

School Enrollment Projections:

Wayland Public Schools

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1. Background

This study was requested in order to help the Town of Wayland assess its public schools needs for the coming years. The Town of Wayland includes three public elementary schools, one middle school and one high school. These schools may need renovation, physical changes or consideration of a new facility.

In order to understand what the present and future needs are, school enrollment projections are helpful. It is hoped that this report will serve as a useful tool in planning for the Town's educational needs.

Many variables are considered in projecting future enrollment: Some of them are total population in town, how many children will be born, how many children already live in Wayland and how many will move in over the next ten years. Although as a whole the U.S. population is "aging"; i.e. there are fewer school-aged children per adult, each particular place can have its own population profile. A town that has good employment, housing, transportation and school opportunities may attract more families with school-aged children. This seems to be the case in Wayland.

In general, population projections are more accurate when the sampling size is larger. Thus the overall projections for total enrollment will be more accurate than for individual grades. Birth rates have been averaged, so any particular grade size may be different than what is projected here. Prediction of future school population is not, and cannot be an exact science. Therefore, although specific numbers are given, actual enrollment levels may of course vary.

In the course of preparing this material, historic school enrollment data was obtained from the Wayland Public Schools Superintendent's office. Information regarding housing and economic development was researched with the help of the Wayland Planning & Building departments. The Town Clerk provided information about yearly births. Existing publications were reviewed. Demographic data and statistics were obtained from the US Census, Massachusetts state community development data and the Massachusetts Institute for Social and Economic Research (MISER). The US Census recently released detailed demographic data from the 2000 census and this information is included here.

2. Summary of Findings & General Trends:

According to the latest US Census, there were 13,100 residents in Wayland in the year 2000. This represents a relatively large increase of 10.33% over the town population in 1990. In comparison, the entire state of Massachusetts grew by only 5.53% over the last decade and Middlesex County grew by about 4.8% during this time.

During the 1980's, both the general population and school enrollments dropped from their historic highs of a decade before. However starting in 1990, this trend has reversed. Over the past decade, the school enrollment has grown by about 40%.

That means that the number of school aged children grew much more than the general population, although in absolute terms the number of children in the school system today is still smaller than that of 25 years ago. The overall composition of the population is different than 25 years ago: Today families are smaller with older parents and fewer students. In the 1970's, over 25% of the total population was school aged students. Today, after ten years of steady growth in the number of school aged children in Wayland, they make up about 21% of the total population.

Most of this growth, both in total population and in school-aged students, is due to a net immigration of families who will either have children in Wayland or already have children under the age of five: The number of children starting kindergarten is significantly higher than the number of children born to Wayland residents five years earlier.

However, once children start elementary school, the grade size stays more stable. It seems that parents tend to move around less after their children have started school.

Will this growth continue?

Until two years ago, the younger incoming grades were larger than the older graduating classes. These children will likely cycle through the school system over the next ten years, increasing the student body at the middle and high school over the next few years whether or not there is continued growth in Wayland.

Comparison of state, county and town populations in the 2000 US Census shows that there is a higher percentage of children in Wayland than in the state or county. This proportion had grown over the past decade, but now has stayed stable for the past 3-4 years.

The number of births can vary greatly from year to year in a small town. This past year the number of births was low, but this may not be indicative of any trend and this number may also be adjusted upward as the year progresses. The past two years' incoming kindergarten class was also unusually small but that may be partially because of a one-time change in the cut-off date (from December to September) for incoming kindergarten students.

Building activity has been steady but not large in Wayland over the past decade; about 37 homes per year. There are new developments being planned, but these are not likely to cause an increase in the yearly number of building permits, just a continuation of existing activity.

The number of residential and other real estate sales increased sharply during 1996 – 2000, but has since decreased. If part of the school enrollment growth is a result of existing home sales, this may be significant. However Wayland has a relatively large percentage of older residents (see Table 5.2). If many of these residents decide to leave Wayland, that may give families of school aged children an opportunity to move into town even if the economy slows.

The Executive Office of Environmental Affairs has sponsored an analysis of the build-out capacity of each town in the state. Wayland's build out analysis, based on land reserves, current zoning and other restraints shows that there is the potential for another 913 students. It is not likely that this capacity will be reached within the next ten years. (See <http://141.154.98.52/index.asp>)

All of these complex factors seem to point to a possible reduction in the pace of growth over the next few years. Overall school enrollment is still likely to rise over the next few years, especially in the middle and high school. Existing home resales are a potential for further growth in school enrollments even if new building slows.

