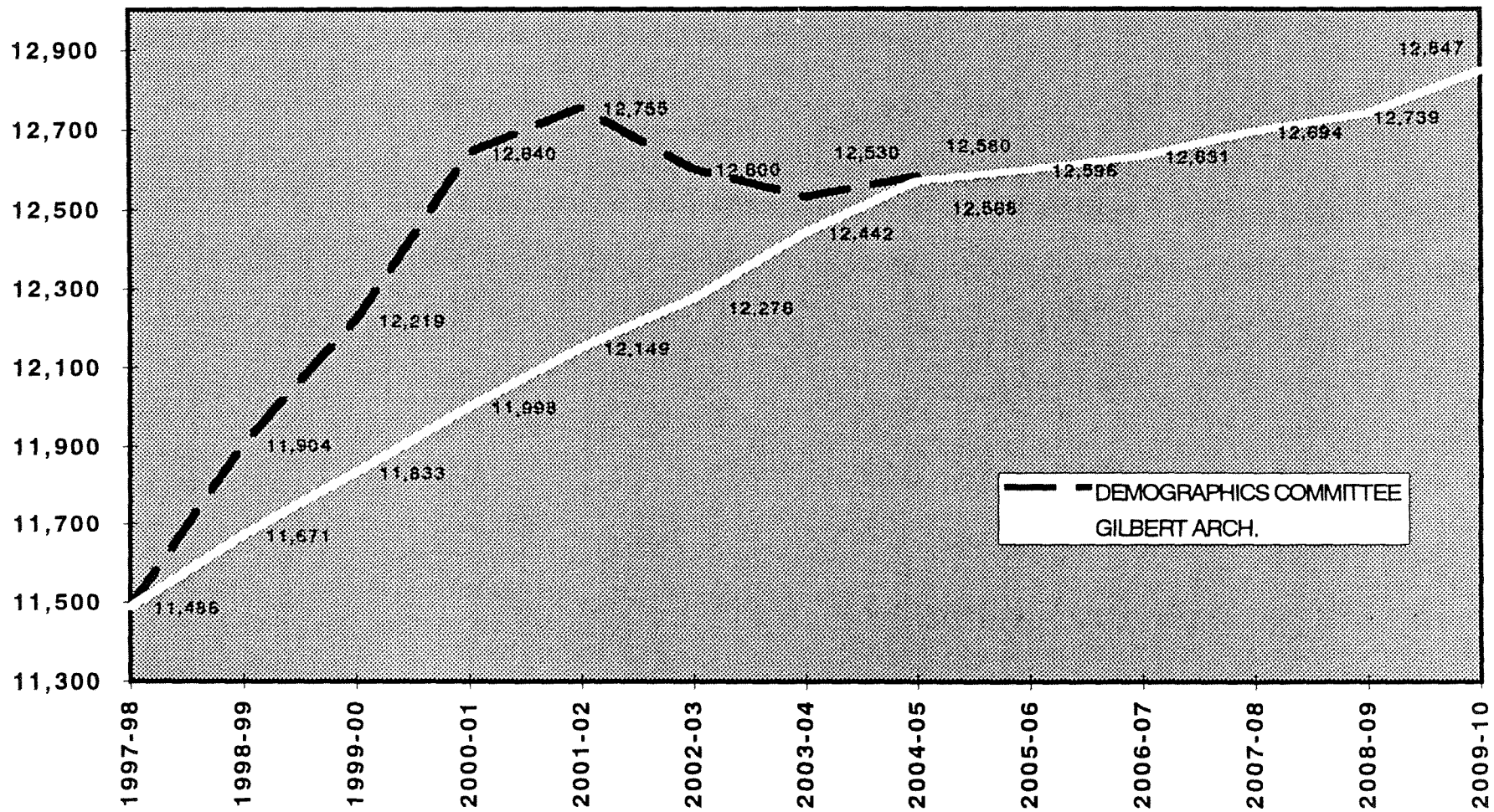
(2) DEMOGRAPHICS COMMITTEE STUDY DATED MARCH 1998

