

Wayland Public Schools 2010-2011 Enrollment Report

Each year, on the first school day in October, we record the total number of students enrolled in our schools as part of the Massachusetts Department of Elementary and Secondary Education's annual census of children attending the Commonwealth's public schools. This year, total enrollment in the Wayland Public Schools on October 1, 2010, was 2,682 students, 39 fewer students than were enrolled on October 1, 2009. This is the seventh straight year of enrollment decline.

ENROLLMENTS BY GRADE

October 1, 2010

GRADE	CLAYPIT HILL	HAPPY HOLLOW	LOKER	MIDDLE SCHOOL	HIGH SCHOOL	TOTAL
* Pre-K					103	103
K	0	0	168			168
1	86	83	0			169
2	125	96	0			221
3	119	85	0			204
4	116	93	0			209
5	125	83	0			208
6				197		197
7				225		225
8				212		212
9					202	202
10					226	226
11					214	214
12					227	227
TOTAL K-12	571	440	168	634	869	2,682
Oct. 1, 2009 K-12	609	417	160	639	896	2,721
DIFFERENCE	-38	23	8	-5	-27	-39

* Pre-kindergarten numbers are for information only and are not included in totals.

Budget and staffing levels for the 2010-2011 school year were built on the assumption that 2,675 students would be enrolled this year in Grades K-12. Actual enrollment is 7 students, or 0.26%, above the in-house projection made last October and used to develop the FY11 School Department budget.

At the elementary level (K-5), enrollment is 1,179, 7 fewer students than last year, and 3 students above a projected 1,176. At the Middle School, enrollment is 634, 5 fewer students than last year, and 4 students above a projected 630. At the High School, enrollment is 1 student above a projected 868, for a total of 869 students. Based on these figures, Wayland's method of using three-year cohort survival averages to determine enrollment projections in Grades 1-12 for budget purposes continues to be a reliable model to use.

PROJECTED vs. ACTUAL ENROLLMENTS, K-12

October 1, 2010

GRADE	PROJECTED Oct. 1, 2010	ENROLLED Oct. 1, 2010	DIFFERENCE
K	160	168	8
1	177	169	-8
2	211	221	10
3	209	204	-5
4	211	209	-2
5	208	208	0
6	201	197	-4
7	222	225	3
8	207	212	5
9	198	202	4
10	227	226	-1
11	218	214	-4
12	225	227	2
TOTAL K-12	2,675	2,682	7
K-5	1,176	1,179	3
6-8	630	634	4
9-12	868	869	1

COMPARISON of ENROLLMENT to PROJECTIONS

GRADE	ACTUAL Oct. 1, 2010	INTERNAL Projections	NESDEC Projections
K	168	160	134
1	169	177	170
2	221	211	195
3	204	209	191
4	209	211	202
5	208	208	195
6	197	201	186
7	225	222	210
8	212	207	196
9	202	198	183
10	226	227	209
11	214	218	200
12	227	225	213
TOTAL K-12	2,682	2,675	2,484
DIFFERENCE		-7	-198
% DIFFERENCE		-0.27%	-7.38%
K-5	1,179	1,176	1,087
6-8	634	630	592
9-12	869	868	805

Numerical differences due to rounding in formulas used for projections.

Elementary enrollment (Grades 1-5) declined for the tenth consecutive year, with all elementary grade totals ranging between 169 and 221 students. This year's Kindergarten enrollment of 168 continues a four-year trend of enrollment well below the 20-year average kindergarten class of 197.

Enrollment at the Middle School fell by 5 students, to 634, down from a high of 748 in 2002-2003. Last year's Grade 8 cohort of 206 students was replaced by an incoming Grade 6 class of 197, which accounts for most of the enrollment loss. This is the eighth straight year of enrollment decline across Grades 6, 7 and 8.

Wayland High School's enrollment, which had been fairly consistent since 2003-2004, declined by 27 students. The largest grade cohort in the district is this year's senior class of 227 students.

