



Enrollment Study for the West Chester Area School District

Presented by
Gilbert Architects
August 17, 1998



Population Projections in Pennsylvania

REGION	CENSUS 1990	2000	2005	2010	2015	2020
Pennsylvania	11,882,643	12,241,488	12,328,348	12,407,523	12,490,248	12,569,017
Allegheny	1,336,449	1,265,184	1,224,318	1,187,725	1,157,001	1,130,284
Berks	336,523	386,202	379,806	391,231	402,989	414,621
Chester	376,396	436,761	458,372	477,297	494,727	510,219
Dauphin	237,813	254,948	259,933	264,378	268,909	273,483
Lancaster	422,822	486,046	513,151	540,823	569,382	597,975
Lebanon	113,744	122,361	124,667	126,489	128,109	129,742
Philadelphia	1,585,577	1,511,074	1,491,116	1,473,330	1,460,800	1,451,337
York County	339,574	382,047	394,330	403,133	410,204	415,934

Source: Penn State Data Center



Chester County Population



	<u>Landscapes</u>	<u>Penn State Data Center</u>
1990	376,396	376,396
2000	425,800	436,761
2010	460,200	477,297
2020	489,300	510,219



W.C.A.S.D. Student Enrollment Projections



Data Elements in Projection Calculation:

Known Data Elements

- History and trends of prior to present 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



W.C.A.S.D. Student Enrollment Projections



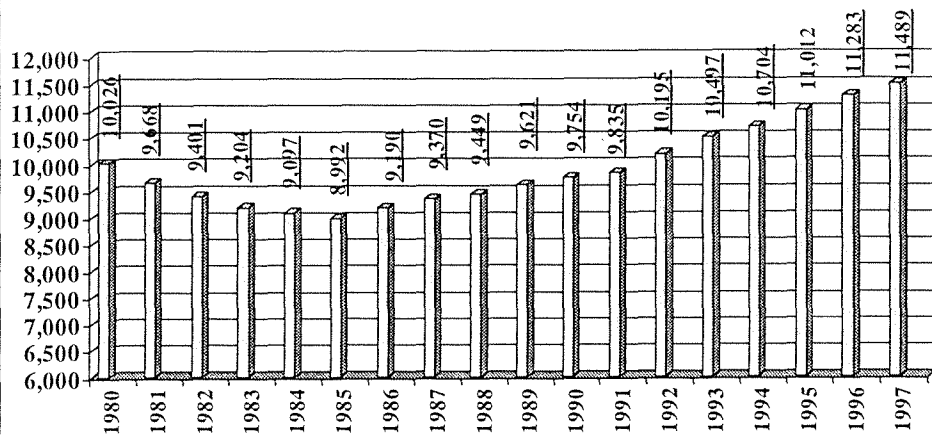
Data Elements in Projection Calculation:

Unknown Data Elements

- History and future of demographic changes to District's 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 the future economic factors affecting building activity, birth rates, and enrollment projections