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

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

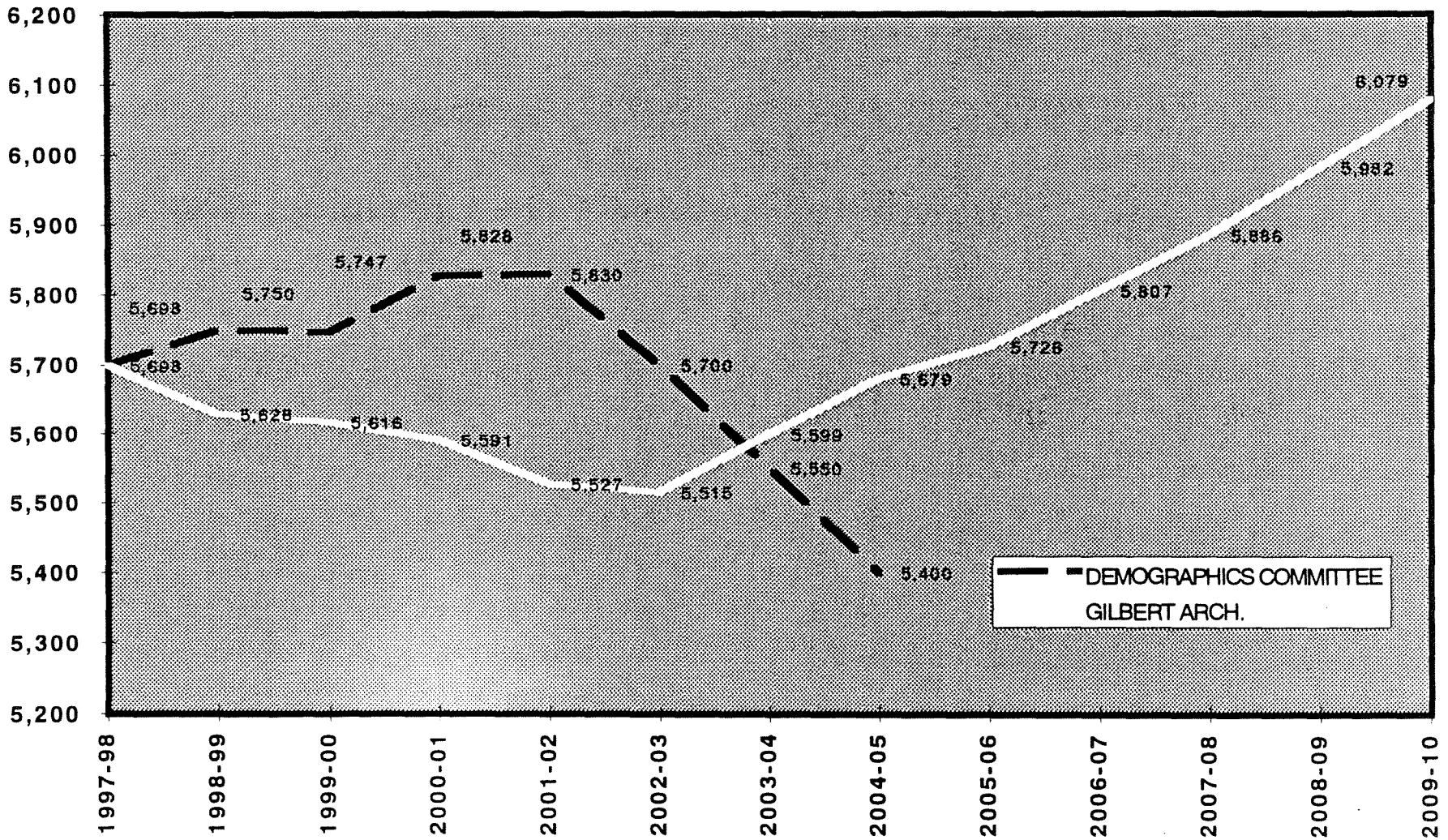
WEST CHESTER AREA SCHOOL DISTRICT

COMPARISON OF ENROLLMENT PROJECTIONS BY DEMOGRAPHICS COMMITTEE AND GILBERT ARCHITECTS
TOTAL STUDENTS



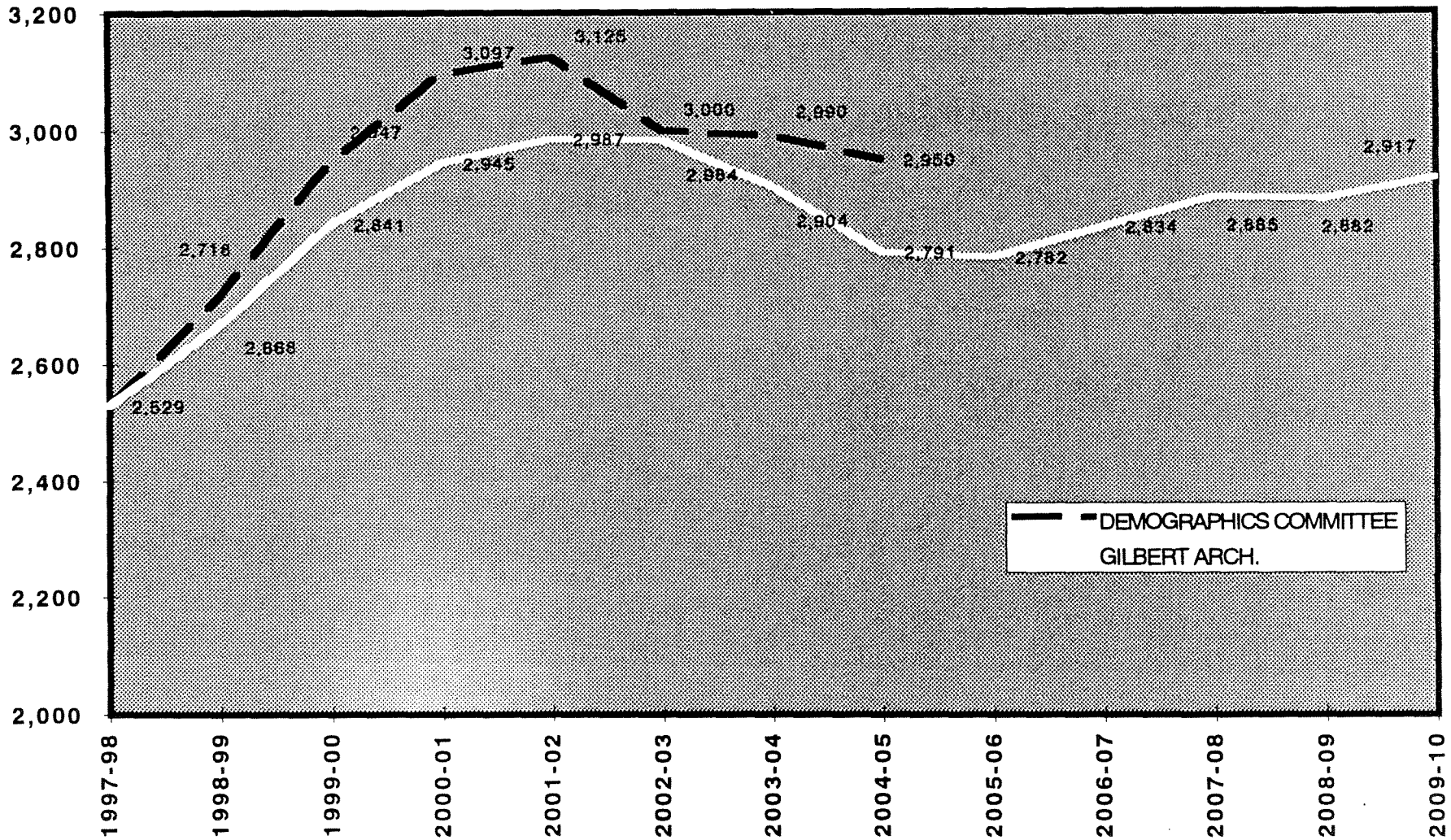
WEST CHESTER AREA SCHOOL DISTRICT

COMPARISON OF ENROLLMENT PROJECTIONS BY DEMOGRAPHICS COMMITTEE AND GILBERT ARCHITECTS ELEMENTARY STUDENTS



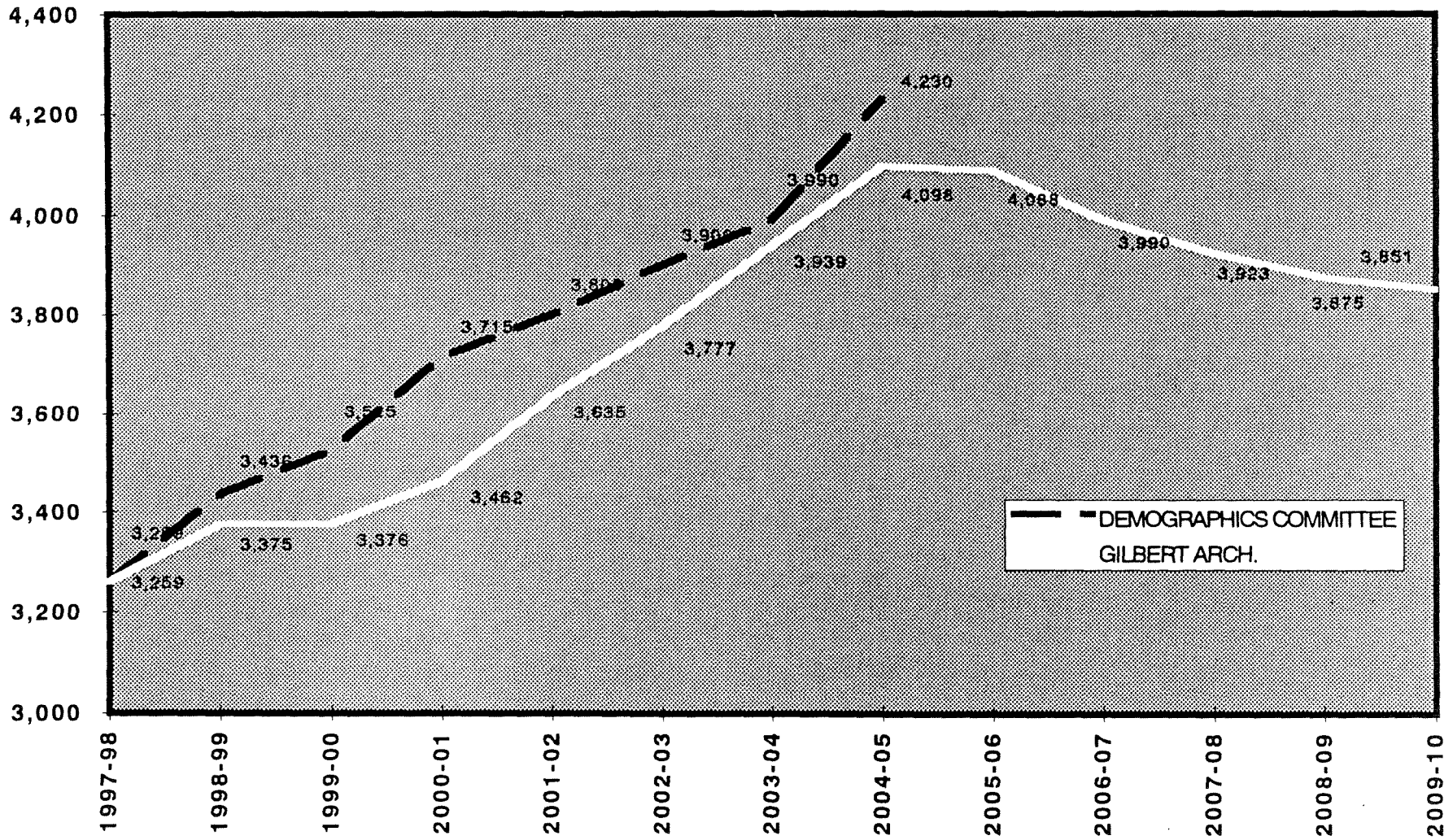
WEST CHESTER AREA SCHOOL DISTRICT

