

**North Carolina
Office of State Personnel**

**Performance Management
Report No. 18 (2006)**
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Performance Management Report No. 18 (2006)

Introduction

A report on the administration of the performance management system is required by North Carolina GS 126-7(9).¹ This report covers the performance management cycle that began on July 1, 2005 and ended on June 30, 2006 (Cycle 18).

At the end of Cycle 18, human resources managers in each of the executive branch agencies, the University of North Carolina system, and all boards and commissions subject to the State Personnel Act (with the exception of those employing fewer than 25 people) entered Cycle 18 performance appraisal ratings into the Personnel Management Information System (PMIS). Using the PMIS data, the Office of State Personnel tallied and analyzed the annual ratings.

In this cycle 87,739 permanent state employees were subject to the provisions of the performance management program. This report is based on the appraisal ratings of these employees.

Executive Summary

In 2006, 79,081 state government employees received annual appraisal ratings. Overall, ratings were positively skewed – 32% of employees received an “outstanding” rating, 52% were rated “very good,” 16% were rated “good,” and less than 1% were rated “below good” or “unsatisfactory” or received a warning. The distribution of ratings has remained highly consistent over the past several years.

Just under 10% of employees subject to the State Personnel Act – 8,658 employees – did not receive ratings in 2006. This is a slight increase in the number of employees not rated over 2005 when 9.2% were not rated. The dominant reason for employees not being rated was insufficient time in position.

There were race and sex differences in performance ratings. White females received the highest ratings, followed by white males, “other” females, “other” males, black females, and black males. Although the sex and race differences in ratings are certainly visible, the standard test for determining disparate impact did not reveal substantial differences this year, or in any of the preceding four years. Further analysis of the reasons for these differences, however, would be prudent.

Other demographic differences highlighted in prior reports still hold true.

- On average, older employees received higher ratings.
- Performance ratings rose with salary grade.
- Ratings also increased with length of service. However, the average service time of employees who received “below good” or “unsatisfactory” ratings, or a warning, was higher than the service time of employees receiving a “good” rating, suggesting that poor performance can “strike” at any time during an employee’s career.
- There were virtually no differences between the performance ratings of disabled employees and those of able employees.

The type of work performed (i.e., occupation) and where it is performed (i.e., agency / university) make a substantial difference in how employees are rated.

- Among the larger occupational groups, legal, administrative, and management employees' and clerical and office services employees' ratings are skewed toward the positive end of the scale. In contrast, licensing, inspection, and public safety employees' ratings are much less positive.
- Some agencies are quite stringent and give out very few "outstanding" ratings (e.g., 12% in Corrections) while others are more lenient (e.g., 50% in Agriculture). Within the universities there are also dramatic differences in ratings distributions.

How well does performance management, as it is practiced in North Carolina state government, stimulate high performance? To answer this question, this report tracked what happened in 2006 to employees who received ratings in 2005. The findings:

- State government is doing a fairly good job of retaining top performers while turning over poor performers. There is a positive relationship between performance and retention. For example, the turnover rate for "outstanding" performers is 12% while poor performers turn over at a rate of 37%.
- Performance above the "good" level tends to be sustained over time. "Very good" and "outstanding" performers in 2005 were very likely to be "very good" and "outstanding" performers the following year.
- A "good" rating tended to stimulate action on the part of the employee. Although many (42%) remained "good," 34% improved their performance, and 20% left state government.
- "Below good" and "unsatisfactory" ratings and warnings definitely stimulate action: 37% of employees receiving these ratings left state employment by the following year and 47% improved their performance – some dramatically so. Curiously, 13% remained employed and continued to perform poorly. Investigation of this last finding is in order.

GS 126-7 requires salary increases to be made "... based upon the individual performance of each State employee." Does it happen? This report addressed this question by looking at the relationship between performance ratings and changes in base salary from the beginning to the end of calendar year 2006. The findings:

- Including the 5.5% across-the-board legislative increase, "outstanding" performers gained 8.4% in their base salary, "very good" performers' salaries increased 8.1%, "good" performers gained 7.8%, and poor performers' salaries were given a 7.0% boost.
- The correlation between percent change in base salary and performance rating, across the state government workforce, was 0.03. In practical terms, this means there was no relationship.
- The correlation between pay and performance varied dramatically from one agency and university to another. State agencies would be well advised to strive to achieving solid, positive correlations between pay and performance in order to make sound use of scarce compensation dollars and to foster a performance culture.

Distribution of Performance Ratings

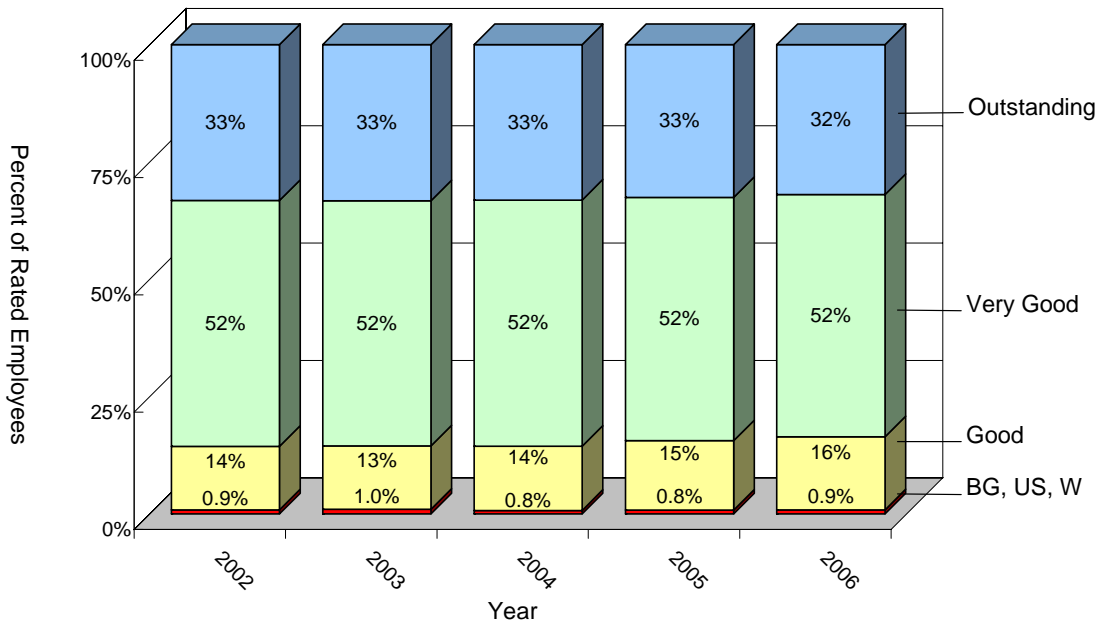
The State of North Carolina performance management system uses a five-point rating scale (“outstanding,” “very good,” “good,” “below good,” “unsatisfactory”). Because very few ratings fall into the lowest two categories – “below good” and “unsatisfactory” – these two categories are combined for purposes of this report. In addition, some employees receive a warning but no rating; for purposes of this analysis, warnings are grouped with the lowest two ratings.

In the 2006 cycle, 87,739 state employees received performance appraisal ratings, which amounts to 90.1% of those subject to the State Personnel Act. One-third of the appraised employees received an “outstanding,” slightly more than half were rated “very good,” and sixteen percent received a “good” rating. Less than one percent received either a “below good” or “unsatisfactory” or received a warning.

Figure 1 shows the distribution of ratings in 2006 compared to the distributions for each of the four preceding years. There is a high degree of stability across cycles – the percentages have varied only slightly from year to year.

Figure 1

Distribution of Performance Ratings, 2002-2006
State Government Workforce



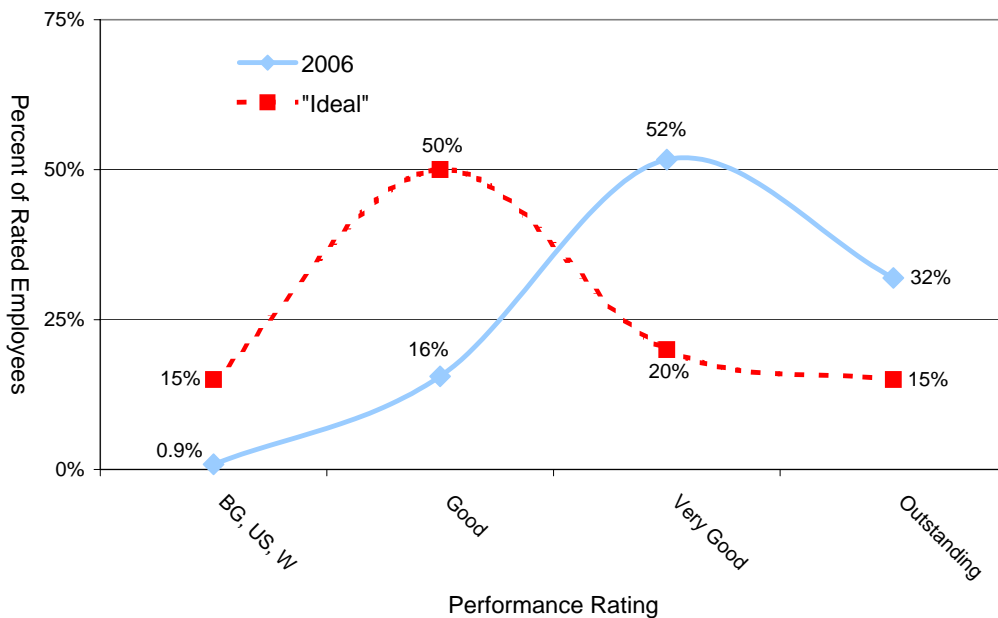
There is much discussion among human resources professionals concerning what a “proper” distribution of ratings should look like. In reality, in most organizations, ratings tend to be skewed, or “inflated,” with many more employees rated at the higher end of the scale than at the lower. It is generally accepted that, if a performance management system is based on the setting of goals and measurement of results achieved, the distribution of ratings will reflect the quality of work done. Some argue that this suggests ratings, if accurately done, should be distributed normally, like a bell-shaped curve.

