

Decompression Plan

The decompression plan adopted by Faculty Senate for Ratification at the November 17, 2009 meeting employs a *composite score* (Score) to prioritize candidates, select candidates for the decompression pool, and distribute the decompression budget. The *composite score* is derived from an equally weighted contribution of the *percent compression differential* (%CD) and *percent average salary* (%AS) variables. This method offers a hybrid approach that considers both market forces and institutional equity to ration limited decompression reserves.

Setup

Calculate the *percent compression differential* (%CD) for each individual using the procedure described in Multiyear Pay Plan.

In addition, calculate the *percent of average salary* (%AS) and *composite score* (Score) for each individual using the following equations.

$$\%AS_n = \frac{S_n - AS_{Rank}}{AS_{Rank}}$$
$$Score_n = \frac{\%AS_n - \%CD_n}{2} \cdot 100$$

Procedure

Step 1

Prioritize candidate list by sorting members in ascending order by their *composite score* (Score).

Step 2

Determine budget available for the decompression pool.

Step 3

Set the entry criteria for the decompression pool by identifying the *target composite score* (Score*) with respect to the decompression budget using the Decompression Budget vs. Composite Score graph.

Step 4

Assign those candidates whose *composite score* (Score) is less than or equal to the *target composite score* (Score*) to the decompression pool.

Step 5

Evaluate each individual's eligibility in the decompression pool based on record of past performance and other factors that may have contributed to salary compression.

Step 6

Distribute the decompression budget by calculating the *salary adjustment* (SA) for each individual using the equation below¹.

$$SA_n = \text{Min} \left[\frac{2 \cdot ES_n \cdot AS_n \cdot \left(\frac{\text{Score}_n^*}{100} + 1 \right)}{ES_n + AS_n} - S_n, CD_n \right]$$

Example

Step 1

Exhibit 1 lists the candidates sorted by *composite score* (Score) in ascending order. The column labels are defined in the following table.

Symbol	Description
Y	Years in rank
AYR	Average Years in Rank
S	Salary
ADS	Average Discipline Salary
AS	Average Salary for rank
EP	Experience Premium
ES	Expected Salary
CD	Compression Differential
%CD	Percent Compression Differential
%AS	Percent of Average Salary
Score	Composite Score

Step 2

Assume a budget of \$50,000 has been allocated to reduce salary compression.

Step 3

Using the Decompression Budget vs. Composite Score graph shown in Exhibit 2, a decompression budget of \$50,000 yields a *target composite score* (Score*) of approximately -11.2.

Step 4

Exhibit 3 lists those candidates with a *composite score* (Score) less than or equal to the *target composite score* (Score*) entered into the decompression pool.

Step 5

Assume all candidates listed in Exhibit 3 meet eligibility requirements for the decompression pool.

Step 6

Exhibit 4 lists the *salary adjustments* (SA), *revised salaries* (S*), and *revised compression differential* (CD*) after moving to the *target composite score* (Score*) of -11.2. A total of \$49,166 of the \$50,000 budget was distributed.

¹ The *salary adjustment* (SA) cannot exceed the *compression differential* (CD), hence the Min() function.

