



# Office of the Colorado State Auditor

## Performance Audit of the Colorado Department of Personnel & Administration's 2003 Annual Total Compensation Survey

June 2003

Prepared by:  
Milliman USA  
1301 Fifth Avenue, Suite 3800  
Seattle, Washington 98101-2605  
206.504-5545

A MILLIMAN GLOBAL FIRM



**Milliman USA**  
Consultants and Actuaries

## TABLE OF CONTENTS

---

<b>I.</b>	<b>General Summary</b> .....	<b>1</b>
<b>II.</b>	<b>Recommendation Locator</b> .....	<b>4</b>
<b>III.</b>	<b>Background</b> .....	<b>5</b>
<b>IV.</b>	<b>Findings, Recommendations and DPA Responses</b>	
	Market Analysis of State Salaries .....	8
	Impact of Total Compensation on State Work Force.....	17
	Policy Issues Affecting Total Compensation.....	19
	Statewide Pay Equity .....	22
	Salary Survey Procedures .....	23
	Actual Pay Data vs. Pay Range Data .....	23
	Pay Range Widths.....	26
	Total Cash Compensation.....	29
	Salary Structure .....	30
	Benefits (Non-Cash Compensation) .....	33
	Benchmarking.....	36
	Succession Planning.....	40
	Follow Up to Prior Audit Recommendations .....	42
	<b>Appendix A: Job Matching Audit</b> .....	<b>A-1</b>
	<b>Appendix B: Market Analysis Charts</b> .....	<b>B-1</b>
	<b>Distribution Page</b> .....	<b>C-1</b>



The purpose of this performance audit is to review the Colorado Department of Personnel & Administration's (DPA's) practices for surveying employers regarding compensation and to provide the State with information related to the use of best practices. Section 24-50-104(4)(b), Colorado Revised Statutes (C.R.S.), requires that the state personnel director establish technically and professionally sound survey methods to determine prevailing total compensation practices, levels, and costs. It also requires the Colorado Office of the State Auditor to contract with a private firm to conduct a performance audit of DPA's annual Total Compensation Survey. The State contracted with Milliman USA (Milliman) to conduct the Fiscal Year 2003 performance audit.

The primary purpose of the Total Compensation Survey is to assess the competitiveness of the State's total compensation—both salary and benefits—compared with “prevailing total compensation” in the market. While the Total Compensation Survey has historically done a good job of supporting the prior “step” system, there are elements of the current process that should be modified. Several aspects of the process will not be helpful in the State's desire to manage total compensation. Prior audits identified certain of these changes to the process. We believe that data from this audit confirms the importance of making these changes. These data suggest that several elements of DPA's current process for conducting the Survey may prevent the State from achieving its primary goal of ensuring a competitive total compensation package. In addition, we found that the time, effort, and resources required to produce the survey in its current form are not proportional to the value received.

The charts and tables in this report summarize the data from our analyses. Care should be exercised in interpreting these charts, in particular the difference between “State practice” as reflected in trend lines and “market” practice. Organizations have varying pay philosophies and tolerances for variance from the “market.” Gaps between an organization's practice and the market are to be expected; what is important is the general story portrayed by the charts. In addition, these charts are intended to support the recommended changes; they are not intended to be a thorough analysis of the competitiveness of compensation. However, we have found that DPA's current survey process may lead to non-competitive results in the future.

Among our findings affecting the State's ability to provide a competitive total compensation package to its employees are the following:

- State pay ranges appear to be somewhat out of alignment with the market. We found that state pay range midpoints appear to be above market for positions paying less than \$2,500/month and below market for positions paying more than \$2,500/month. Consequently, actual pay practice for higher level positions within the State may be non-

competitive because of pay ranges that are behind the market. From our analysis, there are several reasons why state ranges may not be competitive with the market:

- DPA uses pay range data when recommending annual pay range adjustments. This approach may ignore changes in actual pay for jobs because the market may have moved certain jobs into different ranges due to competitive pressure. It may also perpetuate a faulty, original pay range by simply adjusting it according to changes indicated by survey data.
  - DPA survey sources do not include data on cash bonuses and incentives paid by employers in the region. This omission may result in failing to account for up to 5% of total cash compensation paid to employees in the market.
  - The State maintains separate salary structures consisting of varying job levels and pay ranges for each occupational group rather than a single, integrated pay structure with a cohesive set of pay ranges. This practice is not only unnecessarily complicated and resource intensive, it also drives survey approaches that may not ensure the State is truly competitive in its pay practices.
- Recent, proposed legislative changes will have a positive impact on the State’s ability to be competitive with the market and provide “prevailing total compensation” to its employees. Prior to these changes, mandated budget processes separated the funding of cash compensation allocations (salaries) from decisions related to non-cash compensation (benefits). This funding process limited DPA’s ability to ensure that the State delivered a total compensation package that is competitive with the market. Statutory changes made by House Bill 03-1316 will foster a more integrated analysis of salary and benefits recommendations and funding each year.
- The Colorado Constitution defines “equity” to mean that compensation be the same for similar work, regardless of a job’s geographic location within the State. This definition conflicts with Section 24-50-104, C.R.S. which requires the State to offer “prevailing” (or competitive) compensation. As a result, some state employees may be paid more than their local peers, while others are paid less. This factor adversely affects the State’s competitiveness as an employer in some regions of Colorado, especially resort areas.

We also identified the following additional findings with respect to survey procedures:

- DPA’s method of matching state jobs with those in the market, in order to identify appropriate benchmarks for the annual total compensation survey, is sound and should be continued. Benchmarks are the jobs actually used to



calculate the Department's recommended pay adjustments. We independently tested DPA's benchmarking methodology to determine the integrity of DPA's job matching. Overall, we found that DPA's matching and market values were very consistent with Milliman's independent market pricing effort. We found a greater than plus or minus 10 percent difference for roughly 7 percent of the Milliman benchmark positions used in this analysis. This level of discrepancy is what we would expect given the fact that Milliman did not conduct a detailed job analysis on the benchmark positions. Each matching difference we observed resulted from what we would characterize as reasonable differences caused by limited information. A chart entitled, "Job Matching Audit," with the above findings is located in Appendix A.

- DPA uses too few benchmark jobs in its market comparisons and expends too much effort each year gathering data on all of those benchmark jobs. Currently, DPA uses only 41 percent of State jobs (198 of 485) but then attempts to compare all 198 of those jobs to the market every year. Instead, DPA should identify 75 percent or 360 of its jobs as benchmarks and seek data on one-third of them (120) each year. While it is important to benchmark at least 75 percent of State jobs, there is no compelling reason to collect data on more than 33% of them each year. Over a three-year period, this approach will produce a more accurate picture of the market with less effort.
- DPA's method for taking into account the age of the data it relies upon is sound and should be continued. Total compensation surveys are published throughout the year and the data are captured at different points in time. It is common practice among compensation practitioners to use an approach that will ensure all survey data are projected to a common date (i.e., July 1, 2003) so that "old" data are not used during the analysis. Data are typically "aged" by a factor that measures the increase in the cost of wages over time. We analyzed DPA's process for developing aging factors and compared it with best practices of compensation practitioners. We found that DPA's method is the one used by most compensation practitioners and is statistically valid and proper. The aging method used by DPA generates results that are consistent with current, labor market trends and recognizes immediate market pressure on compensation. The method is able to recognize current market pressure by evaluating prior year salary increases as well as projected increases for the coming year.