However, the purpose of human resource management (HRM) systems is usually to ensure that only highly qualified employees are hired and that their performance is optimized through effective performance management and compensation practices. Thus if performance ratings were distributed in a truly normal fashion, it would suggest that the organization's HRM practices have failed. Nonetheless, it is also granted that most performance appraisal ratings are prone to error and bias, which are exacerbated when employees perform jobs that are inherently difficult to measure.

All of this is prelude to presenting Figure 2 comparing the actual distribution of ratings in 2006 with an "ideal" curve. The ideal distribution assumes that the majority of employees (50%) will meet expectations and that 35% will exceed expectations while 15% will fall short. This chart is presented only as a reminder that ratings often do tend to be inflated and that agencies should continue to strive toward accurate, honest, unbiased ratings of employees.

Figure 2

Actual vs. "Ideal" Distribution of Performance Ratings, 2006
State Government Workforce



Employees Not Rated

Inevitably, each year a number of employees do not receive ratings. In 2006, 8,658 state employees subject to the State Personnel Act did not receive ratings. This percentage – 9.9% – is slightly higher than in preceding years (2005: 9.2%, 2004: 9.4%, 2003: 8.0%, and 2002: 7.0%).

In the current cycle, of the 8,658 employees who were not rated, 64.4% were not rated due to "insufficient time" (i.e., the employees had not been in position or under the evaluating supervisor long enough to receive a rating) while 1.1% were on leave without

pay (“LWOP”). The remaining unrated employees were classified as either “blank” (32.5%) or “not done” (2.1%).

Performance and Demographics

Race and Sex

The race and sex composition of the state workforce has remained fairly constant across the past five cycles. Figures for 2006 are presented in Table A. Males and females are about equally represented. Whites make up about two-thirds while blacks comprise slightly less than one-third of the workforce; there are (proportionally) small numbers of American Indians, Asians, and Hispanics.

Table A
Race and Sex Composition of
State Government Workforce, 2006

	<i>Male</i>	<i>Female</i>	<i>Totals</i>
White	32,033	26,287	58,320
Black	10,368	15,525	25,893
Hispanic	479	451	930
Asian	612	686	1,298
American Indian	780	518	1,298
Totals	44,272	43,467	87,739

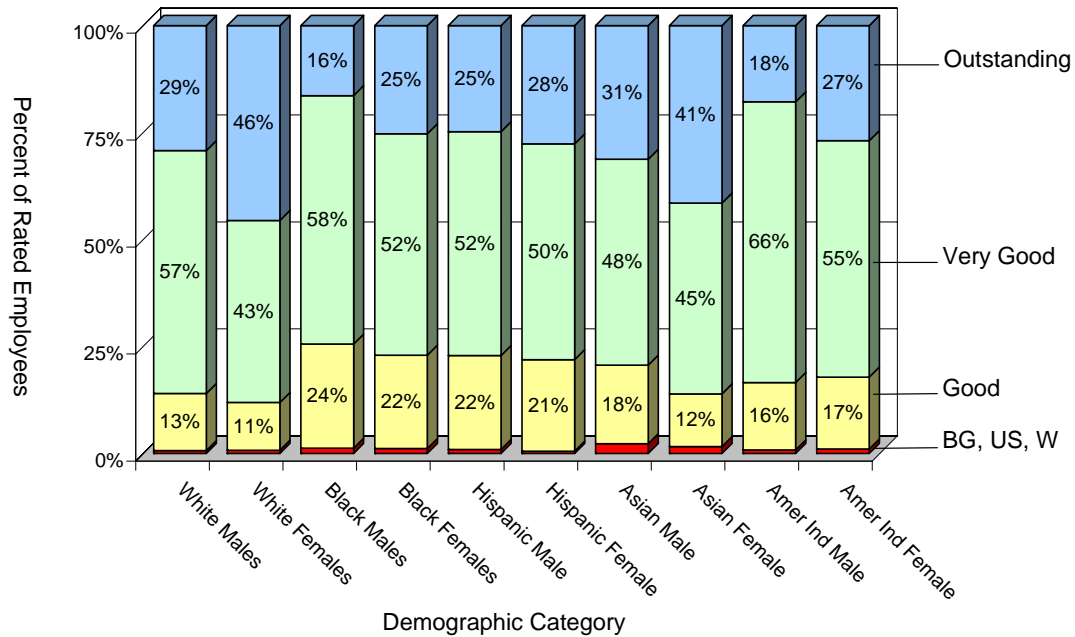
Race and Sex Composition of State
Government Workforce, 2006 (Percentages)

	<i>Male</i>	<i>Female</i>	<i>Group %s</i>
White	36.5%	30.0%	66.5%
Black	11.8%	17.7%	29.5%
Hispanic	0.5%	0.5%	1.1%
Asian	0.7%	0.8%	1.5%
American Indian	0.9%	0.6%	1.5%
Group %s	50.5%	49.5%	

The 2006 distribution of ratings by race and sex is presented in Figure 3. There are considerable differences among the distributions. White females have the highest percentage of “outstanding” and the lowest percentage of “good” ratings. In contrast, black males have the lowest percentage of “outstanding” and highest percentage of “good” ratings.

Figure 3

**Distribution of Ratings by Race and Sex, 2006
State Government Workforce**



Because of the small numbers of American Indians, Asians, and Hispanics relative to the numbers of whites and blacks in the state workforce, the distributions for these smaller groups should be viewed with caution. Nonetheless, although the percentages of other races are small, the numbers are not trivial: 930 Hispanics, 1,298 Asians, and 1,298 American Indians were rated in 2006. Asian females received the highest percentage of “outstanding” and the lowest percentage of “good” ratings, while American Indian males received the fewest “outstanding” ratings.

What accounts for these black-white, male-female differences?

1. One possibility is evaluation bias – raters favor one group over another irrespective of actual performance.
2. A second is that there may be legitimate differences in performance between the groups.
3. And a third possibility is that the sexes and races are not randomly distributed across all positions or across agencies, and that these factors – the kind of work people do and the environment in which they do it – substantially affect how well they perform or are perceived to perform.

To illustrate this third possibility: A disproportionately large number of black males are employed as prison guards in the Department of Corrections. Prison guard is a difficult, demanding job, one that is not forgiving of errors. The Department of Corrections evaluates its employees more stringently than other departments. Thus, the non-random gravitation of black males into exacting positions in a department where evaluations are rigorously done would tend to skew the overall distribution of ratings.

In contrast, a disproportionately large number of white females work in clerical positions. Employees in clerical positions tend to receive more positive ratings than people in most other occupations.

It is beyond the scope of this report to sort out these complex correlations. A separate research project is suggested. In order to better understand the race and sex differences in performance evaluation ratings, such a project is recommended.

Race and Sex – Disparate Impact Analysis

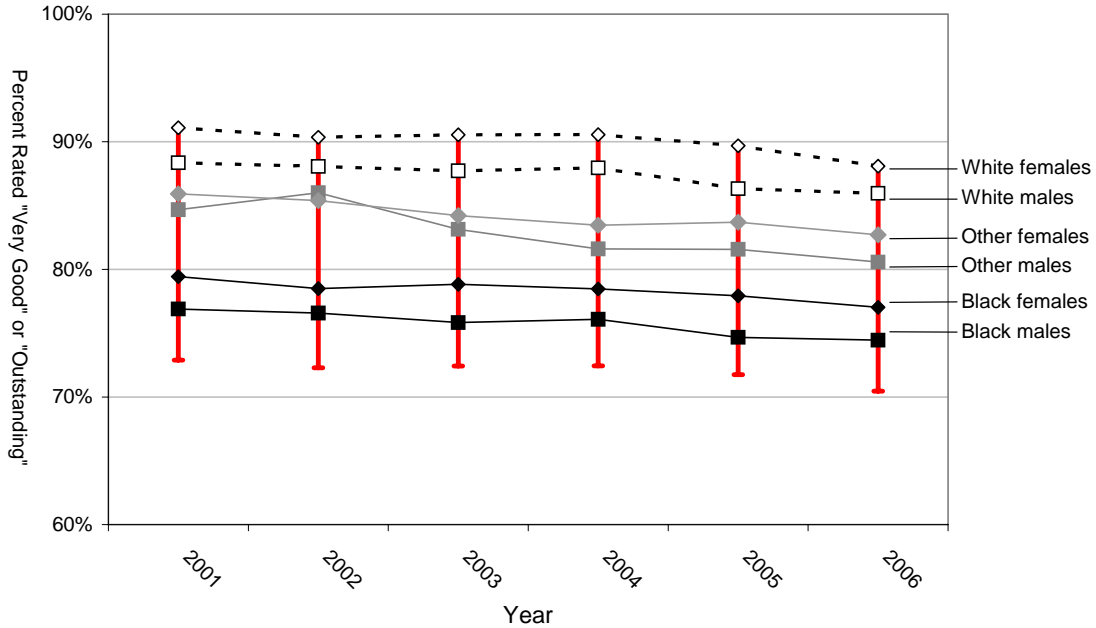
Does the performance management system have a disparate impact on any one race-sex group? On average, black males received lower ratings than other groups. But is this difference substantial (that is, is it big enough to be a concern) and is it systematic (that is, does it persist over time)?

To determine if the difference is *substantial*, we apply the four-fifths rule suggested by the Equal Employment Opportunity Commission.² According to this rule of thumb, if the rate for the group in question is less than four-fifths (80%) of the rate for the most successful group, a potential disparity exists. This rule was originally applied to selection ratios (applicants hired in relation to applicants considered); in the present analysis, it is applied to the percentage of employees rated “very good” or “outstanding” in relation to all employees rated.

In 2006, 88.1% of white female employees who received ratings were rated “very good” or “outstanding.” They were the highest rated group.³ Four-fifths of 88.1% is 70.5%. Thus, if any group’s percentage falls below 70.5%, it would be evidence of potential disparate impact. [Figure 4](#) displays this analysis graphically. The red bracket extending down from the white-female data point represents the range within which, according to the four-fifths rule, a difference would *not* be considered evidence of a potential disparity. A group’s data point would have to fall *below* this bracket to suggest disparate impact. Looking at the 2006 data, all groups’ data points fall *within* the bracket, suggesting the performance management systems does not have disparate impact on any of the race-sex categories.