COMPARISON OF ENROLLMENT PROJECTIONS BY DEMOGRAPHICS COMMITTEE AND GILBERT ARCHITECTS MIDDLE SCHOOL STUDENTS



WEST CHESTER AREA SCHOOL DISTRICT

COMPARISON OF ENROLLMENT PROJECTIONS BY DEMOGRAPHICS COMMITTEE AND GILBERT ARCHITECTS HIGH SCHOOL STUDENTS



Detail of Enrollment History

and

Gilbert Projections

WEST CHESTER AREA SCHOOL DISTRICT

SUMMARY OF HISTORICAL INFORMATION

1990-91 to 1996-97

- Estimates indicate that the total residential population increased from 85,900 to 94,296 or a 9.77% increase.

- 1,529 students or 15.68% increase occurred in District enrollments
  839 students or 17.41% growth at the elementary level
  390 students or 18.52% growth at the middle school level
  300 students or 10.61% growth at the high school level

- This period followed 5 years when the highest number of residential building permits were issued and preceded 1997 when the number of permits was high again.

- Ratios representing year-to-year changes in District enrollments (1981-1997) indicate that the 1985-89 strong increase in residential building permits resulted in:

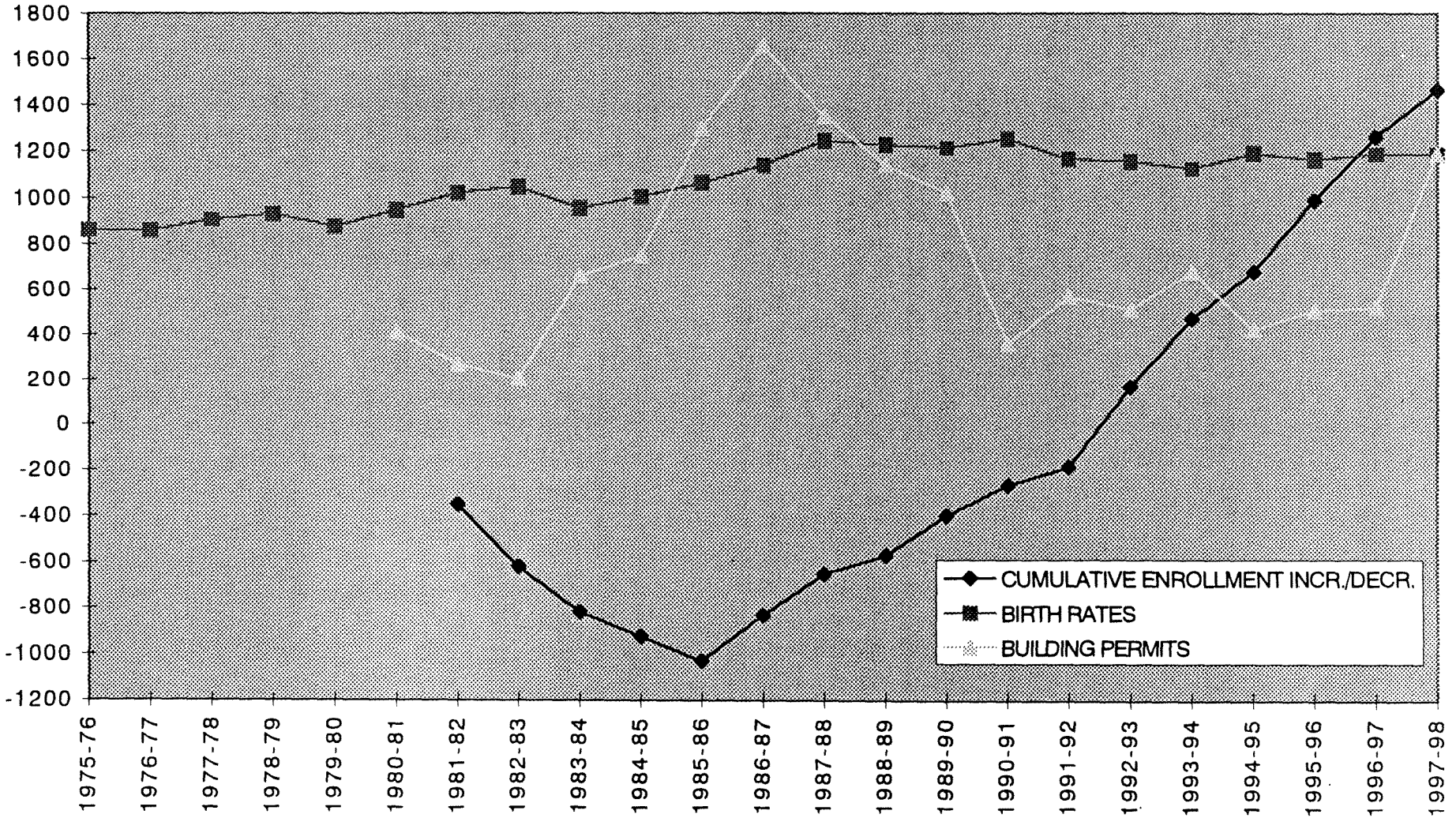
  - strong growth at the elementary level through 1997