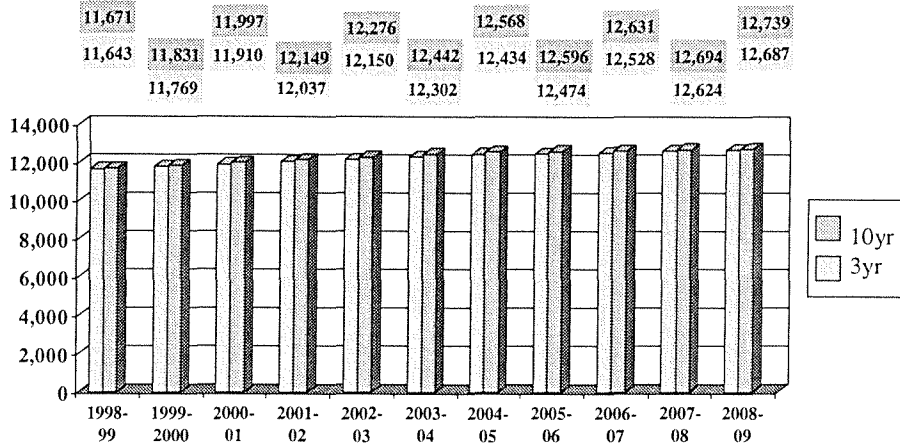


West Chester Area School District Enrollments 1980 - 1997

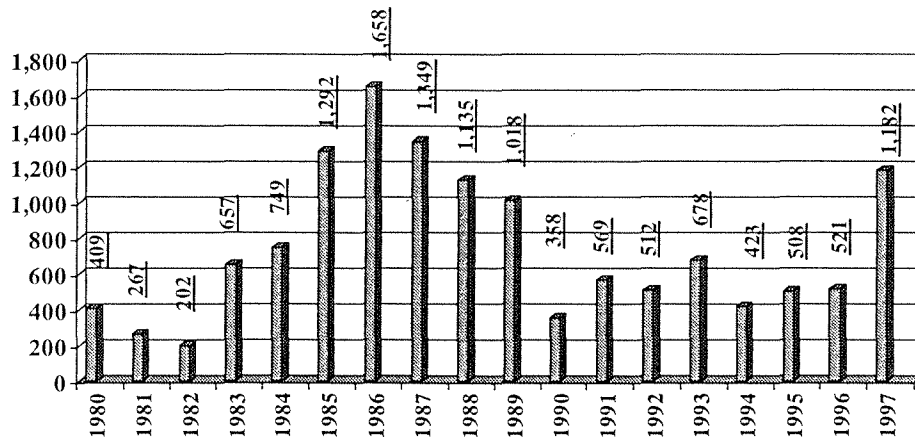




District Enrollment Projections



West Chester Area School District Residential Building Permits 1980 - 1997





**W.C.A.S.D.
Planned Housing Units**



<u>Anticipated Units</u>		<u>Approx. Build-out</u>
● East Goshen	190 S.F.	80%
● West Goshen	173 S.F.	90%
● West Whiteland	380 S.F.	85%
	553 T.H.	
	300 Apts.	
● East Bradford	262 S.F.	90%
	37 T.H.	



**W.C.A.S.D.
Planned Housing Units, cont.**



<u>Anticipated Units</u>		<u>Approx. Build-out</u>
● Thornbury (DE)	255 S.F.	75%
	236 T.H.	
● Thornbury (C)	110 S.F.	80%
	228 T.H.	
	170 Apts.	
● Westtown	40 S.F.	80%
● West Chester Borough		100%



W.C.A.S.D.

Planned Housing Units, cont.

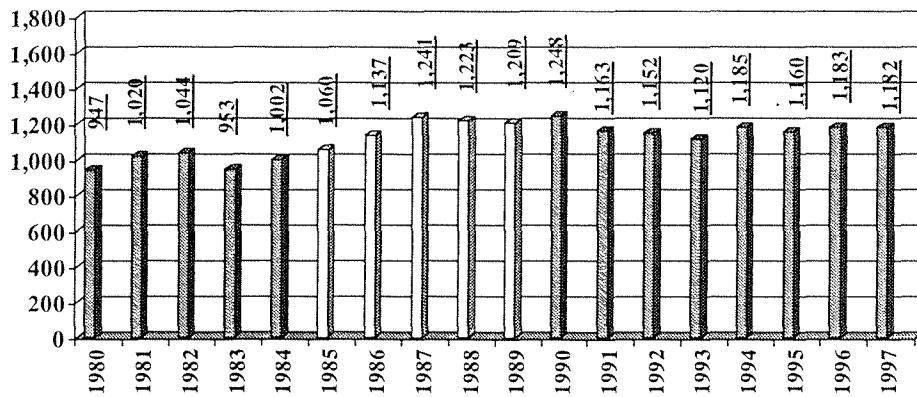


Summary:

1410 Single Family Homes	X .29 = 409
1054 Town Houses	X .15 = 158
470 Apartments	X .11 = 52
Potential Student Growth (phased in over time)	619 students



West Chester Area School District Births 1980 - 1997





W.C.A.S.D. Projecting Birth Rates



1. Births per 1,000 population

	Births*	Population**	Ratio	Births /1,000
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 - Penn State Data Center

2. Average (1993, 1994, 1995, 1996) Births per 1,000 population - 12.57



W.C.A.S.D. Projecting Birth Rates



3. Estimated Population for 2005:

1990 - 85,900

1996 - 94,296

- Growth between 1990 & 1996
 $94,296 - 85,900 = 8,396$
- Average growth per year = 1399.33
- Projected population in 2005
 $1996 \text{ population} + (\text{average growth per year} \times 9 \text{ years})$
 $94,296 + (1399 \times 9) = \underline{106,887}$



W.C.A.S.D. Projecting Birth Rates



4. Birth Rate for the year 2005:
- Average rate x (estimated total population for 2005)
 $12.57 \times (106,887 / 1,000)$
 $12.57 \times 106.89 = \underline{1343.6073}$
5. Birth Rates for 1998 - 2005:
Birth Rate for 2005 - Birth Rate for 1997
 $1,344 - 1,182 = 162$
Birth Rate increments (each year for 8 years) = 20.25