Figure 4

Disparate Impact Analysis: Percent Rated "Very Good" or "Outstanding"
by Race and Sex, 2001-2006 - State Government Workforce



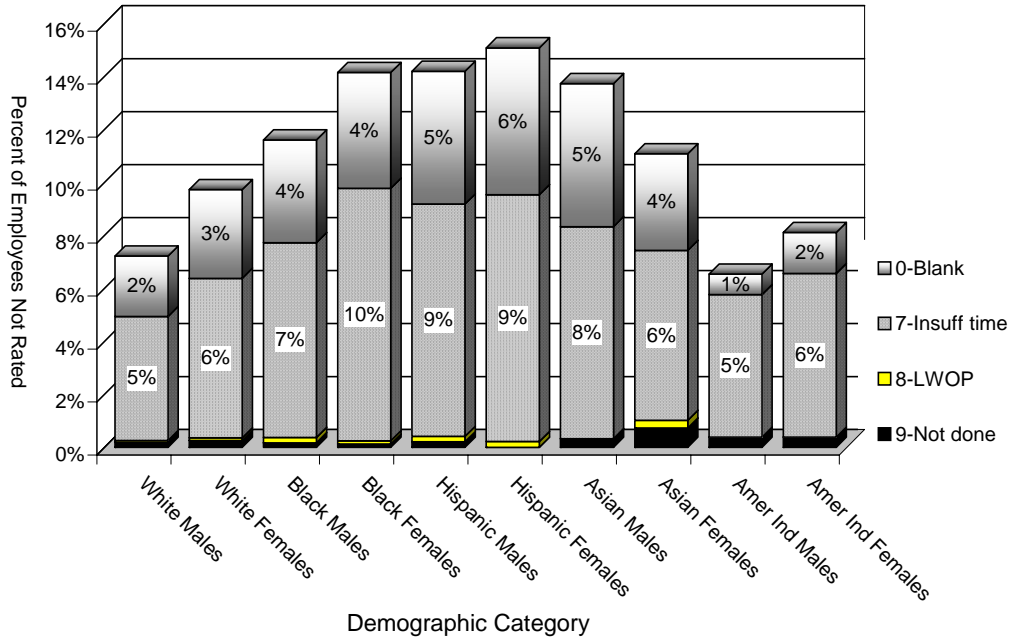
To determine if any difference is *systematic*, previous Performance Management Reports have adopted the following convention: If a potential disparity persists across three consecutive cycles, it should be regarded as a disparity warranting investigation. Since there is no potential disparity in the 2006 data, this step of the analysis is not required. Furthermore, it will be noted in [Figure 4](#) that none of the groups' data points has fallen outside of the four-fifths brackets in any of the preceding five years.

Effect of Employee Race and Sex on Not Receiving a Rating

Was any race or sex group more likely to *not* receive a rating in 2006? A total of 8,658 permanent state employees did not receive a rating – 9.9% of employees eligible to be rated. Only 7.2% of white males did not receive a rating, while 9.7% of white females, 10.9% of other males, 11.2% of other females, 11.6% of black males, and 14.1% of black females were not rated. [Figure 5](#) shows the distribution of reasons for not being rated. In this chart, the “other” category is broken out into its constituent categories. Their numbers appear to fluctuate widely but it should be remembered that the numbers in these categories are much smaller and thus less stable statistically than the larger categories' numbers. “Insufficient time” was the dominant reasons across the board.

Figure 5

**Distribution of "Not Rated" by Race and Sex, 2006
State Government Workforce**



Age

Table B shows how age groups are represented within the state workforce. The largest groups are those in the 30- to 59-year-old range. Translating age ranges to generations, Baby Boomers (currently 42 to 60 years old) make up approximately 60% of the workforce. The Silent Generation, or Late Career Employees (61 years old and up) account for around 6%. Generation Xers (30 to 40 years of age) comprise about 23% of employees. And the youngest group, Generation Y or Echo Boomers (under 30 years old), account for about 11%.

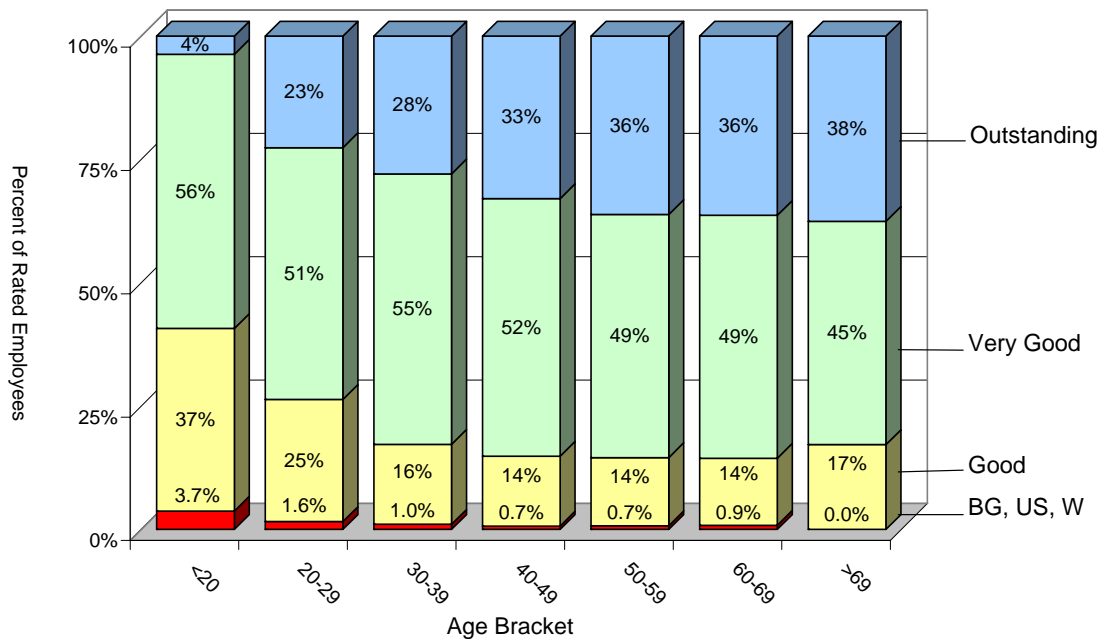
**Table B
Age of State Government Workforce, 2006**

Age	Number of Employees	Percentage	Generation
<20	54	0.1%	Generation Y
20-29	9,864	11.2%	
30-39	20,501	23.4%	Generation X
40-49	27,682	31.6%	Baby boom
50-59	24,417	27.8%	
60-69	4,989	5.7%	Silent generation
>69	232	0.3%	
	87,739		

An age-related performance trend is fairly clear, as can be seen in [Figure 6](#). The percentage of “outstanding” ratings increases steadily from the youngest group and levels off with those employees in their fifties and sixties. “Very good” ratings remain at very high levels throughout the age span, peaking with the thirties group and declining somewhat with the oldest group. The youngest group received a rather large number of “good” ratings, but as groups age the number of “good” ratings declines. These very regular trends suggest that the age differences in performance level are due more to chronological age and experience than to generational membership.

Figure 6

Distribution of Appraisal Ratings by Age, 2006
State Government Workforce



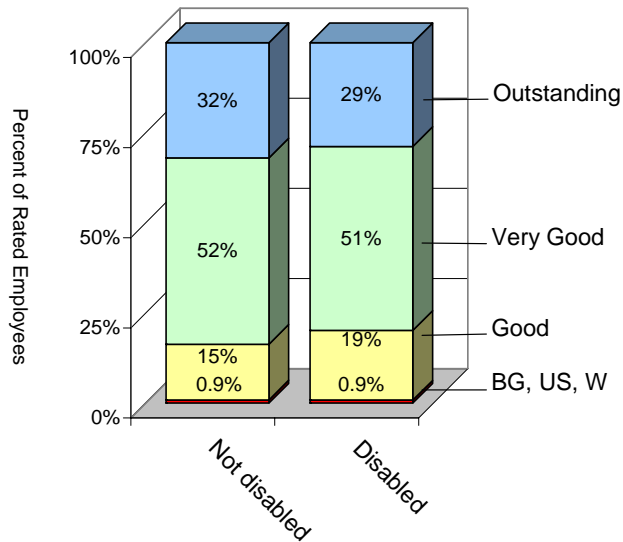
Disability

Within the state workforce in 2006, 1,909 employees identified themselves as disabled. This amounted to 2.2% of the total workforce. Of the disabled state employees, 9.5% did not receive ratings, a proportion that is in line with the total number of employees that were not rated.

[Figure 7](#) compares the distribution of ratings for disabled employees with the distribution for able employees. The two distributions coincide almost perfectly, indicating that disabled employees were evaluated no differently than able employees.

Figure 7

Distribution of Appraisal Ratings by Disability, 2006
State Government Workforce



Salary Grade

Table C shows how many employees fall into each of the salary-grade ranges.

