

# ENROLLMENT PROJECTIONS FOR LOUDON COUNTY SCHOOLS: COMPARISON OF 2007 PEFA STUDY AND 2005 LOUDON REPORT



March 15, 2007

**TABLE 1**  
**COMPARISON OF 2010/11 ENROLLMENT PROJECTIONS:**  
**2007 PEFA STUDY AND 2005 LOUDON STUDY**

SCHOOL	PEFA	LOUDON			LOUDON			LOUDON		
	PROJECTED ENROLLMENT 2010/11 (ACCELERATED)	PROJECTED ENROLLMENT 2010/11 (METHOD 1)	RAW DIFFERENCE	% DIFFERENCE	PROJECTED ENROLLMENT 2010/11 (METHOD 2)	RAW DIFFERENCE	% DIFFERENCE	PROJECTED ENROLLMENT 2010/11 (METHOD 3)	RAW DIFFERENCE	% DIFFERENCE
Eaton Elementary	720	1030	-310	-30.1	970	-250	-25.8	1001	-281	-28.1
Fort Loudoun Middle	458	502	-44	-8.8	527	-69	-13.1	513	-55	-10.7
Greenback School	671	777	-106	-13.6	781	-110	-14.1	784	-113	-14.4
Highland Park Elementary	447	473	-26	-5.5	488	-41	-8.4	482	-35	-7.3
Loudon Elementary	531	745	-214	-28.7	721	-190	-26.4	734	-203	-27.7
Loudon High	764	864	-100	-11.6	923	-159	-17.2	894	-130	-14.5
North Middle	864	1538	-674	-43.8	1553	-689	-44.4	1546	-682	-44.1
Philadelphia Elementary	527	552	-25	-4.5	533	-6	-1.1	546	-19	-3.5
Steekee Elementary	248	264	-16	-6.1	234	14	6.0	247	1	0.4
Total	5230	6745	-1515	-22.5	6730	-1500	-22.3	6747	-1517	-22.5