  - stronger growth at the middle school level from 1990 through 1997 (Growth also occurs as larger classes of elementary students progress into the middle schools.)

  - growth at the high school level from 1994-97 (Growth will continue as larger classes of middle school students progress into the high schools.)

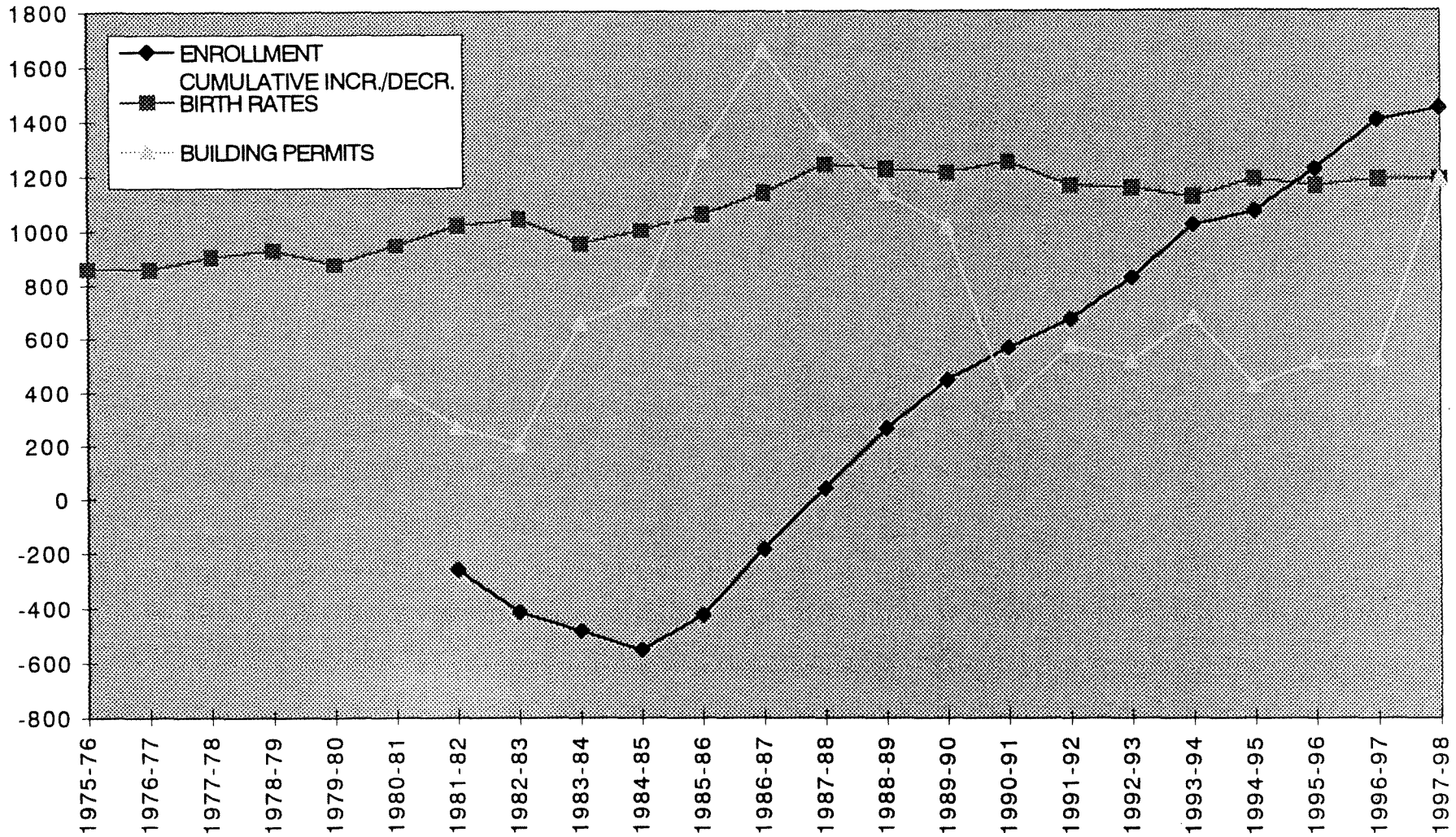
WEST CHESTER AREA SCHOOL DISTRICT

RELATIONSHIP OF LIVE BIRTHS, BUILDING PERMITS AND STUDENT ENROLLMENT CHANGES



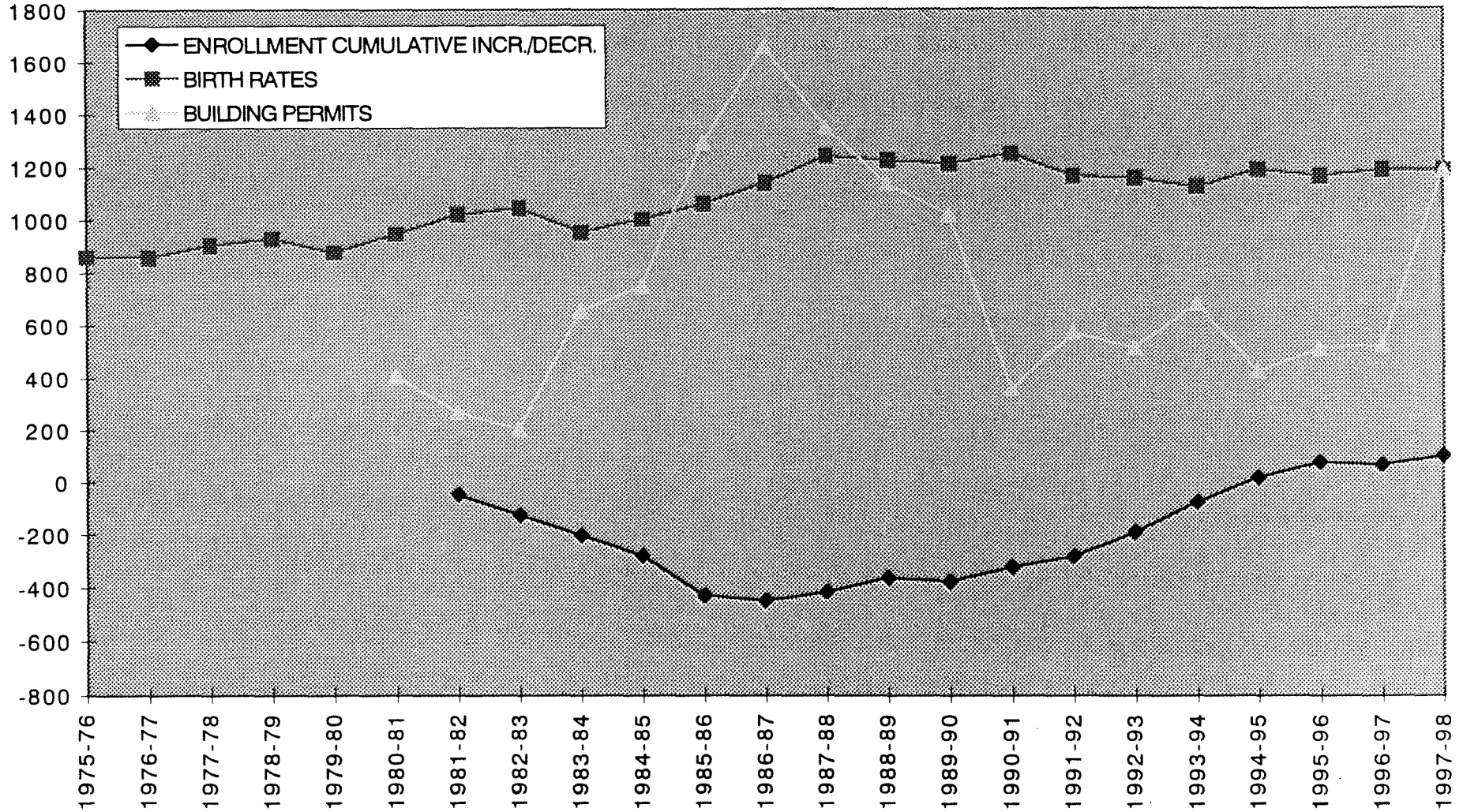
WEST CHESTER AREA SCHOOL DISTRICT

RELATIONSHIP OF LIVE BIRTHS, BUILDING PERMITS AND ELEMENTARY SCHOOL ENROLLMENT CHANGES



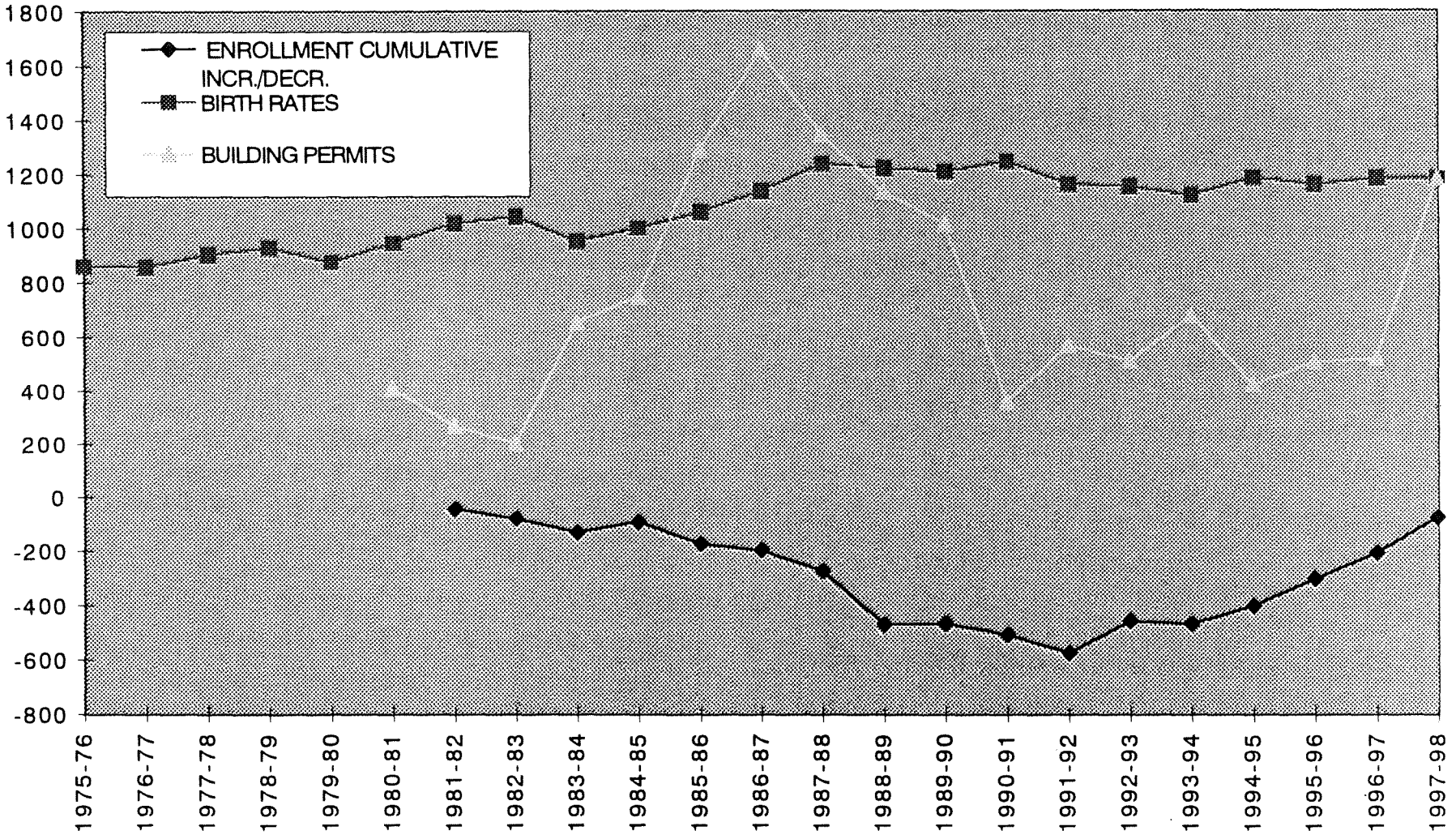
WEST CHESTER AREA SCHOOL DISTRICT

RELATIONSHIP OF LIVE BIRTHS, BUILDING PERMITS AND MIDDLE SCHOOL STUDENT ENROLLMENT CHANGES