Table C
State Government Workforce Salary Grades

Salary Grade	Number of Employees	Percentage	Percentage
FR/NG	13,800	15.7%	15.7%
50-54	3,580	4.1%	20.4%
55-59	14,285	16.3%	
60-64	22,022	25.1%	45.2%
65-69	17,597	20.1%	
70-74	10,198	11.6%	17.0%
75-79	4,704	5.4%	
80-96	1,553	1.8%	1.8%
	87,739		

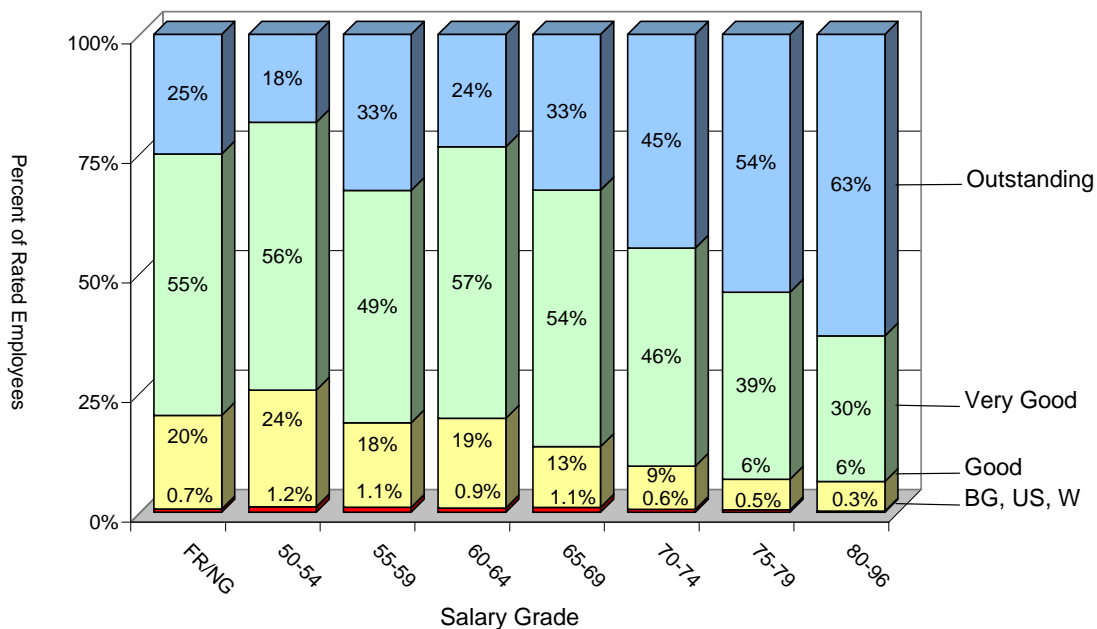
- The flat-rate / no grade salary group, making up 15.7% of the state workforce, consists mainly of apprentices or persons with skills difficult to recruit into state government.

- The 50-54 and 55-59 salary grades, representing 20.4% of the workforce, consist of clerical and semi-skilled workers. Employees in these grades include clerks, housekeepers, food-service workers, and healthcare technicians.
- The 60-64 and 65-69 salary grades – the largest of the salary groups, representing 45.2% of all employees – consist of entry-level professionals and paraprofessionals. This group includes technicians, administrative assistants, and law enforcement personnel.
- The 70-74 and 75-79 salary grades, representing 17.0% of the workforce, consist of higher-level professionals and some managers. Analysts, consultants, and program managers are typically found in these grades.
- The 80-96 salary grades, making up only 1.8% of the total workforce, are primarily physicians, physician supervisors, dentists, assistant department secretaries, commissioners, and agency heads.

In general, as can be seen in [Figure 8](#), employees at higher salary grades were rated higher. The number of “outstanding” ratings increases dramatically from the 50-54 salary-grade group, where 18% of employees received the highest rating, to the 80-96 salary-grade group, where 63% of employees received “outstanding” ratings.

Figure 8

Distribution of Appraisal Ratings by Salary Grade, 2006
State Government Workforce



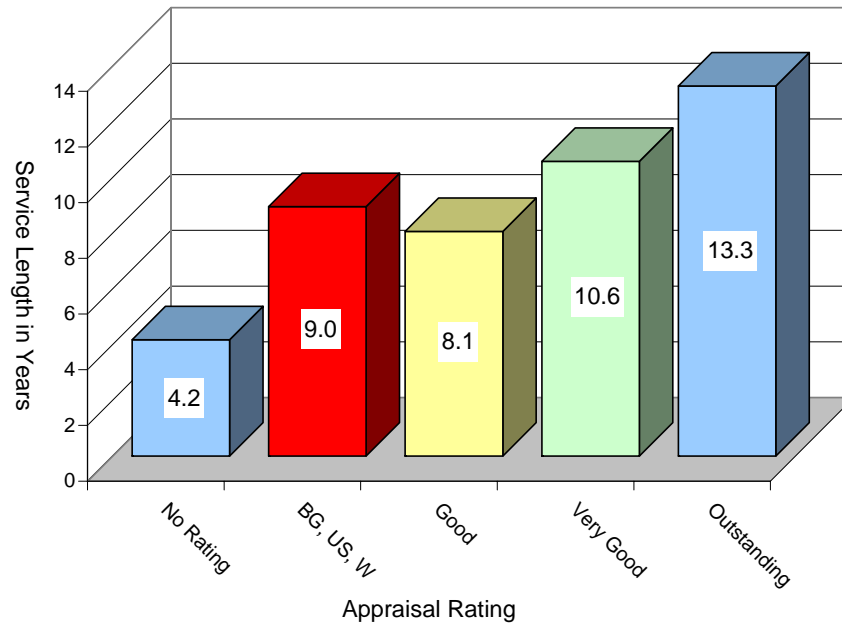
The most populous group, the 60-64 salary-grade range, making up more than a quarter of the state workforce, received 24% “outstanding,” 57% “very good,” and 19% “good” ratings. Less than 1% of the employees in this group received either “below good” or “unsatisfactory” ratings or a warning.

Length of Service

Figure 9 shows the relationship between length of service and evaluation rating. For the top three points on the rating scale, there is a clear linear trend: the longer an employee's service time, the higher the evaluation rating. This linear trend does not extend to the lowest rating category, however. Employees receiving "below good" or "unsatisfactory" ratings, or a warning, had slightly more service time than employees receiving "good" ratings. Employees who were not rated have the least amount of service time.

Figure 9

Average Service Length (in Years) by Appraisal Rating, 2006
State Government Workforce



Occupation

This subsection and the one that follows highlight two factors that make a dramatic difference in how employees are rated: the jobs they perform (i.e., occupation) and the environment or culture in which they perform their jobs (i.e., agency or university).

There are fourteen occupational groups within the state workforce. With more than 16,000 employees, the licensing, inspection, and public safety occupational group is the largest, accounting for 20% of the workforce. The clerical and office services group has over 14,000 employees, accounting for 16% of state employees. [Table D](#) lists the occupational groups along with the size and ratings distribution for each.

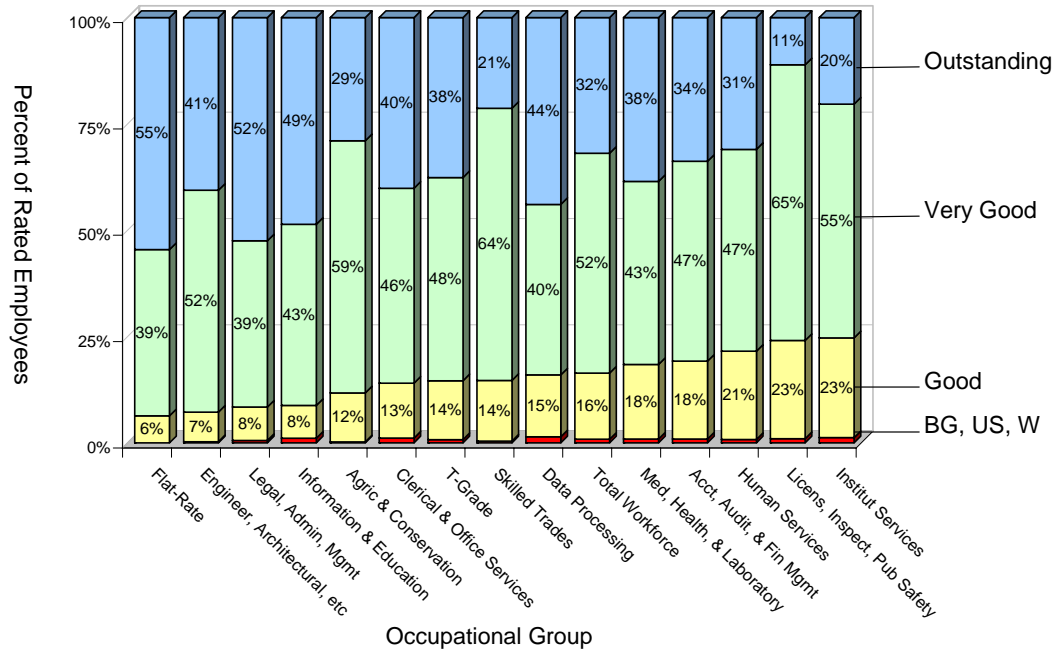
**Table D
Distribution of Ratings by Occupation, 2006**

Occupation	Employees			Performance Ratings				Employees Not Rated	
	Number	% of State Work force	Number Rated	% BG, US, W	% Good	% Very Good	% Out-standing	Number Not Rated	% Not Rated
Licens, Inspect, Pub Safety	17,694	20%	15,107	1%	23%	65%	11%	2,587	15%
Clerical & Office Services	14,308	16%	13,037	1%	13%	46%	40%	1,271	9%
Skilled Trades	8,849	10%	8,523	0%	14%	64%	21%	326	4%
T-Grade	7,350	8%	6,503	1%	14%	48%	38%	847	12%
Med, Health, & Laboratory	6,529	7%	5,938	1%	18%	43%	38%	591	9%
Data Processing	6,207	7%	5,649	1%	15%	40%	44%	558	9%
Engineer, Architectural, etc	5,880	7%	5,682	0%	7%	52%	41%	198	3%
Legal, Admin, Mgmt	5,166	6%	4,821	1%	8%	39%	52%	345	7%
Institutional Services	3,909	4%	3,449	1%	23%	55%	20%	460	12%
Human Services	3,715	4%	3,415	1%	21%	47%	31%	300	8%
Information & Education	3,076	4%	2,746	1%	8%	43%	49%	330	11%
Acct, Audit, & Fin Mgmt	2,523	3%	2,384	1%	18%	47%	34%	139	6%
Agric & Conservation	1,824	2%	1,717	0%	12%	59%	29%	107	6%
Flat-Rate	709	1%	110	0%	6%	39%	55%	599	84%
Total	87,739		79,081	1%	16%	52%	32%	8,658	10%

Figure 10 shows the distribution of performance ratings for all the occupational groups. What is noteworthy is the dramatic contrast in the shapes of the occupational groups' ratings distributions. Some distributions are heavily skewed toward the positive end of the rating scale. For example, 86% of employees in clerical and office services group received "very good" or "outstanding" ratings. Even more positively skewed are the distributions of the agriculture and conservation group; information and education group; the legal, administrative, and management group; and the engineer, architectural, etc., group. In these groups, 88% to 93% of employees received "very good" or "outstanding" ratings. The licensing, inspection, and public safety group's distribution presents a very different profile. Only 11% of employees in this group received "outstanding" ratings, the lowest percentage of "outstanding" ratings for any of the occupational groups. It is clear that the type of job performed (or some variable closely correlated with occupation) profoundly affects how an employee's performance is rated.