There are already enough younger students within the system to ensure growth in school enrollment over the few years. Today there is significant net in-migration into Wayland. Over a third of the children who start kindergarten were not born in town. Continuation of this influx is dependent on many factors. While this will certainly continue, there is a question whether the volume will go down or not. General economic outlooks do not forecast a rise in growth.

Although the overall population might increase, there is a general aging of the US population: As the "baby boomers" age, smaller numbers of people will have young children. So far, however, this has not been in evidence in Wayland: Families with school aged children are moving into town. This can be seen in Table 5.2 : there is a higher percentage of school aged children in Wayland than in the surrounding county or state. Their parents, however, are older than might be expected.

Therefore two enrollment projections are presented here. The first, higher one is more likely if the present ten year trend continues: although the population in general is aging, families with young children (not necessarily young parents) will continue to move to Wayland. New housing will continue to be built at the same pace.

However if the short term trends of the last two years continue or if the economy gets weaker, then new building will continue but at a slower pace. People will still move to Wayland, but in smaller numbers and they may be less likely to have young children. School enrollment will still grow, but mostly at the middle and high school. It will peak and then decline slightly. This is reflected in the second enrollment projection presented here.

3. Medium School Enrollment Projection, with Historical Enrollments, 1985 - 2011:
Table 3.1

	K	G.1	G.2	G.3	G.4	G.5	G.6	G.7	G.8	G.9	G.10	G.11	G.12	Total
1985	180	132	137	140	154	134	157	170	157	177	192	221	231	2,182
1986	129	194	142	133	142	156	145	159	172	157	178	198	216	2,121
1987	163	133	185	141	133	151	159	143	159	164	152	185	204	2,072
1988	176	171	143	187	143	138	156	168	146	166	159	152	181	2,086
1989	168	168	169	137	191	141	159	163	167	142	164	152	146	2,067
1990	181	185	172	169	140	188	152	155	163	155	130	155	149	2,094
1991	185	190	184	171	172	149	198	149	158	156	155	131	154	2,152
1992	173	196	188	186	167	171	155	196	152	155	151	151	140	2,181
1993	202	182	202	192	193	169	178	158	197	147	147	143	150	2,260
1994	205	214	189	211	192	196	173	180	156	184	139	144	142	2,325
1995	219	223	218	189	213	196	198	184	184	160	175	134	150	2,443
1996	242	228	228	229	200	217	207	202	185	182	153	175	132	2,580
1997	228	250	225	229	229	203	220	209	204	176	179	154	173	2,679
1998	219	227	245	232	230	225	209	223	203	199	176	175	160	2,723
1999	209	234	233	237	235	239	227	205	220	204	198	173	181	2,795
2000	232	219	241	241	243	251	246	228	208	216	204	196	162	2,887
2001	186	242	219	250	242	242	255	244	231	207	216	198	190	2,922
2002	198	191	244	232	249	239	247	257	251	230	202	216	193	2,949
2003	227	207	194	250	235	253	245	250	258	246	229	199	215	3,008
2004	203	237	210	199	254	239	259	248	251	254	245	225	198	3,021
2005	234	212	240	215	201	258	245	262	249	247	252	241	224	3,081
2006	190	244	215	247	218	205	264	248	264	245	245	248	240	3,073
2007	237	199	248	221	250	222	210	267	249	259	243	241	247	3,093
2008	239	247	202	254	224	254	227	212	269	245	257	239	240	3,110
2009	242	250	251	207	258	227	260	230	213	264	243	253	238	3,138
2010	245	253	254	257	210	262	233	264	231	209	262	239	252	3,172
2011	248	256	257	260	261	213	268	236	265	227	208	258	238	3,195

Source for historical school enrollment data: Wayland Public Schools. 2002 data is preliminary actual enrollment.

Boldface: Projection

General population and births projections for the next five years were made for purposes of school enrollment projections only.