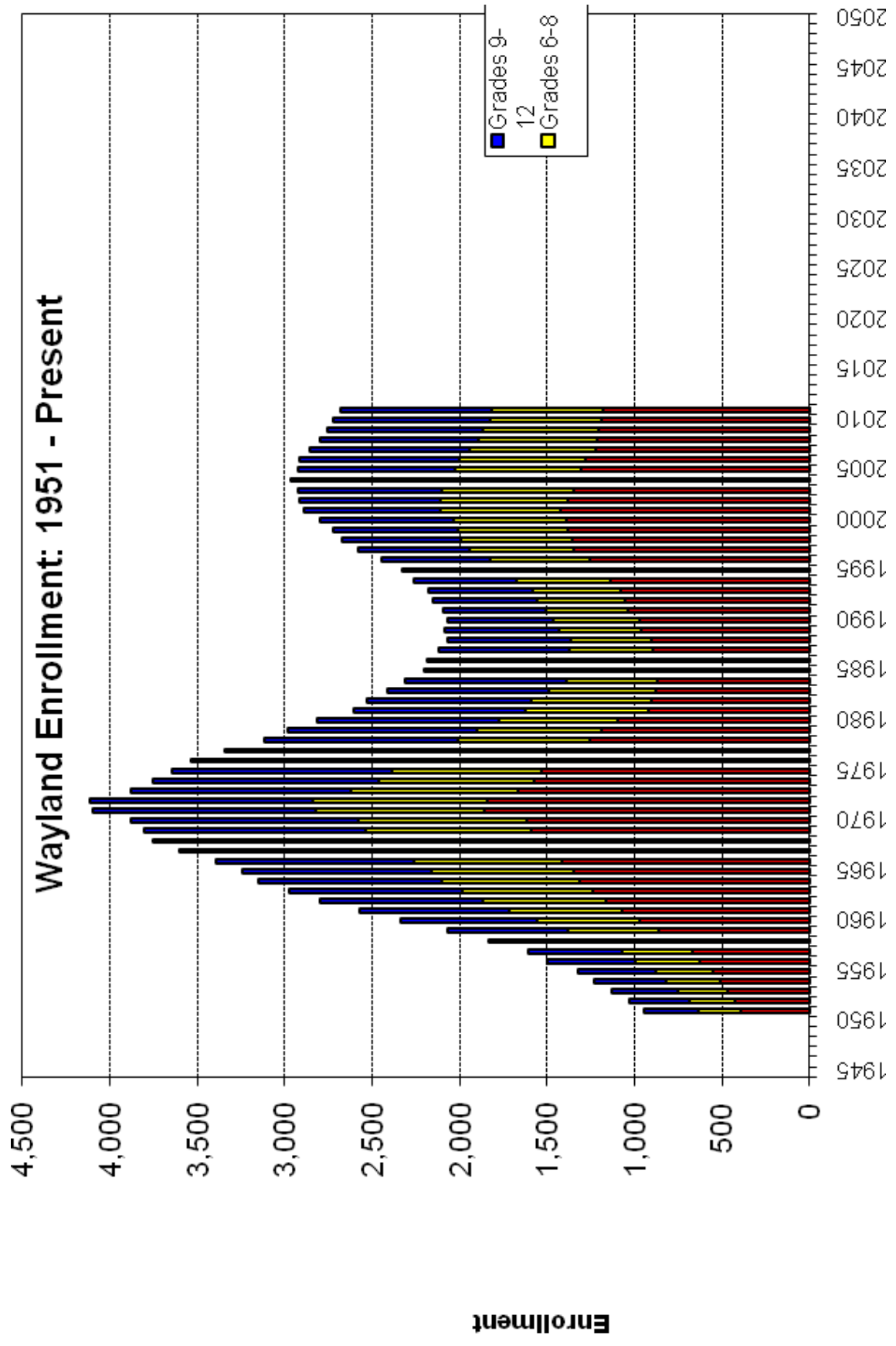
Of the 2,682 students enrolled in the Wayland Public Schools on October 1, 133 were Boston students participating in our METCO program. The number of Boston students enrolled in Wayland has remained fairly consistent over the past nine years.

ENROLLMENTS BY GRADE - METCO Students

October 1, 2010

GRADE	CLAYPIT HILL	HAPPY HOLLOW	LOKER	MIDDLE SCHOOL	HIGH SCHOOL	TOTAL
* Pre-K						0
K			3			3
1	4	3				7
2	10	4				14
3	6	10				16
4	2	5				7
5	6	4				10
6				10		10
7				10		10
8				8		8
9					11	11
10					13	13
11					15	15
12					9	9
METCO K-12	28	26	3	28	48	133

This is the seventh successive year of K-12 enrollment decline in the Wayland Public Schools since 2003-2004; however, the rate of decline at the elementary level appears to be slowing. The greater decline is now being seen at the Middle School and High School, following a similar pattern of enrollment decline that was experienced at the elementary schools from 2001 to 2006. The following graphic is indicative of Wayland Public Schools' enrollment falling on the downward side of the "baby boomlet" enrollment cycle that began around 1990 and peaked with a total enrollment of 2,965 students in the 2003-2004 school year.