Figure 10

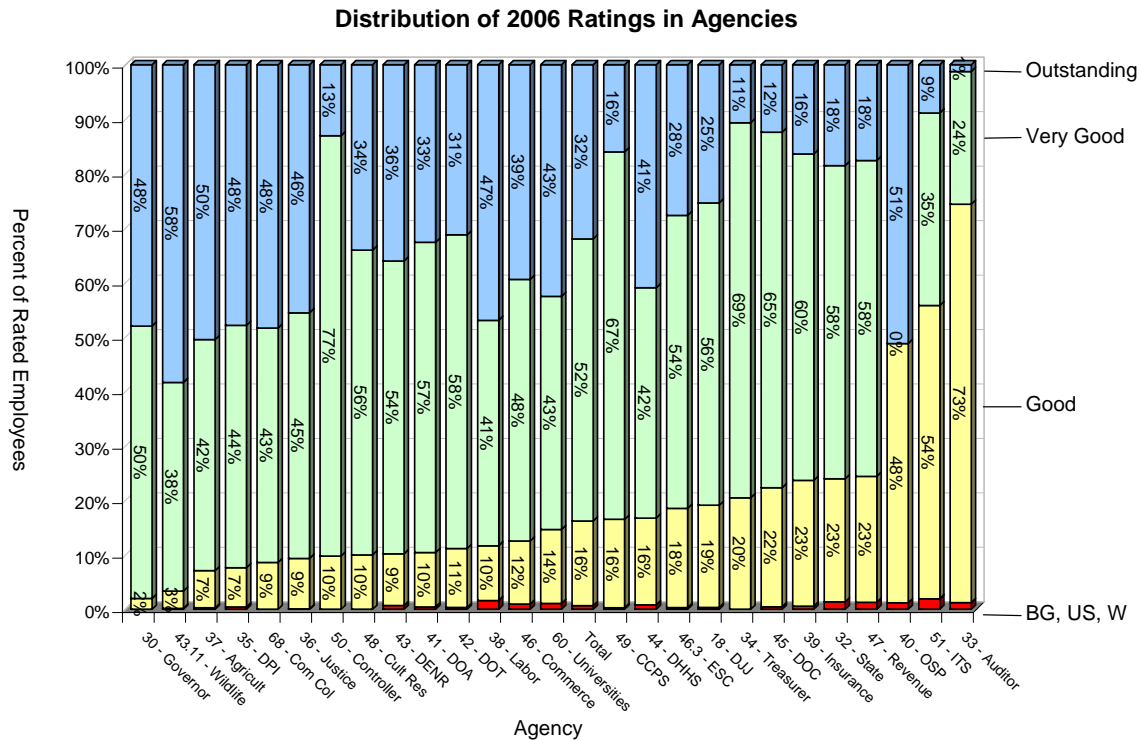
**Distribution of Appraisal Ratings by Occupation, 2006
State Government Workforce**



Agency

Place also makes a difference. Twenty-nine agencies and eighteen universities are covered in this report. Figure 11 shows the distribution of ratings for the 26 agencies in which more than 50 employees received ratings. The universities are grouped together as a single data series in this figure and the “total” statewide statistics are also shown.

Figure 11



In the largest agencies, more positive ratings are the norm in Transportation (where 89% were rated either “outstanding” or “very good”), the Universities (85%), and Health and Human Services (83%). Less positive ratings prevail at Corrections (78%). As a point of comparison, 84% of the entire state workforce received either an “outstanding” or a “very good” rating.

Looking at all the agencies displayed in this figure, it is apparent that different agencies take very different approaches to performance appraisal, whether as a matter of policy (some agencies perhaps encouraging lenient ratings and others, a more strict approach to appraisals) or as a reflection of the very different types of work performed within. At one extreme there is the Auditor’s office, with 1% “outstanding” and 73% “good,” while at Wildlife more than half the rated employees received “outstanding” appraisals.

Table E shows the data in tabular format for all agencies. Included in the table are the percentages of employees who did not receive ratings. Some agencies have a noticeably high incidence of no ratings. Table F breaks out the “not rated” data based on the reasons employees were not rated.

**Table E
Distribution of Ratings by Agency**

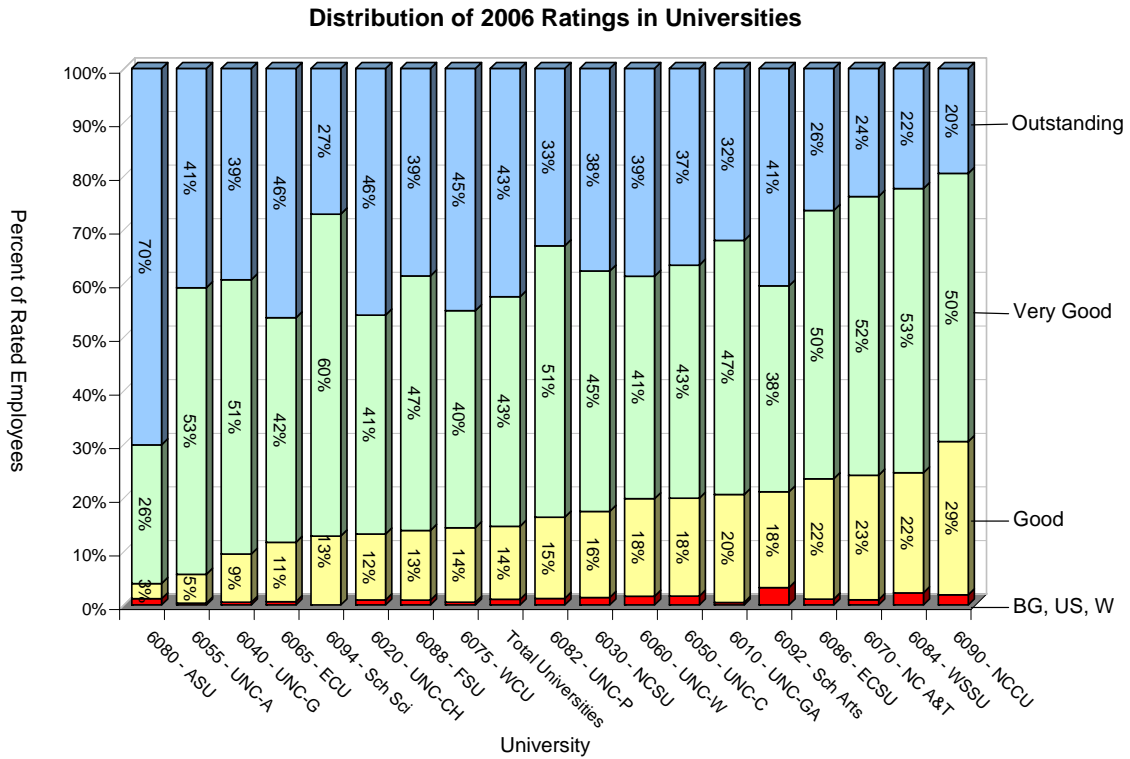
Agency	Employees		Number of Employees Rated	Evaluation Ratings				Employees Not Rated	
	Number	% of State Work force		BG, US, W	Good	Very Good	Outstanding	Number Not Rated	% Not Rated
60 - Universities	21,129	24.1%	18,968	1.1%	14%	43%	43%	2,161	10%
45 - DOC	18,734	21.4%	15,732	0.5%	22%	65%	12%	3,002	16%
44 - DHHS	16,578	18.9%	14,750	0.8%	16%	42%	41%	1,828	11%
42 - DOT	12,373	14.1%	12,036	0.3%	11%	58%	31%	337	3%
43 - DENR	3,538	4.0%	3,370	0.7%	9%	54%	36%	168	5%
49 - CCPS	2,691	3.1%	2,519	0.3%	16%	67%	16%	172	6%
46.3 - ESC	1,561	1.8%	1,493	0.3%	18%	54%	28%	68	4%
18 - DJJ	1,620	1.8%	1,435	0.3%	19%	56%	25%	185	11%
47 - Revenue	1,363	1.6%	1,285	1.3%	23%	58%	18%	78	6%
36 - Justice	1,173	1.3%	1,131	0.1%	9%	45%	46%	42	4%
37 - Agricult	1,218	1.4%	1,127	0.3%	7%	42%	50%	91	7%
41 - DOA	744	0.8%	709	0.4%	10%	57%	33%	35	5%
48 - Cult Res	678	0.8%	620	0.0%	10%	56%	34%	58	9%
46 - Commerce	685	0.8%	614	1.0%	12%	48%	39%	71	10%
43.11 - Wildlife	599	0.7%	564	0.2%	3%	38%	58%	35	6%
35 - DPI	528	0.6%	445	0.4%	7%	44%	48%	83	16%
51 - ITS	425	0.5%	407	2.0%	54%	35%	9%	18	4%
38 - Labor	390	0.4%	377	1.6%	10%	41%	47%	13	3%
39 - Insurance	382	0.4%	342	0.6%	23%	60%	16%	40	10%
34 - Treasurer	307	0.3%	244	0.0%	20%	69%	11%	63	21%
33 - Auditor	177	0.2%	164	1.2%	73%	24%	1%	13	7%
68 - Com Col	158	0.2%	151	0.0%	9%	43%	48%	7	4%
32 - State	156	0.2%	146	1.4%	23%	58%	18%	10	6%
50 - Controller	94	0.1%	92	0.0%	10%	77%	13%	2	2%
40 - OSP	88	0.1%	84	1.2%	48%	0%	51%	4	5%
30 - Governor	60	0.1%	50	0.0%	2%	50%	48%	10	17%
Total	87,739		78,917	0.7%	16%	52%	32%	8,822	10%