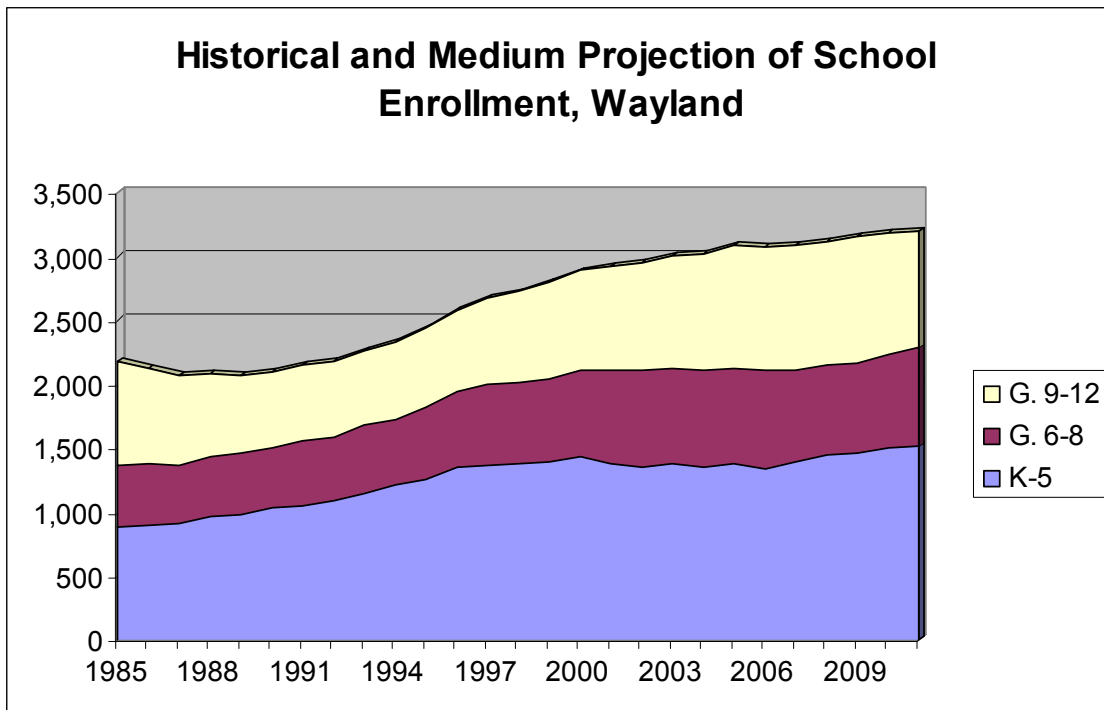
METCO students **are** included.

See Appendix for calculations.

Table 3.2: Historical and Enrollment Projections, by Elementary, Middle and High School

	K-5	G. 6-8	G. 9-12
1985	877	484	821
1986	896	476	749
1987	906	461	705
1988	958	470	658
1989	974	489	604
1990	1,035	470	589
1991	1,051	505	596
1992	1,081	503	597
1993	1,140	533	587
1994	1,207	509	609
1995	1,258	566	619
1996	1,344	594	642
1997	1,364	633	682
1998	1,378	635	710
1999	1,387	652	756
2000	1,427	682	778
2001	1,381	730	811
2002	1,353	755	841
2003	1,366	753	889
2004	1,342	758	922
2005	1,361	756	964
2006	1,320	776	978
2007	1,376	726	990
2008	1,421	708	982
2009	1,435	704	998
2010	1,481	728	963
2011	1,495	769	932

Chart 3.1



3.2: Forecasts/Assumptions:

1. The ten year average for births will continue at a similar rate for the next five years.
2. The general population will grow at the same rate as the last five years, for the next five years.
3. New residents with kindergarten-aged children will move into Wayland at a rate similar to that of the last 10 years.
4. The last two years of smaller kindergarten enrollments are not indicative of a drastic, long term change, but only local fluctuations.
5. Building activity will remain at the same level as the past 5 -10 years.
6. The number of first graders is generally larger than the previous year's kindergarten students. This is likely due both to the addition of METCO students as well as parents putting their children in private, all-day kindergartens since the public kindergarten is open only half-days.
7. The migration rates of the other grades have been relatively stable over the past ten years, and there is little change between the 5 and 10 year average. This reflects that parents have evidently been less likely to move when their children are already in school. This stability is projected to continue.
8. Major fluctuations in the economy were not factored into this projection.