Faculty Salary Data

Fiscal Year: 2008-09

Rank	Y	AYR	S	ADS	AS	EP	ES	CD	%CD	%AS	Score
Assistant Professor	13.5	3	44,955	49,829	51,983	905	59,335	14,380	24.23%	-13.52%	-18.88
Professor	10.5	10	58,125	71,256	67,500	673	71,594	13,469	18.81%	-13.89%	-16.35
Associate Professor	2.6	3	45,133	54,240	54,055	905	53,847	8,714	16.18%	-16.51%	-16.34
Associate Professor	1.5	3	47,928	62,140	54,055	947	60,722	12,794	21.07%	-11.34%	-16.20
Professor	1.5	10	56,391	72,660	67,500	788	65,964	9,573	14.51%	-16.46%	-15.49
Professor	1.5	10	56,839	75,177	67,500	962	67,003	10,164	15.17%	-15.79%	-15.48
Associate Professor	4.6	3	49,300	62,257	54,055	669	63,298	13,998	22.11%	-8.80%	-15.46
Professor	1.5	10	58,041	78,856	67,500	1,066	69,798	11,757	16.84%	-14.01%	-15.43
Professor	0.5	10	57,624	77,768	67,500	1,036	67,927	10,303	15.17%	-14.63%	-14.90
Professor	1.5	10	58,475	76,914	67,500	897	69,292	10,817	15.61%	-13.37%	-14.49
Associate Professor	0.5	3	48,217	60,457	54,055	673	58,775	10,558	17.96%	-10.80%	-14.38
Associate Professor	1.5	3	48,083	59,755	54,055	908	58,396	10,313	17.66%	-11.05%	-14.35
Associate Professor	4.5	3	48,528	58,266	54,055	788	59,449	10,921	18.37%	-10.23%	-14.30
Associate Professor	1.1	3	45,900	54,240	54,055	905	52,531	6,631	12.62%	-15.09%	-13.85
Associate Professor	7.3	3	50,013	60,393	54,055	380	62,044	12,031	19.39%	-7.48%	-13.43
Professor	9.5	10	62,443	77,426	67,500	980	76,939	14,496	18.84%	-7.49%	-13.17
Associate Professor	1.5	3	48,083	57,858	54,055	827	56,620	8,537	15.08%	-11.05%	-13.06
Associate Professor	1.5	3	49,230	60,974	54,055	1,035	59,425	10,195	17.16%	-8.93%	-13.04
Professor	0.5	10	57,922	73,427	67,500	827	65,571	7,649	11.67%	-14.19%	-12.93
Professor	13.5	10	65,168	79,862	67,500	1,035	83,488	18,320	21.94%	-3.45%	-12.70
Assistant Professor	4.3	3	44,786	49,385	51,983	827	50,500	5,714	11.31%	-13.84%	-12.58
Professor	13.0	10	61,444	71,256	67,500	673	73,258	11,814	16.13%	-8.97%	-12.55
Assistant Professor	2.3	3	44,795	51,029	51,983	1,039	50,347	5,552	11.03%	-13.83%	-12.43
Professor	12.5	10	66,705	83,797	67,500	1,253	86,931	20,226	23.27%	-1.18%	-12.22
Associate Professor	6.5	3	50,333	58,266	54,055	788	61,026	10,693	17.52%	-6.89%	-12.20
Professor	7.6	10	62,407	77,426	67,500	980	75,040	12,633	16.83%	-7.55%	-12.19
Associate Professor	3.5	3	49,672	58,560	54,055	962	59,064	9,392	15.90%	-8.11%	-12.00

Exhibit 1: Partial list of salary data sorted by *composite score* (Score) in ascending order.

Professor	9.5	10	64,302	79,862	67,500	1,035	79,348	15,046	18.96%	-4.74%	-11.85
Professor	7.6	10	63,653	79,862	67,500	1,035	77,342	13,689	17.70%	-5.70%	-11.70
Assistant Professor	12.5	3	48,345	51,469	51,983	669	57,825	9,480	16.39%	-7.00%	-11.70
Professor	5.5	10	61,281	75,177	67,500	962	70,851	9,570	13.51%	-9.21%	-11.36
Assistant Professor	0.4	3	44,500	50,358	51,983	725	48,437	3,937	8.13%	-14.39%	-11.26
Professor	11.5	10	63,783	75,177	67,500	962	76,622	12,839	16.76%	-5.51%	-11.13
Professor	7.6	10	63,365	77,768	67,500	1,036	75,245	11,880	15.79%	-6.13%	-10.96
Associate Professor	3.6	3	50,497	58,936	54,055	730	59,344	8,847	14.91%	-6.58%	-10.75
Professor	2.6	10	62,495	76,330	67,500	548	72,256	9,761	13.51%	-7.41%	-10.46
Assistant Professor	1.3	3	45,298	50,358	51,983	725	49,160	3,862	7.86%	-12.86%	-10.36
Professor	12.5	10	70,996	92,907	67,500	946	95,273	24,277	25.48%	5.18%	-10.15
Assistant Professor	0.4	3	44,500	49,385	51,983	827	47,194	2,694	5.71%	-14.39%	-10.05

Exhibit 1 (cont): Partial list of salary data sorted by *composite score* (Score) in ascending order.