**Table F
Reasons Employees Not Rated, Sorted by Agency**

<i>Agencies</i>	<i>Number of Employees Not Rated</i>	<i>% of Employees Not Rated</i>	<i>0 - Blank</i>	<i>7 - Insuff Time</i>	<i>8 - LWOP</i>	<i>9 - Not Done</i>
18 - DJJ	185	11.4%	52.4%	45.9%	1.1%	0.5%
30 - Governor	10	16.7%	100.0%	0.0%	0.0%	0.0%
31 - Lt Gov	7	100.0%	100.0%	0.0%	0.0%	0.0%
32 - State	10	6.4%	30.0%	70.0%	0.0%	0.0%
33 - Auditor	13	7.3%	7.7%	92.3%	0.0%	0.0%
34 - Treasurer	63	20.5%	93.7%	6.3%	0.0%	0.0%
35 - DPI	83	15.7%	19.3%	79.5%	1.2%	0.0%
36 - Justice	42	3.6%	11.9%	88.1%	0.0%	0.0%
37 - Agricult	91	7.5%	56.0%	41.8%	2.2%	0.0%
38 - Labor	13	3.3%	0.0%	100.0%	0.0%	0.0%
39 - Insurance	40	10.5%	25.0%	62.5%	12.5%	0.0%
40 - OSP	4	4.5%	0.0%	100.0%	0.0%	0.0%
41 - DOA	35	4.7%	17.1%	82.9%	0.0%	0.0%
42 - DOT	337	2.7%	77.2%	20.2%	2.4%	0.3%
43 - DENR	168	4.7%	4.8%	93.5%	1.8%	0.0%
43.11 - Wildlife	35	5.8%	2.9%	97.1%	0.0%	0.0%
44 - DHHS	1,828	11.0%	29.9%	66.5%	0.6%	3.0%
45 - DOC	3,002	16.0%	8.8%	88.8%	0.5%	1.9%
46 - Commerce	71	10.4%	66.2%	33.8%	0.0%	0.0%
46.3 - ESC	68	4.4%	1.5%	98.5%	0.0%	0.0%
47 - Revenue	78	5.7%	17.9%	71.8%	9.0%	1.3%
48 - Cult Res	58	8.6%	0.0%	98.3%	1.7%	0.0%
49 - CCPS	172	6.4%	2.9%	74.4%	0.0%	22.7%
50 - Controller	2	2.1%	0.0%	100.0%	0.0%	0.0%
51 - ITS	18	4.2%	16.7%	83.3%	0.0%	0.0%
68 - Com Col	7	4.4%	14.3%	71.4%	14.3%	0.0%
80 - Brd Elect	45	100.0%	100.0%	0.0%	0.0%	0.0%
81 - Licens Bd	160	84.7%	100.0%	0.0%	0.0%	0.0%
82 - Adm Hear	2	5.7%	50.0%	50.0%	0.0%	0.0%
84 - Maj Med	14	100.0%	100.0%	0.0%	0.0%	0.0%
60 - Universities	2,161	10.2%	54.4%	35.1%	5.7%	4.9%
Total Workforce	8,822	10.1%	31.9%	63.2%	2.0%	2.9%

Figure 12 presents the universities' ratings distributions. Across all the universities, 86% of employees received "outstanding" or "very good" ratings and 43% received an "outstanding." ASU stands out with 96% of employees rated at the two highest levels and 70% receiving an "outstanding." ASU stands out with 96% of employees rated at the two highest levels and 70% receiving an "outstanding."

Figure 12



In Table G, rating information from all universities is presented. Across all universities, 10% of employees were not rated. Table H breaks out the “not rated” data based on the reasons employees were not rated.

Table G
Distribution of Ratings by University

Universities	Employees		Number of Employees Rated	Evaluation Ratings				Employees Not Rated	
	Number	% of University Workforce		BG, US, W	Good	Very Good	Outstanding	Number Not Rated	% Not Rated
6020 - UNC-CH	6,172	29.2%	5,728	0.9%	12%	41%	46%	444	7%
6030 - NCSU	3,681	17.4%	3,405	1.4%	16%	45%	38%	276	7%
6065 - ECU	2,729	12.9%	2,509	0.6%	11%	42%	46%	220	8%
6050 - UNC-C	1,190	5.6%	1,091	1.6%	18%	43%	37%	99	8%
6080 - ASU	1,182	5.6%	1,129	1.2%	3%	26%	70%	53	4%
6040 - UNC-G	1,067	5.0%	1,013	0.5%	9%	51%	39%	54	5%
6060 - UNC-W	837	4.0%	803	1.6%	18%	41%	39%	34	4%
6070 - NC A&T	792	3.7%	616	1.0%	23%	52%	24%	176	22%
6075 - WCU	662	3.1%	598	0.5%	14%	40%	45%	64	10%
6090 - NCCU	481	2.3%	266	1.9%	29%	50%	20%	215	45%
6084 - WSSU	380	1.8%	134	2.2%	22%	53%	22%	246	65%
6088 - FSU	373	1.8%	331	0.9%	13%	47%	39%	42	11%
6055 - UNC-A	334	1.6%	279	0.4%	5%	53%	41%	55	16%
6082 - UNC-P	341	1.6%	330	1.2%	15%	51%	33%	11	3%
6010 - UNC-GA	309	1.5%	209	0.5%	20%	47%	32%	100	32%
6086 - ECSU	297	1.4%	272	1.1%	22%	50%	26%	25	8%
6092 - Sch Arts	201	1.0%	185	3.2%	18%	38%	41%	16	8%
6094 - Sch Sci	101	0.5%	70	0.0%	13%	60%	27%	31	31%
Total	21,129		18,968	1.1%	14%	43%	43%	2,161	10%

**Table H
Reasons Employees Not Rated, Sorted by University**

<i>Universities</i>	<i>Number of Employees Not Rated</i>	<i>% of Employees Not Rated</i>	<i>0 - Blank</i>	<i>7 - Insuff Time</i>	<i>8 - LWOP</i>	<i>9 - Not Done</i>
6010 - UNC-GA	100	32.4%	96.0%	4.0%	0.0%	0.0%
6020 - UNC-CH	444	7.2%	29.1%	23.6%	23.6%	23.6%
6030 - NCSU	276	7.5%	51.4%	48.6%	0.0%	0.0%
6040 - UNC-G	54	5.1%	20.4%	70.4%	9.3%	0.0%
6050 - UNC-C	99	8.3%	0.0%	98.0%	2.0%	0.0%
6055 - UNC-A	55	16.5%	92.7%	7.3%	0.0%	0.0%
6060 - UNC-W	34	4.1%	35.3%	64.7%	0.0%	0.0%
6065 - ECU	220	8.1%	19.1%	80.5%	0.5%	0.0%
6070 - NC A&T	176	22.2%	92.6%	6.3%	1.1%	0.0%
6075 - WCU	64	9.7%	46.9%	53.1%	0.0%	0.0%
6080 - ASU	53	4.5%	17.0%	79.2%	3.8%	0.0%
6082 - UNC-P	11	3.2%	27.3%	63.6%	9.1%	0.0%
6084 - WSSU	246	64.7%	100.0%	0.0%	0.0%	0.0%
6086 - ECSU	25	8.4%	0.0%	100.0%	0.0%	0.0%
6088 - FSU	42	11.3%	40.5%	57.1%	2.4%	0.0%
6090 - NCCU	215	44.7%	89.3%	10.2%	0.5%	0.0%
6092 - Sch Arts	16	8.0%	6.3%	75.0%	18.8%	0.0%
6094 - Sch Sci	31	30.7%	100.0%	0.0%	0.0%	0.0%
Total Universities	2,161	10.2%	54.4%	35.1%	5.7%	4.9%

Year-to-Year Changes in Performance

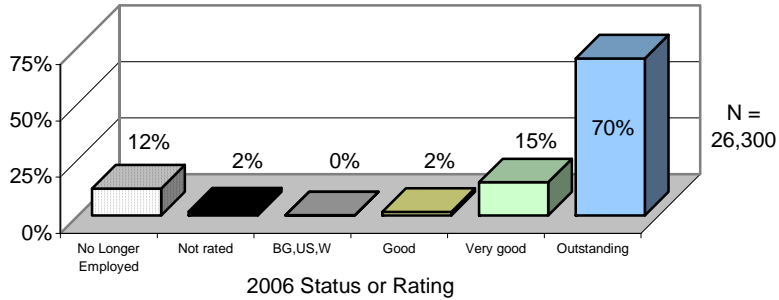
One of the purposes of the performance management system is to “further ... the outstanding performance of State employees,”⁴ that is, to stimulate high levels of employee performance – whether by sustaining high performers, moving lower performers to higher levels of performance, or moving out of the organization those low performers who fail to improve. How well does the system accomplish these purposes?

Figure 13 looks at changes in performance from year to year, in this case from 2005 to 2006. This figure tracks all employees who were in PMIS in 2005 and looks at their status in 2006 – whether their ratings remained the same or changed, and if they were still in the state workforce. Four conclusions may be drawn from the data presented.