WEST CHESTER AREA SCHOOL DSITRICCT

RELATIONSHIP OF LIVE BIRTHS, BUILDING PERMITS AND HIGH SCHOOL ENROLLMENT CHANGES



West Chester Area School District
and Gilbert Architects
District Enrollment Data (Grades K -12)

School Terms	District Enrollments (October)	Difference from Prior Year	Percentage of Change	Avg. Yearly Progression Ratio (school term)	Birth Rates* (calendar yr.)	Residential Building Permits (calendar year)
History						
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	198	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	

*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 conclusi

West Chester Area School District
and Gilbert Architects
Elementary Enrollment Data (Kdg. - Grade 5)

School Terms	District Enrollments (October)	Difference from Prior Year	Percentage of Change	Avg. Yearly Progression Ratio (school term)	Birth Rates* (calendar yr.)	Residential Building Permits (calendar year)
History						
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	512 (1992)
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	

*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)

School Terms	District Enrollments (October)	Difference from Prior Year	Percentage of Change	Avg. Yearly Progression Ratio (school term)	Birth Rates* (calendar yr.)	Residential Building Permits (calendar year)
History						
1975-76					860	
1976-77					858	
1977-78					905	
1978-79					931	
1979-80					877	
1980-81	2,431				947	409 (1980)
1981-82	2,382	-49	-2.02	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	-6	-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	