Decompression Budget vs. Composite Score

Fiscal Year: 2008-09

Score	Total
0	\$ 460,856
-1	\$ 421,507
-2	\$ 378,637
-3	\$ 334,584
-4	\$ 289,195
-5	\$ 246,253
-6	\$ 206,003
-7	\$ 167,434
-8	\$ 132,634
-9	\$ 102,154
-10	\$ 75,618
-11	\$ 53,242
-12	\$ 34,546
-13	\$ 21,111
-14	\$ 12,205
-15	\$ 5,708
-16	\$ 2,140
-17	\$ 1,040
-18	\$ 486
-19	\$ 0
-20	\$ 0
-21	\$ 0
-22	\$ 0
-23	\$ 0
-24	\$ 0
-25	\$ 0

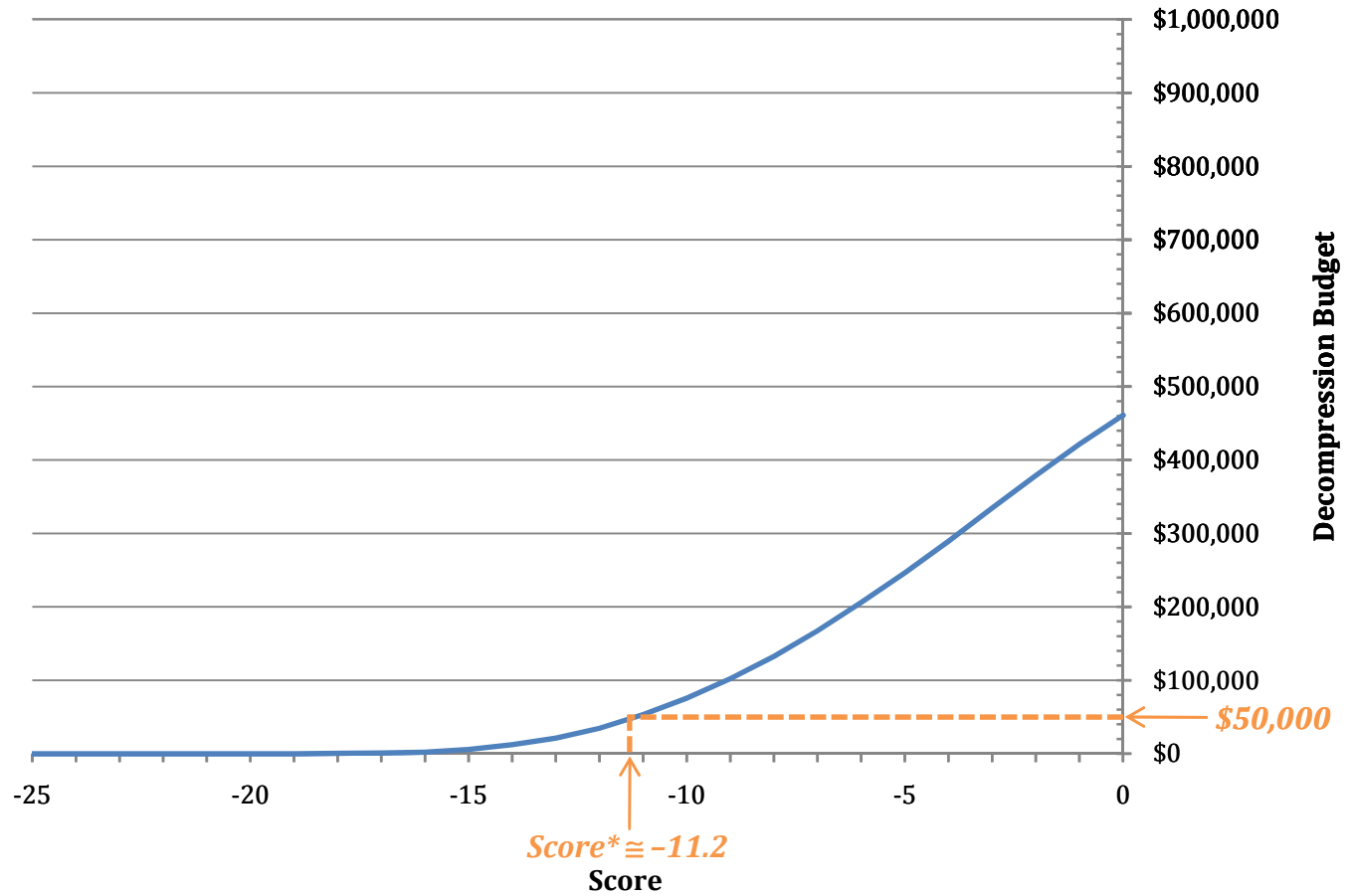


Exhibit 2: Decompression budget needed as a function of *composite score* (Score).

Decompression Pool

Fiscal Year: 2008-09

Rank	Y	S	ES	CD	%CD	%AS	Score
Assistant Professor	13.5	44,955	59,335	14,380	24.23%	-13.52%	-18.88
Professor	10.5	58,125	71,594	13,469	18.81%	-13.89%	-16.35
Associate Professor	2.6	45,133	53,847	8,714	16.18%	-16.51%	-16.34
Associate Professor	1.5	47,928	60,722	12,794	21.07%	-11.34%	-16.20
Professor	1.5	56,391	65,964	9,573	14.51%	-16.46%	-15.49
Professor	1.5	56,839	67,003	10,164	15.17%	-15.79%	-15.48
Associate Professor	4.6	49,300	63,298	13,998	22.11%	-8.80%	-15.46
Professor	1.5	58,041	69,798	11,757	16.84%	-14.01%	-15.43
Professor	0.5	57,624	67,927	10,303	15.17%	-14.63%	-14.90
Professor	1.5	58,475	69,292	10,817	15.61%	-13.37%	-14.49
Associate Professor	0.5	48,217	58,775	10,558	17.96%	-10.80%	-14.38
Associate Professor	1.5	48,083	58,396	10,313	17.66%	-11.05%	-14.35
Associate Professor	4.5	48,528	59,449	10,921	18.37%	-10.23%	-14.30