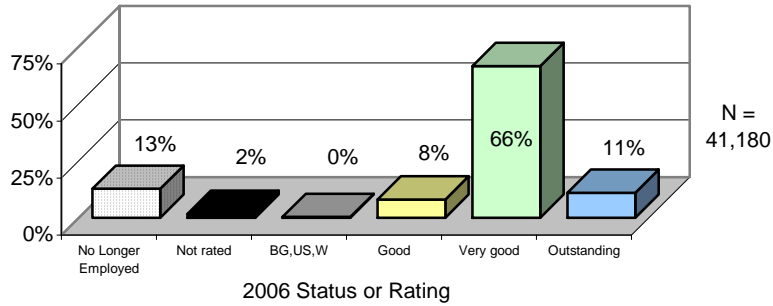
Figure 13

How Employee Performance Changes (or Doesn't Change) from Year to Year

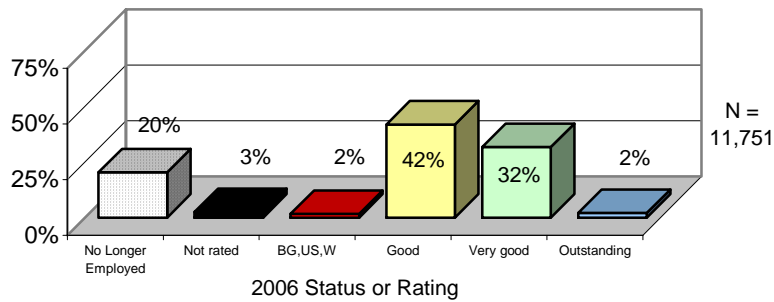
2006 Status of Employees Rated "Outstanding" in 2005



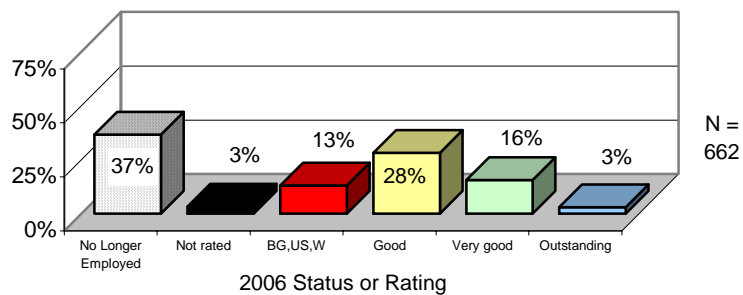
2006 Status of Employees Rated "Very Good" in 2005



2006 Status of Employees Rated "Good" in 2005



2006 Status of Employees Rated "Below Good," "Unsatisfactory," or Receiving a Warning in 2005



1. There is a clear relationship between performance and retention, and it is in the appropriate direction. The worse the performance rating, the more likely employees were to be gone the following year – 37% of employees rated less than “good” in 2005 were no longer employed in 2006. In contrast, the better their performance, the more likely employees were to still be around the next year – only 12% of “outstanding” employees had exited by the following year.
2. “Very good” and “outstanding” performers tended to remain “very good” and “outstanding” performers over time. Seventy percent of employees rated “outstanding” in 2005 were rated “outstanding” again in 2006. Two-thirds of employees rated “very good” in 2005 received the same rating in 2006, while a few (11%) got better and a slightly smaller number (8%) slid back.
3. “Good” performers also tended to remain “good” for the most part (42%), but the “good” rating also stimulated a bit of “action.” Fully 20% of the “good” employees left state employment while almost a third of them raised the level of their performance.
4. Although the numbers are small (662 employees in 2005 – less than 1% of the workforce), a less than “good” rating (“below good,” “unsatisfactory,” or a warning) stimulated considerable action:
 - 37% had left state employment by the following year – the highest turnover rate for any of the appraisal rating categories.
 - 47% of the poor performers improved their performance, some dramatically so. This large positive effect appears to be a success story, demonstrating that employee performance can indeed be altered. The data unfortunately do not tell us how these successes were achieved.
 - Although the majority of poor performers left or got better, fully 13% of the poor performers in 2005 were still employed and still performing poorly in 2006.

This last finding is problematic. Why would poor performers who failed to improve still be employed and performing poorly? The data cannot answer this question but can identify where this phenomenon is most prevalent.

Table I includes the agencies that had the largest number of poor performers in 2005 and their disposition in 2006. The handful of agencies represented in this chart account for most of the poor performers in 2005 that continued to be employed as poor performers in 2006. It also suggests different strategies may be employed by these agencies for dealing with poor performance. Agencies and universities with the highest percentage of poor performers remaining employed and continuing to perform poorly were CCPS (21%), DENR (20%), and DHHS (19%).

Table I
Status of Poor Performers One Year Later
in Selected Agencies

Agency	Employees rated BG,US,W in FY05	Rating or status in FY06		
		No Longer Employed	BG,US,W	Good, Very Good, Outstanding
DOT	55	15%	11%	69%
CCPS	43	14%	21%	65%
DOC	127	31%	14%	51%
DENR	20	30%	20%	50%
State workforce	662	37%	13%	47%
DHHS	189	37%	19%	42%
Universities	157	54%	8%	34%

Table J breaks down the universities category. Although the numbers are small, the differences are dramatic. Both UNC-CH and ECU were quite effective at “moving” poor performers, though in different directions and very likely by very different means. At UNC-CH most poor performers tended to leave the organization, whereas at ECU most remained employed and became productive. Do these differences result from different strategies – culling vs. developing – or are other factors responsible?

Table J
Status of Poor Performers One Year Later
in Selected Universities

University	Employees rated BG,US,W in FY05	Rating or status in FY06		
		No Longer Employed	BG,US,W	Good, Very Good, Outstanding
ECU	17	35%	0%	53%
NCSU	28	36%	14%	46%
UNC-C	13	38%	15%	46%
Universities	157	54%	8%	34%
UNC-CH	67	84%	1%	15%

Table K breaks down the poor performer data by race and sex. For poor performers who remain poor performers, the black-white, male-female differences are indistinguishable – they all stay around at about a 13% rate. The statistics for black female and black male poor performers are nearly identical – slightly less than half get better, slightly more than a third leave, and a small but sizeable number (13% or 15%) remain poor performers. What is remarkable is the difference between white males and white females. White males are least likely to turn over (28%) and most likely to get better (57%), while just the opposite is true for white females – they are *most* likely to turn over (46%) and *least* likely to stay around and become productive (40%).

Table K
Status of Poor Performers One Year Later
by Race and Sex

Race / Sex	Employees rated BG, US, W in FY05	Rating or status in FY06		
		No Longer Employed	BG, US, W	Good, Very Good, Outstanding
Other Females	11	27%	0%	73%
White Males	190	28%	13%	57%
State workforce	662	37%	13%	47%
Other Males	22	32%	23%	45%
Black Females	155	37%	13%	44%
Black Males	135	39%	15%	41%
White Females	149	46%	11%	40%

Further exploration of these differences would be instructive: Why do poor performers remain employed as poor performers? What causes some poor performers to become productive? Under what conditions do poor performers leave the organization?

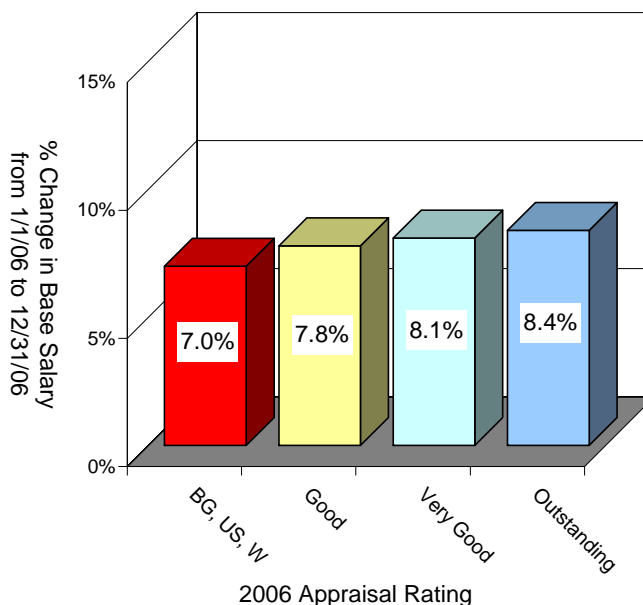
Pay for Performance

State law requires that "... salary increases to State employees ... be implemented through the Comprehensive Compensation System based upon the individual performance of each State employee."⁵ Although the Comprehensive Compensation System has been neither funded nor implemented over most of its history, the spirit of the law is nonetheless clear: that employees should be paid according to the level of their performance. Through alternative funding methods, agencies do have limited ability to provide salary increases to higher performing employees. So it is reasonable to ask if there is in fact a relationship between pay and performance.

Figure 14 shows the relationship, across the entire state government workforce, between 2006 appraisal ratings and the average percent change in employees' base salaries. The figure includes only those employees who were appraised in 2006 and who remained in the same position from the beginning to the end of the year (so that changes in salary due to promotions would not distort the analysis). Change in base salary was determined by calculating the difference between base salary at the beginning of the year and at the end of the year.

Figure 14

**Relationship Between Appraisal Rating and
Average Percent Change in Base Salary, 2006
State Government Workforce**



The figure shows a modest, positive relationship between appraisal rating and change in base salary. For organizations with strong performance cultures, where the practice is to drive high levels of performance by significantly rewarding outstanding performance, Figure 14 would display a similar positive relationship, but the slope would be much more exaggerated, with poor performers' base salaries remaining flat (if not declining) and outstanding performers receiving "noticeable" increases.

In 2006, all state government employees, regardless of rating, received a 5.5% legislatively mandated increase during the year. Actual percent changes in base salary exceeded 5.5% at each of the performance levels, suggesting that, regardless of employees' performance, agencies found ways to boost employee pay above and beyond the across-the-board legislative increase. Thus, "outstanding" employees, on average, received an additional 2.9% increase; "very good" performers, a 2.6% increase; and "good" performers, a 2.3% increase.

What is interesting is that poor performers received an additional 1.5% increase in their base salaries on top of the 5.5% legislative increase. Although the number of poor performers (those receiving "below good" and "unsatisfactory" ratings or warnings) was small, the dollar value of the raises given to poor performers was \$1,116,840.

At the individual employee level, in practical terms, an "outstanding" performer earning \$35,000 received an increase of \$2,940 in annual base salary, but this increase was only \$210 greater than the increase received by a "good" performer. That is \$17.50 per monthly paycheck, not exactly a noticeable differentiation between "outstanding" and "good" performance. Furthermore, the "outstanding" performer's increase was \$490 greater than the poor performer's – around \$41 per month.

A statistically more sensitive way of looking at the pay-performance relationship is to compute the *correlation* between appraisal ratings and percent changes in base pay. Across the entire state workforce, this correlation is 0.03, strongly implying that there is virtually no relationship between pay and performance. Table L breaks out this correlational analysis by agency. The larger the correlation (*r*), the stronger the relationship between pay and performance. OSP and the Controller's office, for example, tended to give greater increases to higher performers, lesser (or no) increases to lower performers. In those agencies where the correlation was close to .00, any increases employees received tended not to be related to their performance. And in those agencies with negative correlations, such as CCPS, there was a tendency for pay and performance to be inversely related – that is, higher performing employees on average received smaller increases than lower performing employees.