ENROLLMENT HISTORY

YEAR	K-5	6-8	9-12	TOTAL	CHANGE	% CHANGE
1970-1971	1,856	969	1,269	4,049		
1971-1972	1,845	993	1,276	4,014	-35	-0.86%
1972-1973	1,662	956	1,261	3,879	-135	-3.36%
1973-1974	1,573	890	1,289	3,752	-127	-3.27%
1974-1975	1,533	856	1,259	3,648	-104	-2.77%
1975-1976	1,473	835	1,229	3,537	-111	-3.04%
1976-1977	1,374	803	1,170	3,347	-190	-5.37%
1977-1978	1,256	752	1,108	3,116	-231	-6.90%
1978-1979	1,186	718	1,079	2,983	-133	-4.27%
1979-1980	1,095	678	1,043	2,816	-167	-5.60%
1980-1981	920	706	977	2,603	-213	-7.56%
1981-1982	904	690	935	2,529	-74	-2.84%
1982-1983	877	610	926	2,413	-116	-4.59%
1983-1984	871	515	925	2,311	-102	-4.23%
1984-1985	841	477	885	2,203	-108	-4.67%
1985-1986	884	484	821	2,189	-14	-0.64%
1986-1987	896	476	749	2,121	-68	-3.11%
1987-1988	906	461	705	2,072	-49	-2.31%
1988-1989	958	470	658	2,086	14	0.68%
1989-1990	974	489	604	2,067	-19	-0.91%
1990-1991	1,035	470	589	2,094	27	1.31%
1991-1992	1,051	505	596	2,152	58	2.77%
1992-1993	1,081	503	597	2,181	29	1.35%
1993-1994	1,140	533	587	2,260	79	3.62%
1994-1995	1,207	509	609	2,325	65	2.88%
1995-1996	1,258	566	619	2,443	118	5.08%
1996-1997	1,345	594	642	2,581	138	5.65%
1997-1998	1,360	633	683	2,676	95	3.68%
1998-1999	1,378	635	710	2,723	47	1.76%
1999-2000	1,387	652	756	2,795	72	2.64%
2000-2001	1,427	682	779	2,888	93	3.33%
2001-2002	1,378	730	811	2,919	31	1.06%
2002-2003	1,350	748	829	2,927	8	0.29%
2003-2004	1,347	737	881	2,965	38	1.29%
2004-2005	1,304	723	897	2,924	-41	-1.38%
2005-2006	1,283	721	912	2,916	-8	-0.27%
2006-2007	1,221	720	919	2,860	-56	-1.92%
2007-2008	1,213	680	903	2,796	-64	-2.24%
2008-2009	1,203	665	891	2,759	-37	-1.32%
2009-2010	1,186	639	896	2,721	-38	-1.38%
2010-2011	1,179	634	869	2,682	-39	-1.43%
2011-2012*	1,183	630	839	2,652	-30	-1.10%

*Projections using 3-Year Cohort Survival

2011-2012 Enrollment Projections

A three-year cohort survival ratio is used to develop internal projections for the Wayland Public Schools. This method has been employed for many years by the administration to make enrollment projections and takes into account housing growth, migration, retention, withdrawals, transfers and births over the three previous school years. It produces highly reliable projections for enrollments in Grades 1-12; however, it is less accurate in predicting kindergarten enrollments which may be affected by parental decisions to postpone kindergarten enrollment, attendance at private full-day kindergarten programs in the area, adoption rates, and housing turnover.

There are several sources of data that can be used to predict kindergarten enrollment: census data from the Town Clerk, birth data from five years before kindergarten enrollment, and self-reported data from parents and local preschools. These three sources of preschool population data are used to define a reasonable range in the number of kindergarteners we might expect in September 2011. January 2010 census data collected by Wayland's Town Clerk shows a total of 163 children residing in Wayland whose birth dates fell between September 1, 2005 and August 31, 2006.

Traditionally, Wayland has used a three-year average of birth-to-kindergarten ratios; that is, using a three-year average of the ratios of the number of kindergarteners to the number of children born to Wayland residents five years earlier as reported to the Commonwealth's Department of Public Health Registry of Vital Records and Statistics. In 2006, there were 129 births reported for Wayland residents. The birth-to-kindergarten ratio calculation yields a projection of 183 kindergarteners for the 2010-2011 school year.

Finally, the district's Special Education Department collects information from local preschools and parents on age-eligible children for kindergarten enrollment. Current information shows a total of 140 children eligible to enroll in kindergarten next September whose parents have responded to the School Department's survey for preschoolers. This number includes those students whose kindergarten enrollment was deferred from September 2010.