**Note:** Lenoir City schools not evaluated in 2005 Loudon study.

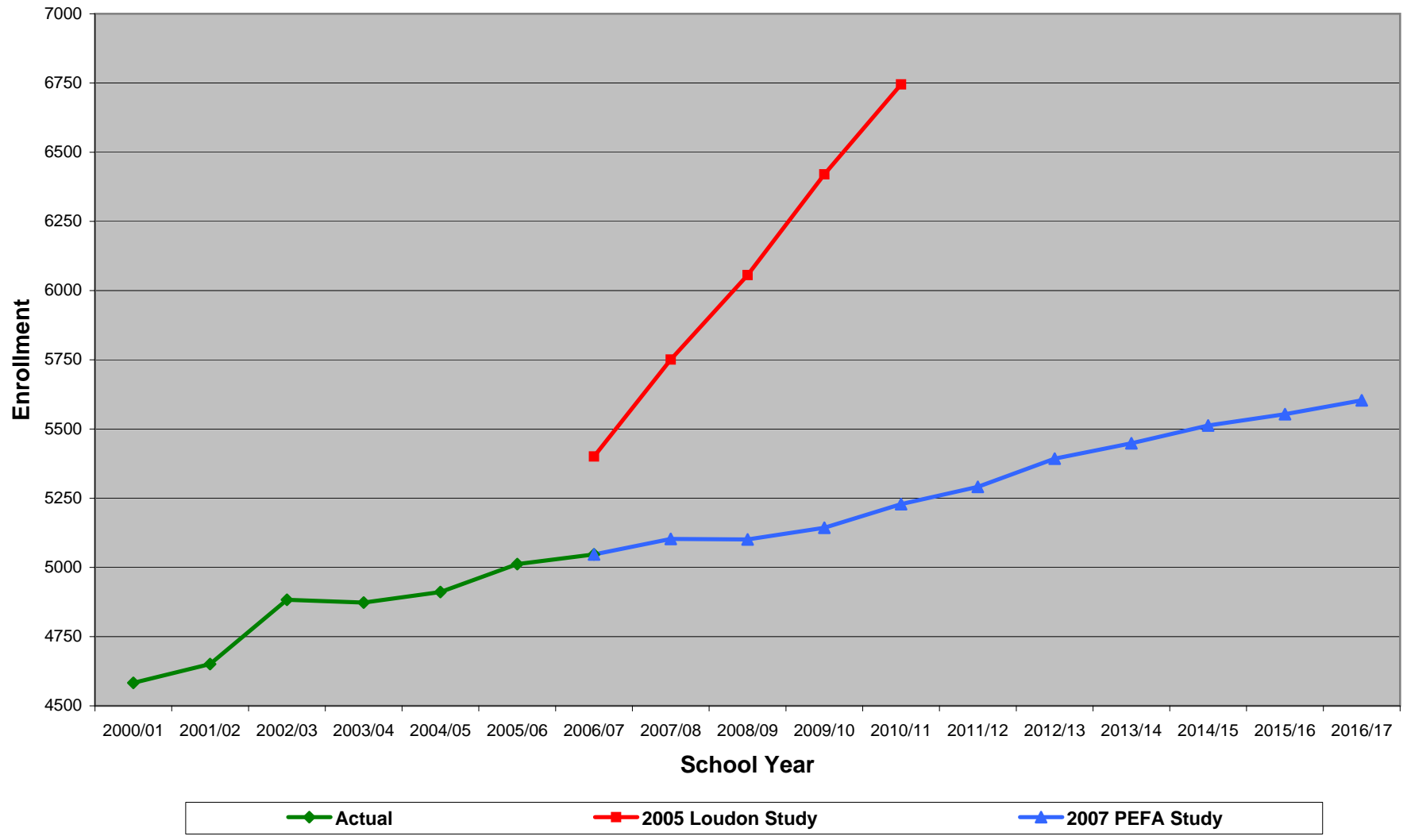
**TABLE 2**  
**COMPARISON OF 2010/11 ENROLLMENT PROJECTION GROWTH RATES:**  
**2007 PEFA STUDY AND 2005 LOUDON STUDY**

SCHOOL	CURRENT ENROLLMENT 2006/07	PROJECTED 4-YEAR GROWTH RATE (%)			
		PEFA	LOUDON METHOD 1	LOUDON METHOD 2	LOUDON METHOD 3
Eaton Elementary	713	1.0	44.5	36.0	40.4
Fort Loudoun Middle	383	19.6	31.1	37.6	33.9
Greenback School	684	-1.9	13.6	14.2	14.6
Highland Park Elementary	418	6.9	13.2	16.7	15.3
Loudon Elementary	512	3.7	45.5	40.8	43.4
Loudon High	717	6.6	20.5	28.7	24.7
North Middle	857	0.8	79.5	81.2	80.4
Philadelphia Elementary	526	0.2	4.9	1.3	3.8
Steekee Elementary	237	4.6	11.4	-1.3	4.2
Total	5047	3.6	33.6	33.3	33.7

**Notes:**

1. Lenoir City schools not evaluated in 2005 Loudon study.
2. Current enrollment based on student address data provided by Loudon County Schools, October, 2006.

### COMPARISON OF ENROLLMENT PROJECTIONS: 2005 LOUDON STUDY AND 2007 PEFA STUDY



**TABLE 3  
ASSESSMENT OF SURVIVAL RATIOS (GRADE PROGRESSION RATIOS) USED IN 2005 LOUDON STUDY**

SCHOOL	RATIO TESTED (GRADES)	REPORTED SURVIVAL RATIO (METHOD 1)	ACTUAL SURVIVAL RATIO APPLIED (METHOD 1)	DIFFERENCE
Eaton Elementary	3 to 4	103.93	114.48	10.55
Fort Loudoun Middle	7 to 8	100.43	106.52	6.09
Greenback School	11 to 12	95.94	96.36	0.42
Highland Park Elementary	3 to 4	98.92	101.08	2.16
Loudon Elementary	4 to 5	105.11	117.88	12.77
Loudon High	11 to 12	91.88	95.73	3.85
North Middle	7 to 8	94.52	104.53	10.01
Philadelphia Elementary	7 to 8	101.19	101.56	0.37
Steekee Elementary	4 to 5	94.48	94.59	0.11

**Notes:**

1. Difference less than 0.5 is the result of numerical rounding.
2. Where a difference greater than 0.5 exists, an artificial acceleration of enrollment growth was applied to the projections by the Loudon report authors (affected schools indicated in blue).
3. No documentation was provided to detail the rationale behind the applied acceleration rate.