4. Low School Enrollment Projection, with Historical Enrollments, 1985 - 2011:

Table 4.1:

Year	K	G.1	G.2	G.3	G.4	G.5	G.6	G.7	G.8	G.9	G.10	G.11	G.12	Total
1985	180	132	137	140	154	134	157	170	157	177	192	221	231	2,182
1986	129	194	142	133	142	156	145	159	172	157	178	198	216	2,121
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1993	202	182	202	192	193	169	178	158	197	147	147	143	150	2,260
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2002	198	191	244	232	249	239	247	257	251	230	202	216	193	2,949
2003	199	206	193	250	234	253	244	247	258	249	229	199	214	2,975
2004	179	207	208	198	252	237	258	244	248	255	247	225	197	2,957
2005	206	186	210	214	200	256	242	258	245	246	254	243	223	2,983
2006	167	214	188	215	216	203	262	243	259	243	244	250	241	2,944
2007	202	174	216	193	217	219	207	262	243	257	241	240	248	2,920
2008	205	210	176	222	194	220	223	208	263	241	255	237	238	2,894
2009	207	213	213	181	224	197	225	224	208	260	240	251	235	2,878
2010	209	215	215	219	182	227	201	225	224	206	259	236	249	2,869
2011	212	218	218	221	220	185	232	202	226	222	205	255	234	2,849

Source for historical school enrollment data: Wayland Public Schools. 2002 data is preliminary actual enrollments.

Boldface: Projection

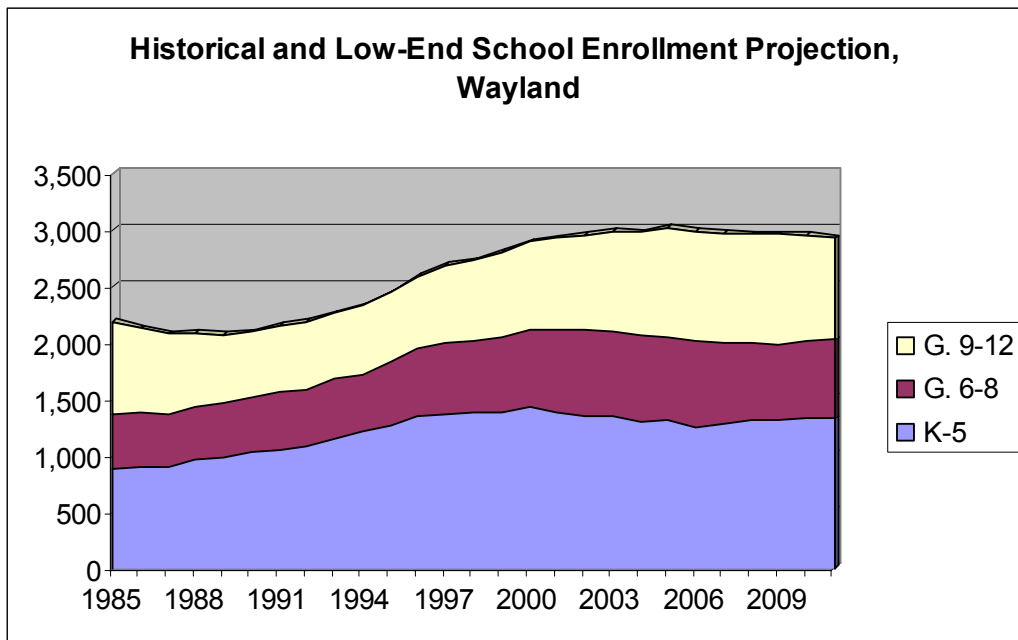
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1999	1,387	652	756
2000	1,427	682	778
2001	1,381	730	811
2002	1,353	755	841
2003	1,336	749	890
2004	1,283	750	925
2005	1,271	746	966
2006	1,203	763	978
2007	1,222	713	986
2008	1,228	694	972
2009	1,235	657	986
2010	1,268	651	950
2011	1,274	660	916

Chart 4.1



4.2: Forecasts/Assumptions:

