

# Simplified Teacher Salaries

At contract time there is always confusion about what is reported and what the teachers actually receive in pay raises. Brandywine Heights has 148 teachers and there are 14 yearly steps before the final pay grade.

## Salary Matrix For 2006-07

Step	Bach	Bach +12	B +24	Masters	M+12	M+30	M+60
1	\$ 39,379	\$ 40,343	\$ 41,424	\$ 42,495	\$ 43,786	\$ 45,078	\$ 47,338
2	\$ 39,679	\$ 40,648	\$ 41,724	\$ 42,795	\$ 44,086	\$ 45,378	\$ 47,638
3	\$ 39,979	\$ 40,948	\$ 42,024	\$ 43,095	\$ 44,386	\$ 45,678	\$ 47,938
4	\$ 40,279	\$ 41,248	\$ 42,324	\$ 43,395	\$ 44,686	\$ 45,978	\$ 48,238
5	\$ 40,844	\$ 41,813	\$ 42,889	\$ 43,960	\$ 45,251	\$ 46,543	\$ 48,803
6	\$ 41,673	\$ 42,641	\$ 43,718	\$ 44,789	\$ 46,080	\$ 47,372	\$ 49,632
7			\$ 44,745	\$ 45,816	\$ 47,108	\$ 48,399	\$ 50,660
8			\$ 45,924	\$ 47,000	\$ 48,292	\$ 49,583	\$ 51,843
9			\$ 47,872	\$ 48,948	\$ 50,240	\$ 51,531	\$ 53,791
10			\$ 50,186	\$ 51,262	\$ 52,554	\$ 53,845	\$ 56,105
11			\$ 52,661	\$ 53,738	\$ 55,029	\$ 56,321	\$ 58,581
12			\$ 56,052	\$ 57,128	\$ 58,419	\$ 59,711	\$ 61,971
13			\$ 59,845	\$ 60,922	\$ 62,213	\$ 63,505	\$ 65,765
14			\$ 66,298	\$ 67,374	\$ 68,665	\$ 69,957	\$ 72,217

To simplify matters an example school will be used that has 3 pay schedules and 8 teachers.

## Base Case

This is the base case with a total payroll of \$420,000 two new teachers, 2 teachers in the middle step and 4 in the final step.

Pay Grade	# teachers	salary	Payroll
YEAR 1			
1	2	\$ 40,000	\$ 80,000
2	2	\$ 50,000	\$ 100,000
3	4	\$ 60,000	\$ 240,000
	8		\$ 420,000

## Case 1

In Case 1 the pay grades will be increased by 2% all the teachers will move down one step, one retirement and replaced by a new teacher in the first pay grade.

YEAR 2 Increase of 2% for each Pay Grades			
1	1	\$ 40,800	\$ 40,800
2	2	\$ 51,000	\$ 102,000
3	5	\$ 61,200	\$ 306,000
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	8		\$ 448,800
	% Increase		6.86%

While the pay grades only received a 2% increase the distribution of the teachers caused an increase of 6.86% in the total salary budget. This is the number you usually see reported and is not indicative of what an individual teacher may receive but based on what the makeup of the salary matrix. This number can be greatly affected by teachers in the top grades retiring earlier than expected and is shown in the following scenario.

## Case 2

In Case 2 the same 2 percent increase for each pay grade results in a drastic change in the salary budget if 3 of the teachers retired and were replaced in the first pay grade.

YEAR 2 Early Retirement with 2% increase			
1	3	\$ 40,800	\$ 122,400
2	2	\$ 51,000	\$ 102,000
3	3	\$ 61,200	\$ 183,600
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	8		\$ 408,000
	% Increase		-2.86%

Even with the increase in salaries the total actual amount is reduced.

### Case 3

Case 3 is the same as Case 1 except this time there are no increases in pay grades but the salary budget still has to be increased by 4.76% to account for the teachers stepping up into a higher grade.

YEAR 2 No Increase			
1	1	\$ 40,000	\$ 40,000
2	2	\$ 50,000	\$ 100,000
3	5	\$ 60,000	\$ 300,000
	8		\$ 440,000
% Increase			4.76%

What normally happens is the board looks at where the teachers fall in the salary matrix. This gives the % increase that will occur for normal progression down the matrix, the trend in real estate, latest salary trends from neighboring schools and other factors and arrive at a number that would yield a reasonable raise for the teachers in the highest bracket and fully fund the existing matrix. The teachers association looks at the same base data and for some reason always comes up with a higher amount. Once the horse trading is completed the teacher association, takes the pot and fills out the matrix with the new amounts. The board then approves the final amounts.