Using only the cohort survival method for all grades, next year's total enrollment in the Wayland Public Schools is expected to be 2,652 students, 30 fewer students than are enrolled for the current school year. High School enrollment is expected to decrease by 30 students, Middle School enrollment will drop by 4 and elementary enrollment (Grades K-5) will increase by 4, with kindergarten enrollment increasing by 15 and enrollment in Grades 1-5 decreasing by 10. Comparing current year enrollments to projected enrollments shows by grade where the decreases and increases will occur.

The High School will see the largest decrease in student population, from 869 to 839; Middle School enrollment will fall to 630, the lowest since 1996. Claypit Hill enrollment will fall by 11 students to 560, while Happy Hollow enrollment is expected to remain constant at 440.

Projected enrollment numbers on the following pages are expressed as whole numbers, even though they are the product of ratio multipliers. Minor differences in totals are the result of the addition of decimal products carried over from spreadsheet calculations, not the whole numbers presented in this report.

PROJECTED ENROLLMENT (3-Yr Cohort Survival Ratios)

2011-2012

GRADE	CLAYPIT	HAPPY	MIDDLE	HIGH	TOTAL	
	HILL	HOLLOW				LOKER
K	0	0	183		183	
1	108	78	0		185	
2	90	86	0		176	
3	126	97	0		224	
4	122	87	0		209	
5	115	92	0		207	
6				208	208	
7				196	196	
8				226	226	
9					205	
10					198	
11					225	
12					210	
TOTAL K-12	560	440	183	630	839	2,652
Oct. 1, 2010 K-12	571	440	168	634	869	2,682
DIFFERENCE	-11	0	15	-4	-30	-30
% DIFFERENCE	-1.90%	0.00%	8.76%	-0.66%	-3.48%	-1.12%

* Proportional split for projected Gr. 1 enrollment by school is based on addresses of K students in 2010-11

COMPARATIVE ENROLLMENTS K - 12

GRADE	ACTUAL	PROJECTED	CHANGE
	2010-2011	2011-2012	
K	168	183	8.8%
1	169	185	9.7%
2	221	176	-20.3%
3	204	224	9.6%
4	209	209	0.0%
5	208	207	-0.6%
6	197	208	5.4%
7	225	196	-12.9%
8	212	226	6.6%
9	202	205	1.7%
10	226	198	-12.3%
11	214	225	5.3%
12	227	210	-7.6%
TOTALS	2,682	2,652	-1.1%
K-5	1,179	1,183	0.4%
6-8	634	630	-0.7%
9-12	869	839	-3.5%

The in-house cohort survival projection is then compared to two others that use different methodologies for predicting enrollment – a straight five-year numerical average of the change in enrollment at each grade from year to year and a more complex projection prepared by NESDEC. The numerical average projection only considers the difference between the number of births recorded five years earlier to the number of kindergarteners, which results in a lower kindergarten projection than the in-house ratios; however, at other grade levels it yields results very close to that of the district’s in-house cohort survival, for a total of 2,608 students. NESDEC’s calculations, using last year’s enrollment data, show greater variation in projections, for a total of 2,613, with a low kindergarten enrollment that is predicated on reported births five years earlier. NESDEC calculations using this year’s October 1 enrollment data will not be available until later in the year.

COMPARATIVE ENROLLMENT PROJECTIONS

2010-2012

GRADE	2010- 11 Actual	Projections		
		Internal 3-Year Cohort*	Numerical 5-Year Average	NESDEC**
K	168	183	145	165
1	169	185	184	146
2	221	176	178	170
3	204	224	224	198
4	209	209	206	191
5	208	207	206	195
6	197	208	209	195
7	225	196	195	182
8	212	226	226	205
9	202	205	204	183
10	226	198	197	209
11	214	225	224	200
12	227	210	211	213
TOTAL	2,682	2,652	2,608	2,484

* Using 3-year average cohort ratios.

**Using January 2010 projections

Enrollment projections are used in development of the coming year’s budget. Staffing levels at all grade levels are predicated on the number of children reasonably expected to be enrolled at the start of the school year. Elementary enrollment numbers by school and by grade are used in conjunction with the School Committee’s Class Size Policy guidelines to determine the number of classroom sections needed at each grade level, which in turn drives the number of specialists (e.g. art, general music, and physical education teachers) required at each school.

Based on enrollment projections, the district will need 26 elementary classroom teachers at Claypit Hill, 20 elementary classroom teachers at Happy Hollow, and 9 kindergarten teachers at Loker School.