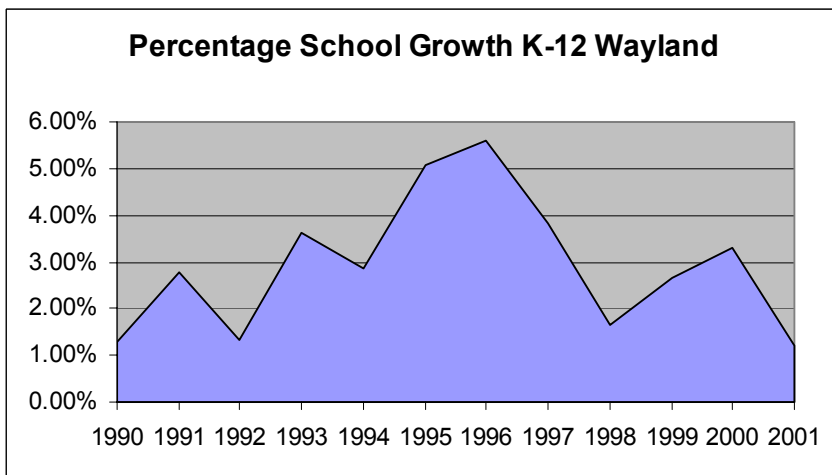
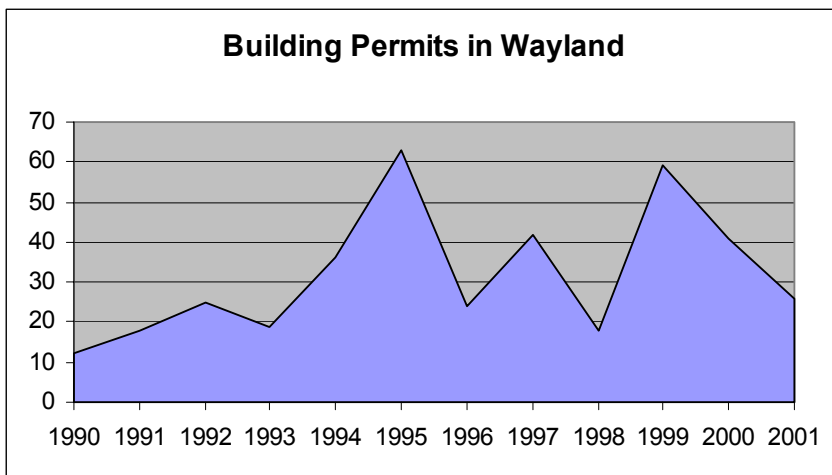
1. The birthrate will be similar to the last 2-3 years, which is lower than the 10-year average.
2. The general population will grow at the same rate as the last five years, for the next five years.
4. Slightly fewer new residents with children will move into Wayland. The existing older population will stay in their present homes and not move away.
5. The number of first graders is generally larger than the previous year's kindergarten students. This is likely due both to the addition of METCO students as well as parents putting their children in private, all-day kindergartens since the public kindergarten is open only half-days.
6. The migration rates of the other grades have been relatively stable over the past ten years, and there is little change between the 5 and 10 year average. This reflects that parents have evidently been less likely to move when their children are already in school. This stability is projected to continue.
7. Major fluctuations in the economy were not factored into this projection, although this projection may be more likely if the economy continues to slow.