*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 Terms	District Enrollments (October)	Difference from Prior Year	Percentage of Change	Avg. Yearly Progression Ratio (school term)	Birth Rates* (calendar yr.)	Residential Building Permits (calendar year)
History						
1975-76					860	
1976-77					858	
1977-78					905	
1978-79					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	-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)
1991-92	2,760	-68	-2.40	0.9760	1,163	569 (1991)
1992-93	2,877	117	4.24	1.0424	1,152	512 (1992)
1993-94	2,867	-10	-0.35	0.9965	1,120	678 (1993)
1994-95	2,932	65	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	

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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)
**Population Data - U.S. Census Data

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 x 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

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
Thornbury Twp. (Chester Co.)	1,131	1,136	1,154	1,195	1,265	1,334	1,377
Thornbury 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; 1991-1996 Estimated Populations, The Population of Pennsylvania Municipalities 1960 to 1996, the Pennsylvania State Data Center)

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 x 9) = 106,887

Building Activity

WEST CHESTER AREA SCHOOL DISTRICT

ENROLLMENT IMPACT OF PLANNED HOUSING UNITS

SUMMARY

RESIDENTIAL BUILDING IN ALL TOWNSHIPS:	FACTOR*			POTENTIAL STUDENT GROWTH
1410 SINGLE FAMILY HOMES	X	.29	=	409 STUDENTS
1054 TOWN HOMES	X	.15	=	158 STUDENTS
470 APARTMENTS	X	.11	=	52 STUDENTS
				619 STUDENTS

*** FACTOR**

- CHESTER COUNTY PLANNING COMMISSION ASSUMES .29 STUDENTS PER SINGLE FAMILY HOME
- WCASD DEMOGRAPHICS COMMITTEE ASSUMES .15 STUDENT PER TOWN HOME AND .11 STUDENT PER APARTMENT

This growth will be phased over time in all grade levels with a higher percentage impacting the elementary schools. If phasing is similar to historical growth, enrollment growth resulting from residential building will occur over five to seven years.

By using the cohort survival method, Gilbert Architect's enrollment projections include student growth related to residential building activity. Since current and future activity is projected to reflect an average of the prior 10 years, the enrollment projections capture the student growth resulting from building activity. Therefore, no adjustment is needed for any increase or decrease in building activity as compared to the prior ten years.

WEST CHESTER AREA SCHOOL DISTRICT
HOUSING UNITS DURING FIVE-YEAR BUILD-OUT

Developments	Type of Homes (Approx. Value Planned)	Total No.	No. to be Built	Tent. Completion
EAST GOSHEN*				
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 (now Gamboni)	S.F. ($500,000)	34	34 **	2003

**Plans submitted

*EAST GOSHEN - REPORTED AN APPROX. 80% BUILD-OUT.

WEST GOSHEN*

1. Netherfield	S.F.(Low $300,000)	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
5. Jerrichan	No submission	25**		

**WCASD Committee Report

*WEST GOSHEN- REPORTED AN APPROX. 90% BUILD-OUT.

WEST WHITELAND*

1. Evian	T.H.($160-170,000)	40	30	1999
2. Coach Hill Court (Exton Station - Final Court)	T.H.($110-120,000)	20	20	1998
3. Ryerss Hunt	S.F.($250-290,000)	55	25	1999
4. Exton Crossing	APTS.	400	300**	1999
		**To be occupied 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

*WEST WHITELAND - REPORTED AN APPROX. 85% BUILD-OUT.

EAST BRADFORD*

1. 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 Parke Farm	S.F. ($500,000+)	34	22	Dec. 1999
5. Sussex	S.F. ($1 million+)	18	17	
6. Steeple Chase at Bradley Run	S.F. (High $300 to mid $400,000)	29	27	
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 low $400,000)	30	30	2001
11. West Glen	S.F.(Mid $300,000)	6	6	
12. Birmingham/ Allegiance (Lynchberger prop.)	S.F. (High $300 to mid $400,000)	5	5	
13. Tigue Road	S.F. ($300,000+)	2	1	1998
14. Lenape Ridge	S.F. ($300,000+)	4	2	1999
15. Across from River Bend	S.F. ($300,000+)	1 in Twp.	1	1999
16. Roz Abrams Prop.	?	20	20	Hearing
17 Singer Prop.	?	150 acres		
18. Tigue Prop.	?	180 acres		

*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
5. Bonner Tract	Sketch Plans only	16	16	

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

THORNBURY TOWNSHIP (CHESTER CO.)*

1. Brandywine at Thornbury	T.H. (Avg. $170,000)	194	170	1999
	S.F. ($250-350,000)	102	87	1999
a. Springhouse at Brandywine	Apts. (Single Bdrm. $950) (Triple Bdrm. $1350)	212	170	1999
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 Oaks	T.H. ($250-Low 300,000)	70	58	2000

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

WESTTOWN TOWNSHIP*

1. East Pleasant Grove	S.F. ($250,000 +)	16	16	(Construction 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).

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

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)