W.C.A.S.D. Projecting Birth Rates

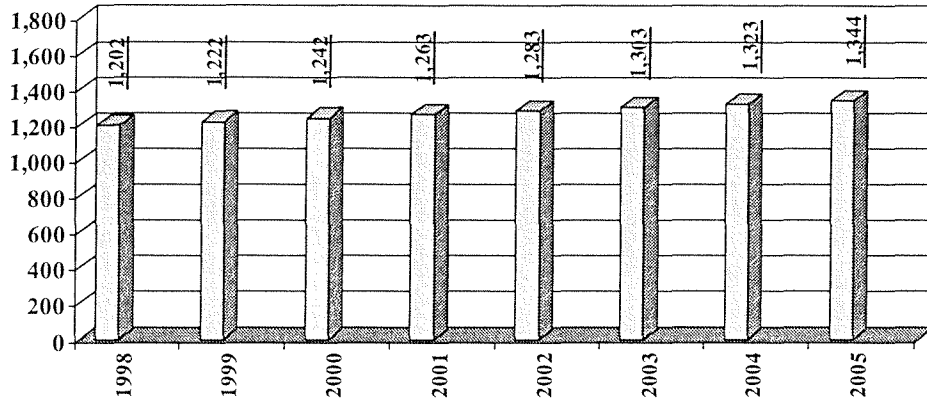


Birth Rates to 2005:

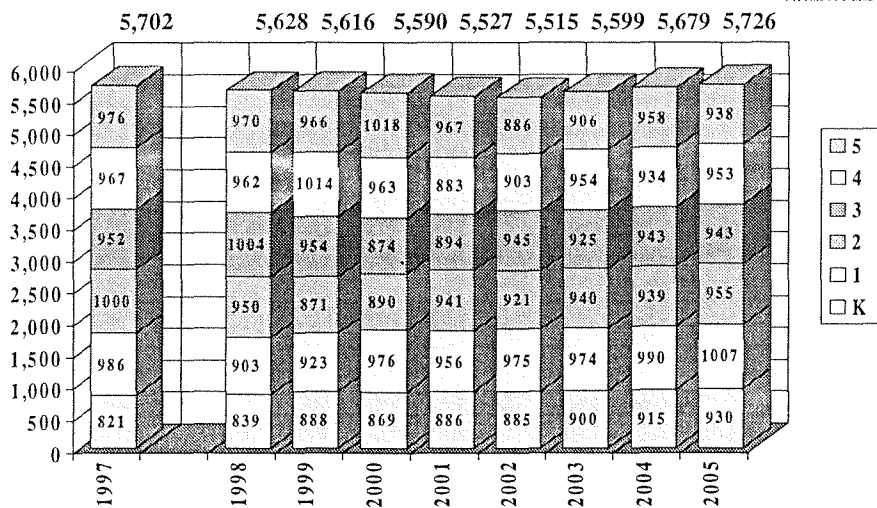
$$\begin{aligned} 1998 &= 1997 + 20.25 = 1202.25 \\ 1999 &= 1998 + 20.25 = 1222.50 \\ 2000 &= 1999 + 20.25 = 1242.75 \\ 2001 &= 2000 + 20.25 = 1263 \\ 2002 &= 2001 + 20.25 = 1283.25 \\ 2003 &= 2002 + 20.25 = 1303.50 \\ 2004 &= 2003 + 20.25 = 1323.75 \\ 2005 &= 2004 + 20.25 = 1344 \end{aligned}$$