**TABLE 4  
COMPARISON OF 2005 LOUDON STUDY PROJECTIONS FOR 2006/07 TO ACTUAL ENROLLMENT IN 2006/07**

SCHOOL	ACTUAL ENROLLMENT 2006/07	PROJECTED ENROLLMENT 2006/07 (METHOD 1)	DIFFERENCE	% DIFFERENCE
Eaton Elementary	713	827	114	16.0
Fort Loudoun Middle	383	385	2	0.5
Greenback School	684	715	31	4.5
Highland Park Elementary	418	425	7	1.7
Loudon Elementary	512	530	18	3.5
Loudon High	717	776	59	8.2
North Middle	857	981	124	14.5
Philadelphia Elementary	526	513	-13	-2.5
Steekee Elementary	237	249	12	5.1
<b>Total</b>	5047	5401	354	7.0

**Notes:**

1. Current enrollment based on student address data provided by Loudon County Schools, October, 2006.
2. Notable differences between actual and projected enrollments indicated in blue.

**TABLE 5**  
**RESIDENTIAL CONSTRUCTION NEEDED TO SUPPORT 2005 LOUDON STUDY ENROLLMENT PROJECTIONS**  
**EATON ES, HIGHLAND PARK ES, NORTH MS AREA**

**A. ACTUAL AND PROJECTED ENROLLMENT**

SCHOOL YEAR	ACTUAL ENROLLMENT	PROJECTED ENROLLMENT (METHOD 1)	ANNUAL GROWTH	ANNUAL GROWTH RATE (%)
2000/01	1816			
2001/02	1853		37	2.0
2002/03	1933		80	4.3
2003/04	1935		2	0.1
2004/05	1979		44	2.3
2005/06	2022		43	2.2
2006/07	1988	2265	243	12.0
2007/08		2492	227	10.0
2008/09		2711	219	8.8
2009/10		2952	241	8.9
2010/11		3143	191	6.5
Projected enrollment growth:			1121	
Projected average annual enrollment growth:			224	
Actual average annual growth rate:				2.2
Projected average annual growth rate:				9.2