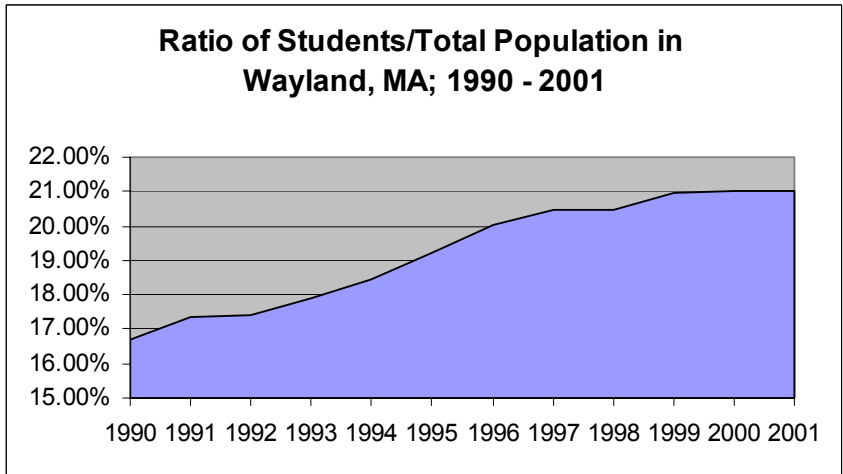
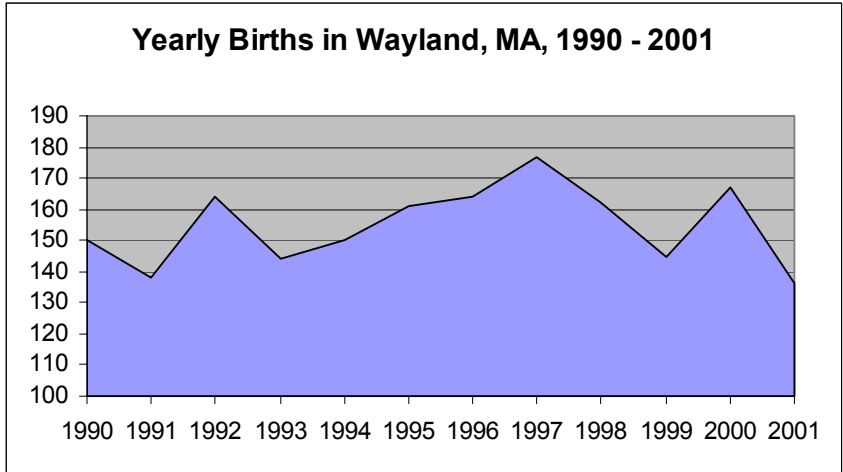
5. Background Data:

Table 5.1

Year	K-12	Building Permits	HH	Total Population	Births	School Growth	Students/Total Population
1990	2,094	12		12,545	150	1.31%	16.69%
1991	2,152	18		12,412	138	2.77%	17.34%
1992	2,181	25		12,518	164	1.35%	17.42%
1993	2,260	19	4,517	12,628	144	3.62%	17.90%
1994	2,325	36	4,532	12,594	150	2.88%	18.46%
1995	2,443	63	4,579	12,725	161	5.08%	19.20%
1996	2,580	24	4,631	12,887	164	5.61%	20.02%
1997	2,679	42	4,701	13,091	177	3.84%	20.46%
1998	2,723	18	4,745	13,304	162	1.64%	20.47%
1999	2,795	59	4,762	13,344	145	2.64%	20.95%
2000	2,887	41	4,781	13,750	167	3.29%	21.00%
2001	2,922	26	4,798	13,894	136	1.21%	21.03%
2002	2,949	22	4,808			0.92%	

Source: Town of Wayland and Wayland Public Schools. 2002 data is preliminary only.