Table L
Correlation Between Pay and Performance
Within Each Agency

<i>Agency</i>	<i>r</i>	<i>N</i>
OSP	0.33	82
Controller	0.25	107
ITS	0.21	396
Treasurer	0.17	232
Insurance	0.16	335
Auditor	0.14	148
Governor	0.13	51
DPI	0.11	438
DOC	0.09	14,977
Agriculture	0.09	1,101
ESC	0.08	1,450
Labor	0.08	364
Com Col	0.07	151
Justice	0.05	1,098
Universities	0.05	18,114
DJJ	0.05	1,346
Cult Resources	0.04	601
DHHS	0.04	14,339
Wildlife	0.04	544
State workforce	0.03	75,727
DENR	-0.01	3,210
DOT	-0.02	11,426
Sec'y State	-0.03	137
Commerce	-0.04	609
DOA	-0.07	680
Revenue	-0.07	1,220
CCPS	-0.12	2,502

These correlations are easier to visualize in Figure 15. In this figure, the average percentage increases for each level of performance is shown in a stacked bar for each agency. For example, it can be seen that the Controller's office gave larger increases to

“outstanding” performers (17% of employees) than to “very good” and “good” performers, and gave no increases to poor performers.

Figure 15

Pay-Performance Relationship by Agency, 2006

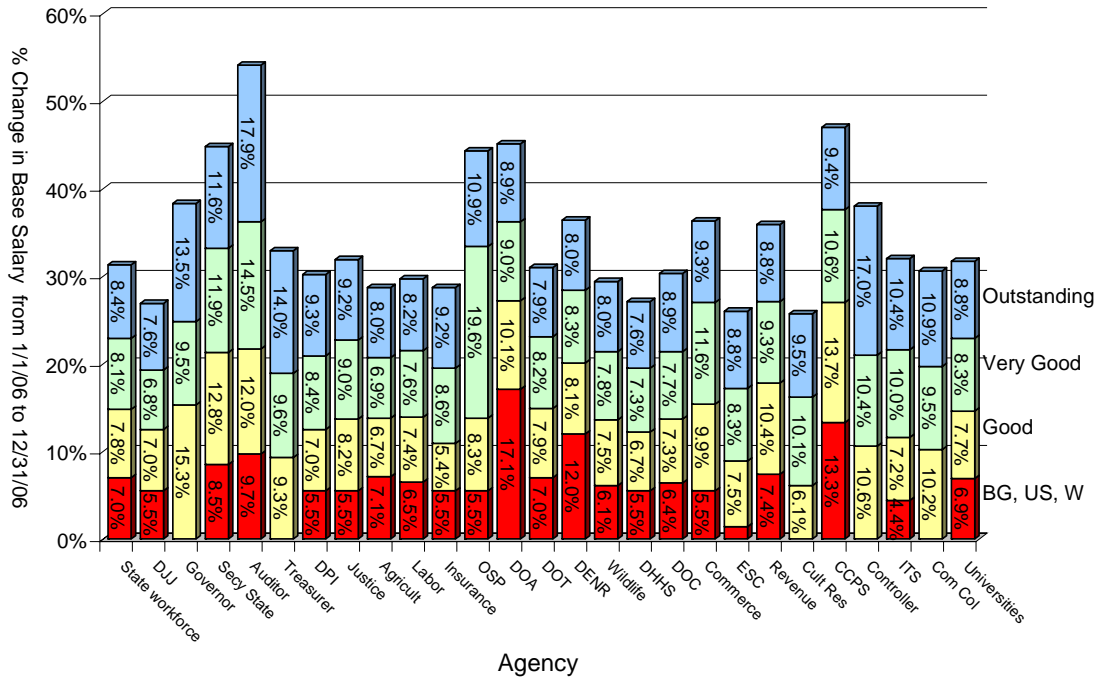


Table M presents a comparable correlational analysis for the universities. The largest institutions have pay-performance correlations that range from -0.01 to 0.08, none of which suggests anything more than a very weak relationship between pay and performance. It is interesting that, among the smaller institutions, the School of the Arts had a correlation of 0.25, indicative of a modest, but solidly positive relationship between pay and performance. At the other end of the spectrum, the School of Science’s correlation was -0.21, suggesting a pay-performance relationship turned on its head.

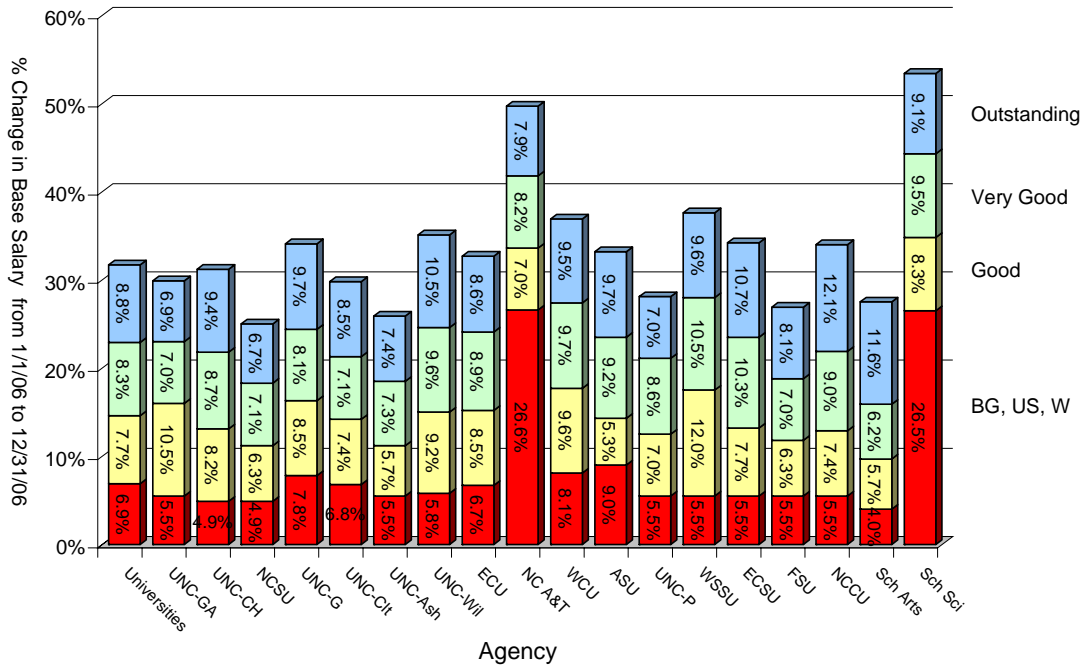
Table M
Correlation Between Pay and Performance
Within Each University

<i>Agency</i>	<i>r</i>	<i>N</i>
School Arts	0.25	177
NCCU	0.22	257
ECSU	0.14	254
FSU	0.08	305
UNC-CH	0.08	5,382
UNC-G	0.07	1,005
UNC-C	0.06	1,054
UNC-W	0.06	769
Universities	0.05	18,114
UNC-Ash	0.04	262
ASU	0.03	1,068
NCSU	0.00	3,332
WCU	0.00	565
ECU	-0.01	2,422
UNC-P	-0.01	308
NC A&T	-0.03	577
WSSU	-0.05	113
UNC-GA	-0.13	202
School Science	-0.21	61

Figure 16 displays the data underlying the correlational analysis in a graphic manner.

Figure 16

Pay-Performance Relationship by University, 2006



Granted, the negative correlations for some agencies and universities were most likely due to in-range adjustments, which would have been justified from a market perspective. However, viewed from a broader perspective, salary increases – for whatever reason – given to poor performers is an unwise investment of scarce compensation dollars. If combined with small increases for top performers, the unfortunate message is that the agency tolerates poor performance and does not value outstanding performance. It would be highly desirable for agencies to strive toward strong, positive correlations between pay and performance.

¹ GS 126-7(9): “The State Personnel Director shall report annually on the Comprehensive Compensation System to the Commission. The report shall evaluate the performance of each department, agency, and institution in the administration of its appraisal system and the distribution of salary increases and awards within each department, agency, and institution and across State government. The report shall include recommendations for improving the performance appraisal system and alleviating inequities. Copies of the report, as adopted by the State Personnel Commission, shall be sent to the Governor, Lieutenant Governor, President Pro Tempore of the Senate, Speaker of the House of Representatives, the standing personnel committees of the House of Representatives and the Senate, and the State Auditor. The State Personnel Director shall recommend to the General Assembly for its approval sanctions to be levied against departments, agencies, and institutions that have deficient performance appraisal systems or that do not link salary increases and awards to employee job performance. These sanctions may include withholding salary increases and awards from the managers and supervisors of individual employing units of departments, agencies, and institutions in which discrepancies exist.”

² Equal Employment Opportunity Commission, Civil Service Commission, Department of Labor, and Department of Justice (1978). *Uniform Guidelines on Employee Selection Procedures*: “A selection rate for any race, sex, or ethnic group which is less than four-fifths (4/5) (or eighty

percent) of the rate for the group with the highest rate will generally be regarded by the Federal enforcement agencies as evidence of adverse impact, while a greater than four-fifths rate will generally not be regarded by Federal enforcement agencies as evidence of adverse impact. Smaller differences in selection rate may nevertheless constitute adverse impact, where they are significant in both statistical and practical terms or where a user's actions have discouraged applicants disproportionately on grounds of race, sex, or ethnic group. Greater differences in selection rate may not constitute adverse impact where the differences are based on small numbers and are not statistically significant, or where special recruiting or other programs cause the pool of minority or female candidates to be atypical of the normal pool of applicants from that group."

³ Because the number of Hispanics, Asians, and American Indians is relatively small compared to the white and black categories, these groups have been combined to form an "other" group.

⁴ General Statute 126-7(a).

⁵ General Statute 126-7(a).