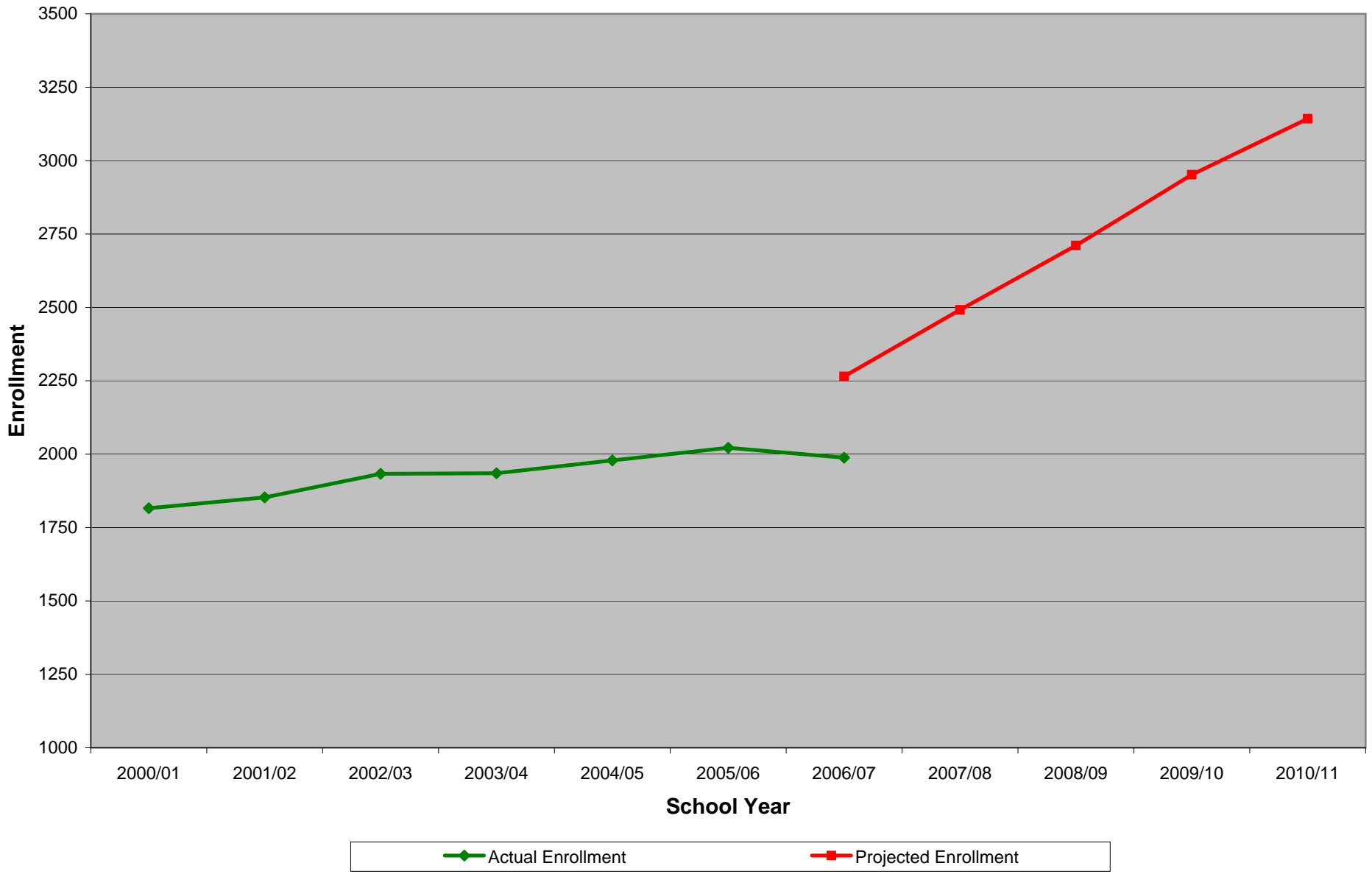
**B. STUDENT YIELDS AND NEW RESIDENTIAL CONSTRUCTION**

<b>Student yields in Eaton/Highland Park/North areas of county (Census Tracts 601 and 603):</b>			
Occupied housing units:			4619
Persons under 18 years of age:			2587
Student yield (children under 18 years of age per household):			0.560
Deduct children under 5 years of age (25%):	(0.140)		0.420
Deduct private/homeschool children (4.8%):	(0.020)		0.400
Net student yield, grades K-12 (children per household):			0.400
Net student yield, grades K-8 (children per household):			0.277
<b>Estimated number of new homes needed between 2006 and 2010 to generate projected growth at Eaton ES, Highland Park ES, and North MS:</b>			
Projected student enrollment growth:			1121
Students (K-8) per new house built:			0.277
Number homes needed in next 5 years:			4049
Average annual homes needed in each of next 5 years:			810
<b>Recent construction activity in Loudon County and Eaton/Highland Park/North areas:</b>			
Average number of homes built annually countywide, 2000-2005:			502
Average number of homes built annually in study area, 2000-2005:			145
Growth acceleration rate in study area needed to accommodate projected enrollment:			458.5%