**RECOMMENDATION LOCATOR**

**SECTION II**

<b>Recommendation No.</b>	<b>Page</b>	<b>Recommendations</b>	<b>Department of Personnel &amp; Administration's Response</b>	<b>Target Implementation Date</b>
1	17	Assess and report to the General Assembly the impact its total compensation package has had on the State's ability to recruit and retain employees.	Agree	Begin August 1, 2003
2	20	Immediately develop the procedures necessary to implement the provisions of House Bill 03-1316.	Partially Agree	August 1, 2003
3	22	Propose that the Governor's Commission on Civil Service Reform review the current constitutional definition of "equity" and recommend changes that would allow the State to consider a position's geographic location when determining what constitutes "prevailing total compensation."	Agree	September 1, 2003
4	25	a). Thoroughly analyze actual pay data collected during the survey effort and use this information when determining the competitiveness of state compensation levels each year and for recommending salary increase budgets.	Partially Agree	August 1, 2003
		b). Use published compensation planning surveys to develop recommendations regarding structure adjustments for state pay ranges (either a single structure or structures for occupational groups).	Partially Agree	August 1, 2003
5	27	Establish pay range widths that are consistent with "best practices" in the market and reflect organizational hierarchy and other work-design objectives.	Agree	Ongoing
6	30	Purchase and use salary surveys that include total cash compensation (base salary plus bonuses/incentives).	Agree	August 1, 2003
7	31	Adopt a single pay structure rather than using multiple pay ranges tied to various occupational groups.	Partially Agree	July 1, 2004
8	34	Consider alternatives to the State's current leave policies.	Agree	July 1, 2004
9	38	Select at least 75 percent of the total state jobs as benchmarks for the Total Compensation Survey. The Department should then analyze approximately one-third of those benchmark jobs each year so that within a three-year cycle, roughly 75 percent of state jobs will have been reviewed for market competitiveness.	Partially Agree	Ongoing
10	40	Assess succession plans, career development initiatives, and internal skill sets as they relate to the Department's ability to conduct the Total Compensation Survey. In the event that current staff are unavailable to conduct the survey, a formal plan to ensure the ability of the Department to maintain this service is essential.	Agree	Ongoing



## Background

Section 24-50-104, Colorado Revised Statutes (C.R.S.) delineates the State's policy of providing "prevailing total compensation to officers and employees in the state personnel system." Total compensation consists of both salaries and benefits. Benefits include health, life and dental insurance, retirement benefits, premium pay practices and leave (e.g., paid time off). The goal of this legislative policy is to enable the State to recruit and retain a qualified work force by offering total compensation value that is competitive with other employers in the labor market.

According to statute, the Department of Personnel & Administration (DPA) is responsible for surveying other public and private employers to determine if the State's total compensation package is comparable with prevailing levels in the market. The statute intends that the survey analyze each of the various components of total compensation in order to identify and establish overall value for State jobs. Toward that end, DPA conducts an annual survey of the competitive labor market to determine prevailing wages and benefits. The survey examines positions across ten occupational classifications, which accounts for nearly 27,000 employees and approximately \$50 million in recommended, annual, total compensation costs resulting from salary increases tied to this survey.

The Department annually compiles the Total Compensation Survey Report as required by Section 24-50-104(4), C.R.S.. The 2003 report is the result of analyzing compensation, benefits, and paid leave using over fifty published surveys. The process relies on the following activities:

- ◆ Matching state positions to benchmark positions included in the surveys.
- ◆ Collecting and analyzing compensation data on these positions.
- ◆ Collecting and analyzing benefit cost information.
- ◆ Reporting findings and recommendations for salary and benefit adjustments.

With regard to the salary component of total compensation, the State maintains separate pay ranges for each of ten occupational groups and sets base salaries independent of benefits. Each occupational group contains multiple pay ranges of varying widths. The DPA analyzes the market annually for both pay range widths (minimum to maximum dollars) and pay range adjustments (increases or decreases in dollars) by examining data specific to each occupational group. Currently, DPA adjusts the pay range widths using percentages developed for each occupational group developed through



the Total Compensation Survey. DPA gathers pay range rates to set the market-driven pay range widths for various levels of positions. For example, pay range data from surveys may indicate that the average range width may be 42 percent in the healthcare group while it may be 48 percent in the engineering group.

Pay range data are also used to set pay range adjustments or movement each year by calculating the difference between the prior year's rate and the current year's rate for every job surveyed. Specifically, DPA first measures the change of a midpoint rate from last year to the current year for each matched job within an occupational group. The Department then uses the number of employees reported in each survey match as a weighting factor. This factor is applied in the calculation of the overall average change in market practice. This overall weighted average of the changes measured from all matched jobs collected for an occupational group becomes the recommended salary adjustment for the group. In this process, DPA examines only pay range information and does not examine data on what employers actually pay their employees. Nor does DPA examine survey sources containing information on total cash compensation (base pay + bonuses and incentives).