PROJECTED ELEMENTARY CLASS SIZES
Using 3-Year Cohort Survival Ratios

	PROJECTED	NUMBER	AVERAGE	TARGET
<u>Claypit Hill</u>	TOTAL	CLASSROOMS	CLASS SIZE	UPPER LIMIT
Kindergarten	0	0		20
Grade 1	108	6	17.9	20
Grade 2	90	4	22.4	23
Grade 3	126	6	21.1	23
Grade 4	122	5	24.4	25
Grade 5	<u>115</u>	<u>5</u>	<u>23.0</u>	25
Total	560	26	21.5	
<u>Happy Hollow</u>				
Kindergarten	0	0		20
Grade 1	78	4	19.5	20
Grade 2	86	4	21.6	23
Grade 3	97	4	24.3	* 23
Grade 4	87	4	21.7	25
Grade 5	<u>92</u>	<u>4</u>	<u>23.0</u>	25
Total	440	20	22.0	
<u>Loker</u>				
Kindergarten	183	9	20.3	* 20
Grade 1	0	0		20
Grade 2	0	0		23
Grade 3	0	0		23
Grade 4	0	0		25
Grade 5	<u>0</u>	<u>0</u>		25
Total	183	9	20.3	
Total Elementary	1,183	55	21.3	

* Average class size exceeds target upper limit.

WAYLAND PUBLIC SCHOOLS

ENROLLMENT TRACKING from 1998 - 2010

and ENROLLMENT PROJECTIONS for FY12, FY13, FY14 and FY15

Oct. 1														PROJECTIONS							
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	FY12 2 Yr. CSR	FY12 3 Yr. CSR	FY12 4 Yr. CSR	FY12 5 Yr. CSR	FY12 10 Yr. CSR	FY13 Using 3-Yr. CSR ('08-'10)	FY14	FY15
Births	162	150	168	136	143	131	124	105	129	112	94	103									
K	219	209	232	186	197	203	170	187	193	174	178	160	168	186	183	176	178	130	157	132	121
Grade 1	227	234	219	242	191	219	221	188	194	206	192	205	169	185	185	184	182	172	202	174	146
Grade 2	245	233	241	219	244	200	218	232	186	202	203	204	221	181	176	176	174	209	193	210	179
Grade 3	232	237	241	250	231	253	207	220	235	193	204	208	204	224	224	225	225	210	178	195	215
Grade 4	230	235	243	242	249	225	257	202	213	230	199	211	209	208	209	206	205	208	229	182	198
Grade 5	225	239	251	242	238	247	231	254	200	208	227	198	208	207	207	206	206	211	206	226	180
Grade 6	209	227	246	255	246	233	240	234	253	208	210	225	197	207	208	210	209	199	206	206	229
Grade 7	223	205	228	244	254	247	241	243	225	248	207	208	225	196	196	195	194	224	207	205	204
Grade 8	203	220	208	231	248	257	242	244	242	224	248	206	212	227	226	226	225	209	197	208	205
Grade 9	199	204	216	207	226	240	237	231	230	232	222	232	202	203	205	205	204	198	219	191	200
Grade 10	176	198	204	216	198	227	241	234	224	221	229	218	226	198	198	197	197	229	202	215	186
Grade 11	175	173	196	198	213	204	218	233	228	222	223	229	214	224	225	225	224	215	198	201	215
Grade 12	160	181	162	190	192	210	201	214	237	228	217	217	227	210	210	211	212	225	221	194	198
Total	2,723	2,795	2,887	2,922	2,927	2,965	2,924	2,916	2,860	2,796	2,759	2,721	2,682	2,655	2,652	2,642	2,635	2,639	2,615	2,539	2,474
Delta	44	72	92	35	5	38	-41	-8	-56	-64	-37	-38	-39	-27	-30	-40	-47	-43	-37	-75	-65
%Growth	1.6%	2.6%	3.3%	1.2%	0.2%	1.3%	-1.4%	-0.3%	-1.9%	-2.3%	-1.3%	-1.4%	-1.5%	-1.0%	-1.1%	-1.5%	-1.7%	-1.6%	-1.4%	-2.9%	-2.6%
Totals																					
K-5	1,378	1,387	1,427	1,381	1,350	1,347	1,304	1,283	1,221	1,213	1,203	1,186	1,179	1,191	1,183	1,174	1,170	1,141	1,166	1,120	1,039
6-8	635	652	682	730	748	737	723	721	720	680	665	639	634	629	630	631	629	632	610	619	638
9-12	710	756	778	811	829	881	897	912	919	903	891	896	869	835	839	838	837	867	839	800	798

Births for 2008 and 2009 are preliminary, as reported to Wayland's Town Clerk and State Vital Statistics