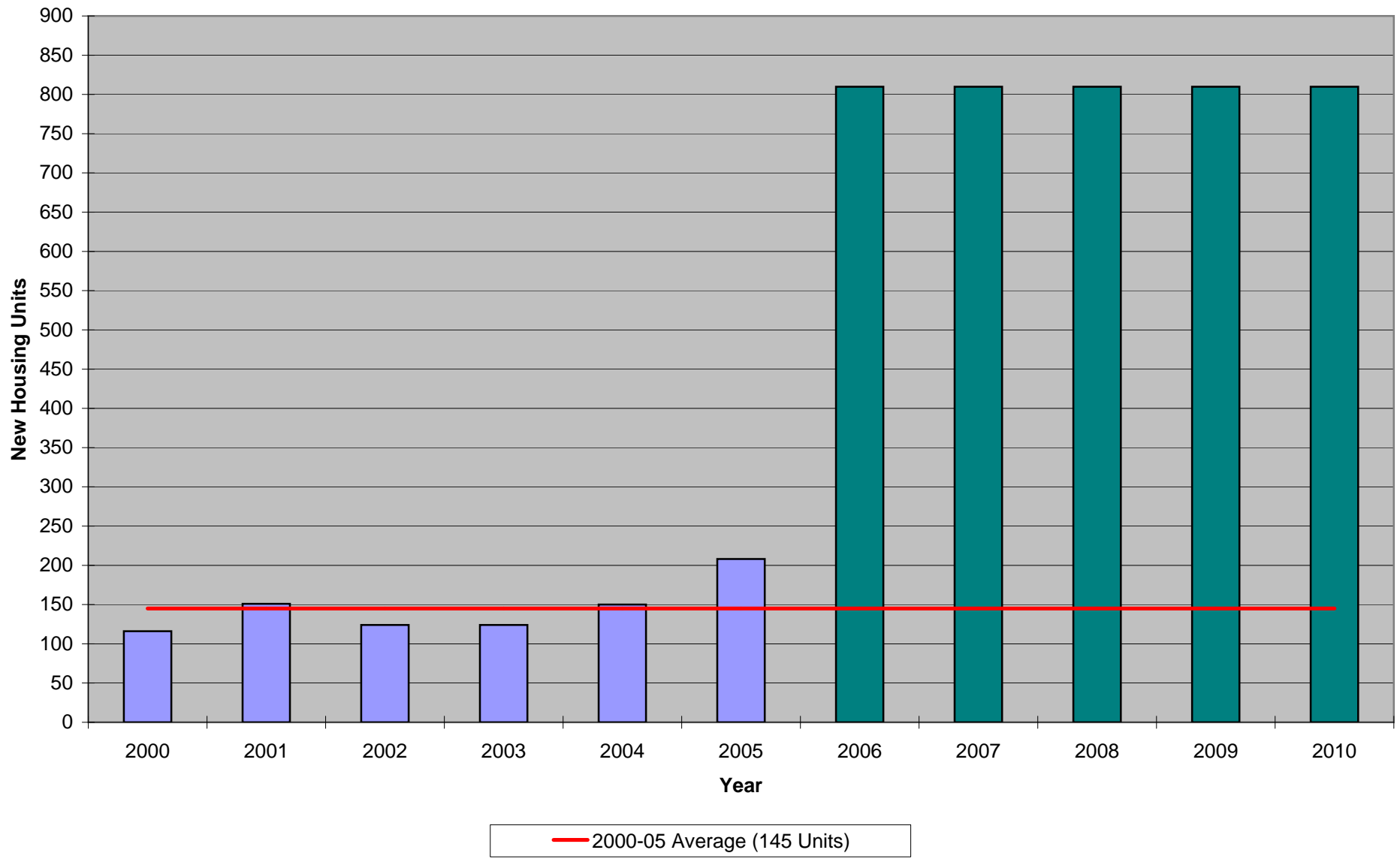
**Notes:**

1. Student yield averages based on Census 2000 data for Loudon County Census Tracts.
2. Dwelling unit data provided by Loudon County Property Assessor, 2006.
3. Actual enrollment for 2006/07 was not available at the time of publication of the 2005 Loudon study. Current figure derived from Loudon County Schools address data, October, 2006.