That is the amount budgeted. The amount spent usually runs lower because more people retire early than late and we do lose a few on the higher pay scale for other reasons.

## Historical Pay Increases

If you want to see the exorbitant raises a typical teacher receives look at a teacher with a Masters degree and who has reached the final pay grade after 14 years. The following comes from the previous 2 contracts. They are not on a fixed income in reality their income has actually been decreasing their salary has actually been decreasing in terms of 1998 dollars.

Teacher Salary with 14+ Years and A Master's Degree					
Year	Salary	% Increase	Inflation	Net % Increase	1998 Dollars
1998	\$ 56,325		1.55%		\$ 56,325
1999	\$ 57,225	1.60%	2.19%	0.05%	\$ 56,352
2000	\$ 58,050	1.44%	3.38%	-0.75%	\$ 55,930
2001	\$ 58,950	1.55%	2.19%	-1.83%	\$ 54,907
2002	\$ 60,000	1.78%	2.83%	-0.41%	\$ 54,682
2003	\$ 61,400	2.33%	1.59%	-0.50%	\$ 54,411
2004	\$ 62,600	1.95%	2.27%	0.36%	\$ 54,609
2005	\$ 64,096	2.39%	2.69%	0.12%	\$ 54,675
2006	\$ 65,718	2.53%	3.39%	-0.16%	\$ 54,587
2007	\$ 67,374	2.52%	3.24%	-0.87%	\$ 54,112

## Comparison of Teacher's Salary vs. Social Security Recipient

It is interesting to see how their increases compare with a retiree on Social Security. There have only been a couple of years where the teachers had an increase above that of a COLA social security increase. The bottom line reflects this because of every thousand dollars a teacher earned in 1998 is now worth \$969. For a retiree their \$1,000 is now worth \$1,035 in 1998 dollars.

Year	% Increase			Current \$		1998 \$	
	Mstr Teacher	SS Recipient	Inflation	SS	Teacher	SS	Teacher
1998			1.55%	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000
1999	1.60%	2.50%	2.19%	\$ 1,025	\$ 1,016	\$ 1,010	\$ 1,000
2000	1.44%	3.50%	3.38%	\$ 1,061	\$ 1,031	\$ 1,023	\$ 993
2001	1.55%	2.60%	2.19%	\$ 1,088	\$ 1,047	\$ 1,015	\$ 975
2002	1.78%	1.40%	2.83%	\$ 1,104	\$ 1,065	\$ 1,007	\$ 971
2003	2.33%	2.10%	1.59%	\$ 1,127	\$ 1,090	\$ 999	\$ 966
2004	1.95%	2.70%	2.27%	\$ 1,157	\$ 1,111	\$ 1,010	\$ 970
2005	2.39%	4.10%	2.69%	\$ 1,205	\$ 1,138	\$ 1,029	\$ 971
2006	2.53%	3.30%	3.39%	\$ 1,245	\$ 1,167	\$ 1,035	\$ 969

## District Comparison

In reviewing the pay scale it is difficult to see how the different districts compares, since each one has their own little thing going. But almost all have a salary schedule for a teacher with a Masters. Each district also is in a different phase of their contract, with movement up and down as new ones are signed. To compare the districts one way is to see how much money that would earn over a 30 year period.

This is the ranking by the total amount over 30 years each district would pay a teacher hired with a master.

### Sorted By Total Received

Rank	School District	NPV M\$	Total M\$
1	Boyertown	\$950	\$1,991
2	Daniel Boone	\$888	\$1,922
3	Exeter	\$899	\$1,910
4	Kutztown	\$908	\$1,903
5	Wilson	\$884	\$1,898
6	Brandywine	\$879	\$1,880
7	Oley	\$853	\$1,848
8	Gov Mifflin	\$861	\$1,834
9	Fleetwood	\$841	\$1,811
10	Reading	\$810	\$1,777
11	Conrad Weiser	\$822	\$1,755
12	Antietam	\$798	\$1,747
13	BCIU	\$758	\$1,632

However this doesn't reflect the time value of money where a bird in the hand today is worth more than a bird in the hand plus a small rodent a year from now,

So using the Net Present Value method, discounting the few cash stream at 5% Brandywine still comes in 6<sup>th</sup> place which is good. We aren't paying the least for critical employees but also aren't giving away the store. The big difference is Kutztown and Daniel Boone. K-town is on a similar track as BHASD paying more early, while D.B. pays less but has a higher ending salary and more steps.

**Sorted By NPV**

	School	NPV	Total
Rank	District	M\$	M\$
1	Boyertown	\$950	\$1,991
2	Kutztown	\$908	\$1,903
3	Exeter	\$899	\$1,910
4	Daniel Boone	\$888	\$1,922
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