Associate Professor	1.1	45,900	52,531	6,631	12.62%	-15.09%	-13.85
Associate Professor	7.3	50,013	62,044	12,031	19.39%	-7.48%	-13.43
Professor	9.5	62,443	76,939	14,496	18.84%	-7.49%	-13.17
Associate Professor	1.5	48,083	56,620	8,537	15.08%	-11.05%	-13.06
Associate Professor	1.5	49,230	59,425	10,195	17.16%	-8.93%	-13.04
Professor	0.5	57,922	65,571	7,649	11.67%	-14.19%	-12.93
Professor	13.5	65,168	83,488	18,320	21.94%	-3.45%	-12.70
Assistant Professor	4.3	44,786	50,500	5,714	11.31%	-13.84%	-12.58
Professor	13.0	61,444	73,258	11,814	16.13%	-8.97%	-12.55
Assistant Professor	2.3	44,795	50,347	5,552	11.03%	-13.83%	-12.43
Professor	12.5	66,705	86,931	20,226	23.27%	-1.18%	-12.22
Associate Professor	6.5	50,333	61,026	10,693	17.52%	-6.89%	-12.20
Professor	7.6	62,407	75,040	12,633	16.83%	-7.55%	-12.19
Associate Professor	3.5	49,672	59,064	9,392	15.90%	-8.11%	-12.00
Professor	9.5	64,302	79,348	15,046	18.96%	-4.74%	-11.85
Professor	7.6	63,653	77,342	13,689	17.70%	-5.70%	-11.70
Assistant Professor	12.5	48,345	57,825	9,480	16.39%	-7.00%	-11.70

Exhibit 3: Candidates that meet criteria (Score ≤ -11.2) for entry into the decompression pool.

Professor	5.5	61,281	70,851	9,570	13.51%	-9.21%	-11.36
Assistant Professor	0.4	44,500	48,437	3,937	8.13%	-14.39%	-11.26

Exhibit 3 (cont): Candidates that meet criteria (Score \leq -11.2) for entry into the decompression pool.