**ACTUAL AND PROJECTED ENROLLMENT: EATON ES, HIGHLAND PARK ES, NORTH MS  
(From 2005 Loudon Study)**



**ANNUAL HOUSING UNIT CONSTRUCTION: ACTUAL UNITS (2000-05) AND ESTIMATED UNITS  
NEEDED TO ACCOMMODATE PROJECTED ENROLLMENT GROWTH (2006-10) AT  
EATON ES, HIGHLAND PARK ES, NORTH MS**



**TABLE 6**  
**COMPARISON OF FACILITY DESIGN CAPACITIES:**  
**2007 PEFA STUDY AND 2005 LOUDON STUDY**

SCHOOL	PEFA DESIGN CAPACITY	LOUDON DESIGN CAPACITY	RAW DIFFERENCE	(%) DIFFERENCE
Eaton Elementary	940	935	5	0.5
Fort Loudoun Middle	455	520	-65	-12.5
Greenback School	1135	1112	23	2.1
Highland Park Elementary	510	520	-10	-1.9
Loudon Elementary	520	575	-55	-9.6
Loudon High	1135	1112	23	2.1
North Middle	1245	1115	130	11.7
Philadelphia Elementary	770	730	40	5.5
Steekee Elementary	405	435	-30	-6.9
Total	7115	7054	61	0.9

**Notes:**

1. Lenoir City schools not evaluated in 2005 Loudon study.
2. Design capacity figures were prepared by Loudon officials in 2005 and PEFA in 2007. Classroom usage may have changed in the period between the two studies. Accordingly, direct comparisons must be evaluated with that consideration taken into account.

**TABLE 7**  
**COMPARISON OF FACILITY FUNCTIONAL CAPACITIES:**  
**2007 PEFA STUDY AND 2005 LOUDON STUDY**

SCHOOL	PEFA FUNCTIONAL CAPACITY	LOUDON FUNCTIONAL CAPACITY	RAW DIFFERENCE	(%) DIFFERENCE
Eaton Elementary	775	720	55	7.6
Fort Loudoun Middle	387	447	-60	-13.5
Greenback School	904	893	11	1.2
Highland Park Elementary	420	395	25	6.3
Loudon Elementary	460	477	-17	-3.6
Loudon High	944	945	-2	-0.2
North Middle	1033	853	180	21.1
Philadelphia Elementary	677	584	93	15.9
Steekee Elementary	320	335	-15	-4.5
Total	5919	5649	270	4.8

**Notes:**

1. Lenoir City schools not evaluated in 2005 Loudon study.
2. Functional capacity figures were prepared by Loudon officials in 2005 and PEFA in 2007. Classroom usage may have changed in the period between the two studies. Accordingly, direct comparisons must be evaluated with that consideration taken into account.

## SUPPLEMENTAL INFORMATION

**TABLE S1**  
**HISPANIC POPULATION ESTIMATES AND PROJECTIONS, 2000-2025**  
**LOUDON COUNTY**

Characteristic	2000		2005		2010		2015		2020		2025	
	POP.	SHARE OF TOTAL (%)	POP.	SHARE OF TOTAL (%)	POP.	SHARE OF TOTAL (%)	POP.	SHARE OF TOTAL (%)	POP.	SHARE OF TOTAL (%)	POP.	SHARE OF TOTAL (%)
Total population	39229		43387		48208		53031		57953		63020	
Hispanic, all ages	900	2.29	1306	3.01	1621	3.36	1957	3.69	2387	4.12	2828	4.49
Hispanic, under 5 years	105	0.27	150	0.35	147	0.30	162	0.31	184	0.32	198	0.31
Hispanic, 5-9 years	114	0.29	129	0.30	158	0.33	152	0.29	170	0.29	191	0.30
Hispanic, 10-14 years	86	0.22	127	0.29	139	0.29	166	0.31	160	0.28	180	0.29
Hispanic, 15-19 years	85	0.22	107	0.25	136	0.28	163	0.31	204	0.35	186	0.30

**Source:** Woods and Poole Economics, 2006.