West Chester Area School District Projected Births 1998 - 2006

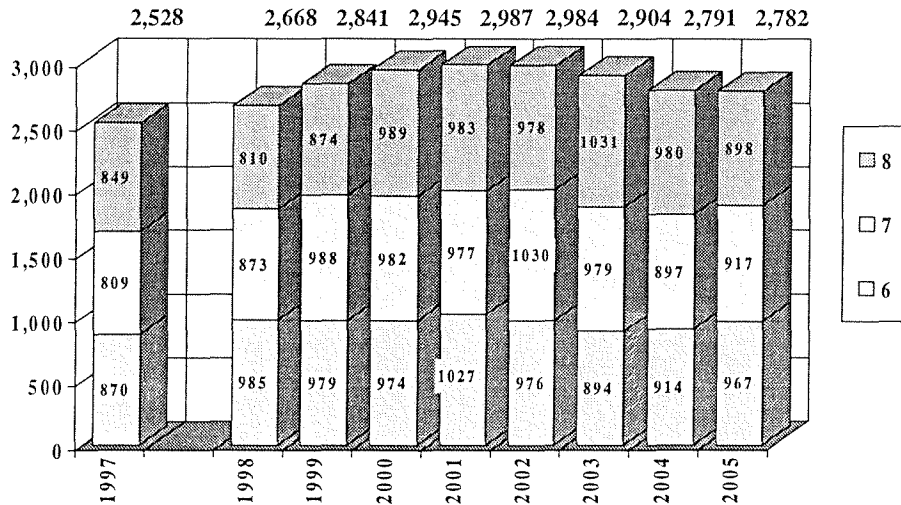


Elementary Enrollment Projections Grades K-5

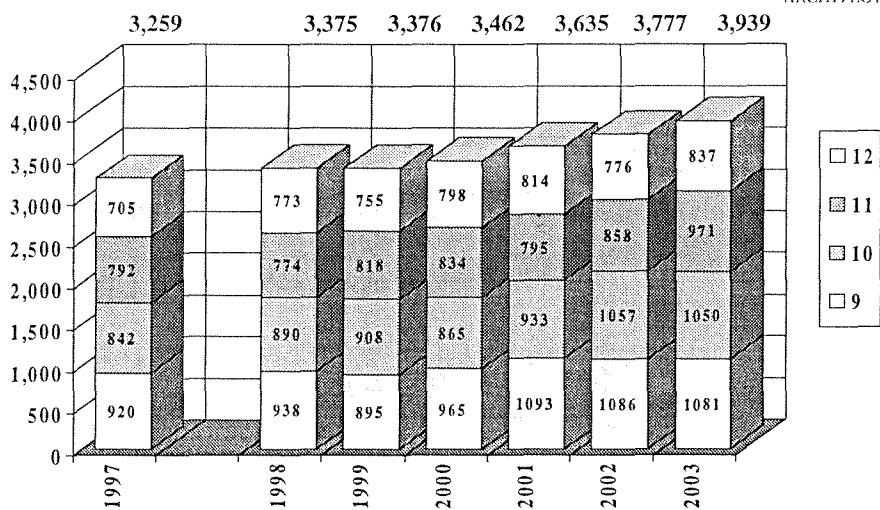




Middle School Enrollment Projections Grades 6-8

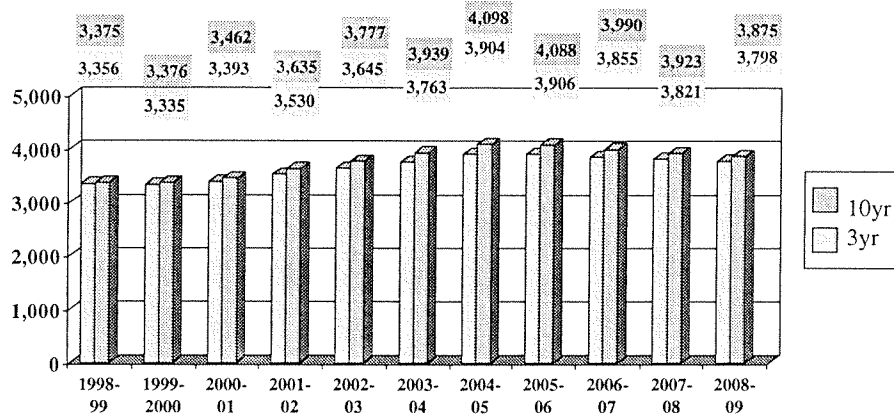


High School Enrollment Projections Grades 9-12





High School Enrollment Projections



Summary



1. Births are increased 1998-2005 as a response to an increasing district population.

1990-1996:

- a. Estimates indicate that the total population increased from 85,900 to 94,296 or a 9.77% increase.
- b. 15.68% increase occurred in district enrollments
 - 17.41% growth at elementary level
 - 18.52% growth at middle school level
 - 10.61% growth at high school level
- c. This period followed 5 years when the highest number of residential building permits were issued and preceded 1997 when the number of permits was again high.



Summary, cont.



2. Ratios representing year-to-year changes in district enrollments (1981 - 1997) indicate that the 1985-1989 strong increase in residential building permits resulted in:
 - a. continued growth at the elementary level through 1997.
 - b. stronger continued growth at the middle school level from 1990 through 1995. (Growth also occurs as larger classes of elementary students progress into the middle schools)
 - c. stronger continued growth at the high school level from 1994 through 1997. (Growth will continue as larger classes of middle school students progress into the high schools.)



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THANK YOU!