Decompression Budget Distribution

Fiscal Year: 2008-09

Rank	Y	S	ES	CD	%CD	%AS	Score	SA	S*	CD*
Assistant Professor	13.5	44,955	59,335	14,380	24.23%	-13.52%	-18.88	4,254	49,209	10,125
Professor	10.5	58,125	71,594	13,469	18.81%	-13.89%	-16.35	3,579	61,704	9,890
Associate Professor	2.6	45,133	53,847	8,714	16.18%	-16.51%	-16.34	2,775	47,908	5,938
Associate Professor	1.5	47,928	60,722	12,794	21.07%	-11.34%	-16.20	2,861	50,789	9,933
Professor	1.5	56,391	65,964	9,573	14.51%	-16.46%	-15.49	2,859	59,250	6,714
Professor	1.5	56,839	67,003	10,164	15.17%	-15.79%	-15.48	2,880	59,719	7,284
Associate Professor	4.6	49,300	63,298	13,998	22.11%	-8.80%	-15.46	2,482	51,782	11,516
Professor	1.5	58,041	69,798	11,757	16.84%	-14.01%	-15.43	2,902	60,943	8,855
Professor	0.5	57,624	67,927	10,303	15.17%	-14.63%	-14.90	2,505	60,129	7,798
Professor	1.5	58,475	69,292	10,817	15.61%	-13.37%	-14.49	2,250	60,725	8,567
Associate Professor	0.5	48,217	58,775	10,558	17.96%	-10.80%	-14.38	1,792	50,009	8,766
Associate Professor	1.5	48,083	58,396	10,313	17.66%	-11.05%	-14.35	1,771	49,854	8,542
Associate Professor	4.5	48,528	59,449	10,921	18.37%	-10.23%	-14.30	1,754	50,282	9,167
Associate Professor	1.1	45,900	52,531	6,631	12.62%	-15.09%	-13.85	1,415	47,315	5,216
Associate Professor	7.3	50,013	62,044	12,031	19.39%	-7.48%	-13.43	1,291	51,304	10,740
Professor	9.5	62,443	76,939	14,496	18.84%	-7.49%	-13.17	1,414	63,857	13,082
Associate Professor	1.5	48,083	56,620	8,537	15.08%	-11.05%	-13.06	1,030	49,113	7,507
Associate Professor	1.5	49,230	59,425	10,195	17.16%	-8.93%	-13.04	1,042	50,272	9,152
Professor	0.5	57,922	65,571	7,649	11.67%	-14.19%	-12.93	1,149	59,071	6,500
Professor	13.5	65,168	83,488	18,320	21.94%	-3.45%	-12.70	1,119	66,287	17,201
Assistant Professor	4.3	44,786	50,500	5,714	11.31%	-13.84%	-12.58	707	45,493	5,007
Professor	13.0	61,444	73,258	11,814	16.13%	-8.97%	-12.55	948	62,392	10,866
Assistant Professor	2.3	44,795	50,347	5,552	11.03%	-13.83%	-12.43	628	45,423	4,924
Professor	12.5	66,705	86,931	20,226	23.27%	-1.18%	-12.22	777	67,482	19,449
Associate Professor	6.5	50,333	61,026	10,693	17.52%	-6.89%	-12.20	576	50,909	10,117
Professor	7.6	62,407	75,040	12,633	16.83%	-7.55%	-12.19	704	63,111	11,929
Associate Professor	3.5	49,672	59,064	9,392	15.90%	-8.11%	-12.00	454	50,126	8,937
Professor	9.5	64,302	79,348	15,046	18.96%	-4.74%	-11.85	474	64,776	14,572
Professor	7.6	63,653	77,342	13,689	17.70%	-5.70%	-11.70	360	64,013	13,329
Assistant Professor	12.5	48,345	57,825	9,480	16.39%	-7.00%	-11.70	272	48,617	9,209

Exhibit 4: Salary adjustments (SA), revised salary (S*), and revised compression differential (CD*).

Professor	5.5	61,281	70,851	9,570	13.51%	-9.21%	-11.36	111	61,392	9,459
Assistant Professor	0.4	44,500	48,437	3,937	8.13%	-14.39%	-11.26	31	44,531	3,906

Exhibit 4 (cont): *Salary adjustments (SA), revised salary (S*), and revised compression differential (CD*).*