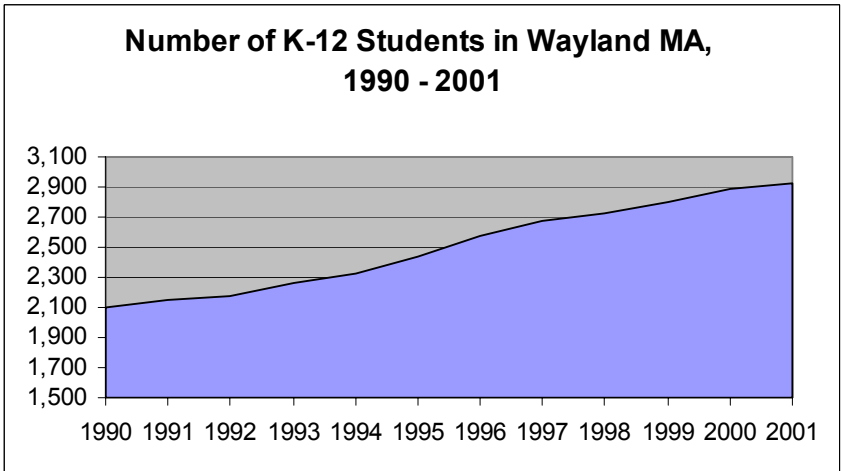
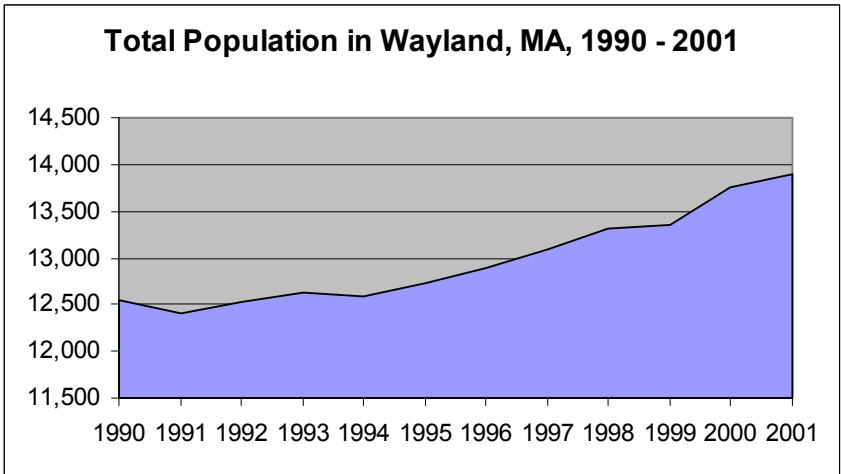
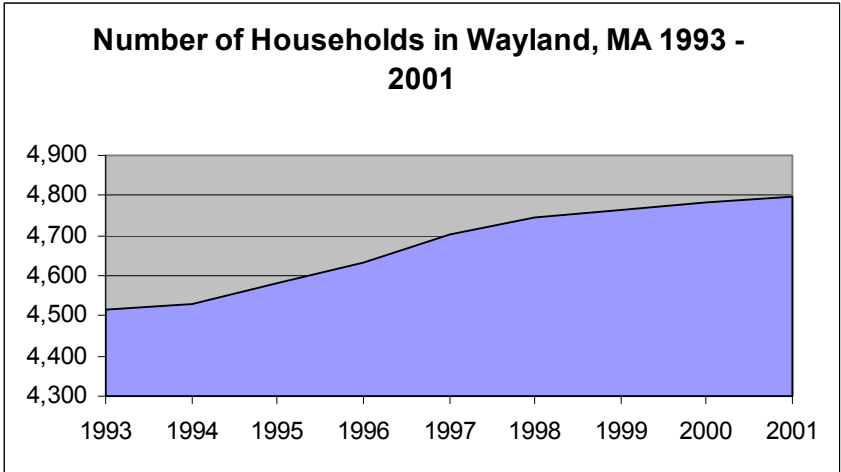


Table 5.2 2000 US Census Comparison: State, County and Town, Percentages

	Under 18	18 - 24	25 - 44	45 - 64	65 & over	Median Age
MA	23.6	9.1	31.3	22.4	13.5	36.5
Middlesex	22.5	9.0	33.4	22.4	12.8	36.4
Wayland	28.7	3.4	24.7	29	14.3	41.4

Type of Statistic: Number of Sales**Time Period Selected:** Calendar Year

Year	Months	1-Family	Condo	All Sales	
2002	Jan - May		55	12	77
2001	Jan - Dec	154	35	216	
2000	Jan - Dec	164	75	290	
1999	Jan - Dec	188	51	284	
1998	Jan - Dec	170	88	301	
1997	Jan - Dec	220	43	332	
1996	Jan - Dec	211	32	304	
1995	Jan - Dec	175	46	248	
1994	Jan - Dec	197	26	275	
1993	Jan - Dec	177	32	238	
1992	Jan - Dec	188	27	250	
1991	Jan - Dec	175	33	252	
1990	Jan - Dec	104	32	176	
1989	Jan - Dec	130	37	210	
1988	Jan - Dec	130	38	264	

Type of Statistic: Median Sales Price**Time Period Selected:** Calendar Year

Year	Months	1-Family	Condo	All Sales
2002	Jan - May	500,000	488,938	500,000
2001	Jan - Dec	461,563	490,000	484,500
2000	Jan - Dec	396,750	523,200	417,500
1999	Jan - Dec	366,550	449,900	388,500
1998	Jan - Dec	332,250	436,268	395,000
1997	Jan - Dec	306,000	385,000	319,500
1996	Jan - Dec	300,000	341,500	300,000
1995	Jan - Dec	290,000	354,000	301,625
1994	Jan - Dec	270,000	267,250	268,500
1993	Jan - Dec	253,000	253,500	241,500
1992	Jan - Dec	235,000	246,000	235,750
1991	Jan - Dec	236,000	235,000	230,000
1990	Jan - Dec	239,500	314,500	250,000
1989	Jan - Dec	249,000	331,000	279,500
1988	Jan - Dec	263,500	298,000	275,000