The State has historically budgeted and funded retirement and insurance benefits separate from salaries. The recommended salary increases from the annual Total Compensation Survey are built into the State's base budget and automatically become effective in the next ensuing fiscal year. By contrast, the State's employer contributions to employee health insurance premiums have been capped in statute at specific dollar amounts. Contributions to the State's Public Employees' Retirement Association (PERA) are set in statute as fixed percentages of salary. Legislation adopted in 2003, House Bill 03-1316, eliminates the statutory caps on the employer contribution to health insurance premiums and provides for a more integrated approach to budgeting and funding of annual salary and benefits adjustment recommendations.

### Audit Scope

The objectives of this performance audit are to audit DPA's procedures and application of data regarding the annual Total Compensation Survey by:

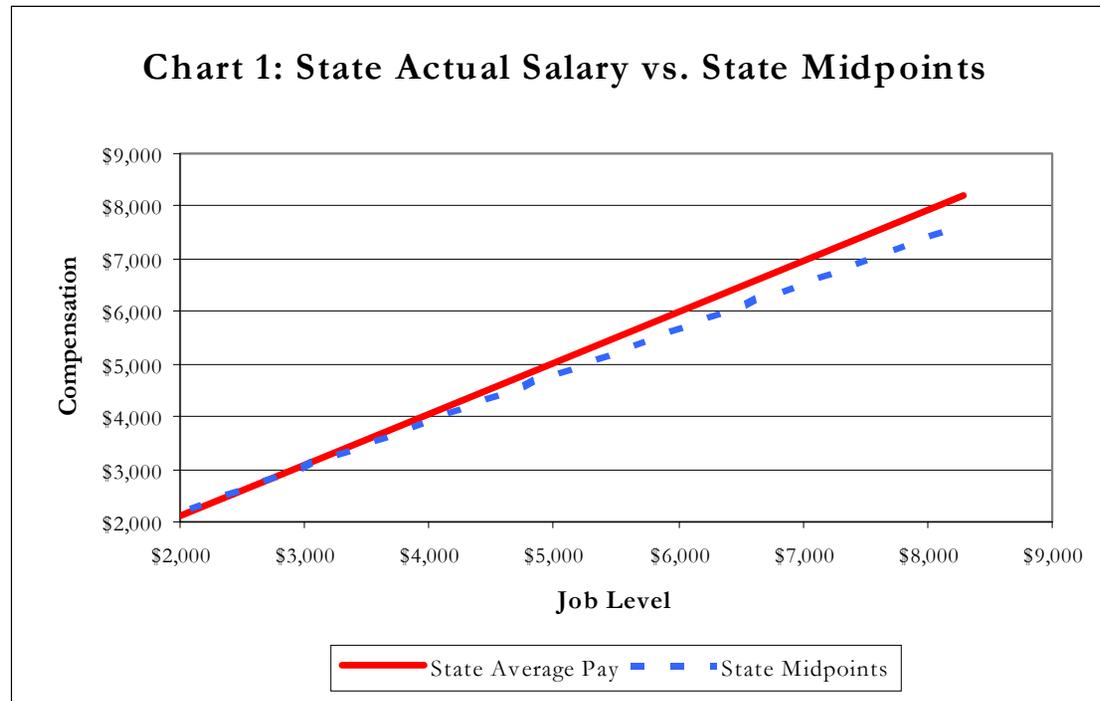
- ◆ Reviewing data to verify the results.
- ◆ Reviewing surveys to ensure their appropriate use and application in terms of designing the State's wage structure.
- ◆ Examining benchmark data to discern appropriate placement of job classes, as well as adequate representation of all state jobs.
- ◆ Reviewing DPA's methodological assumptions to ensure their appropriate application.

In addition, given the overriding objective of the survey process to ensure the State's competitiveness as an employer in the labor market, we analyzed how the actual implementation of the total compensation philosophy impacts the soundness of survey methodology and procedures.

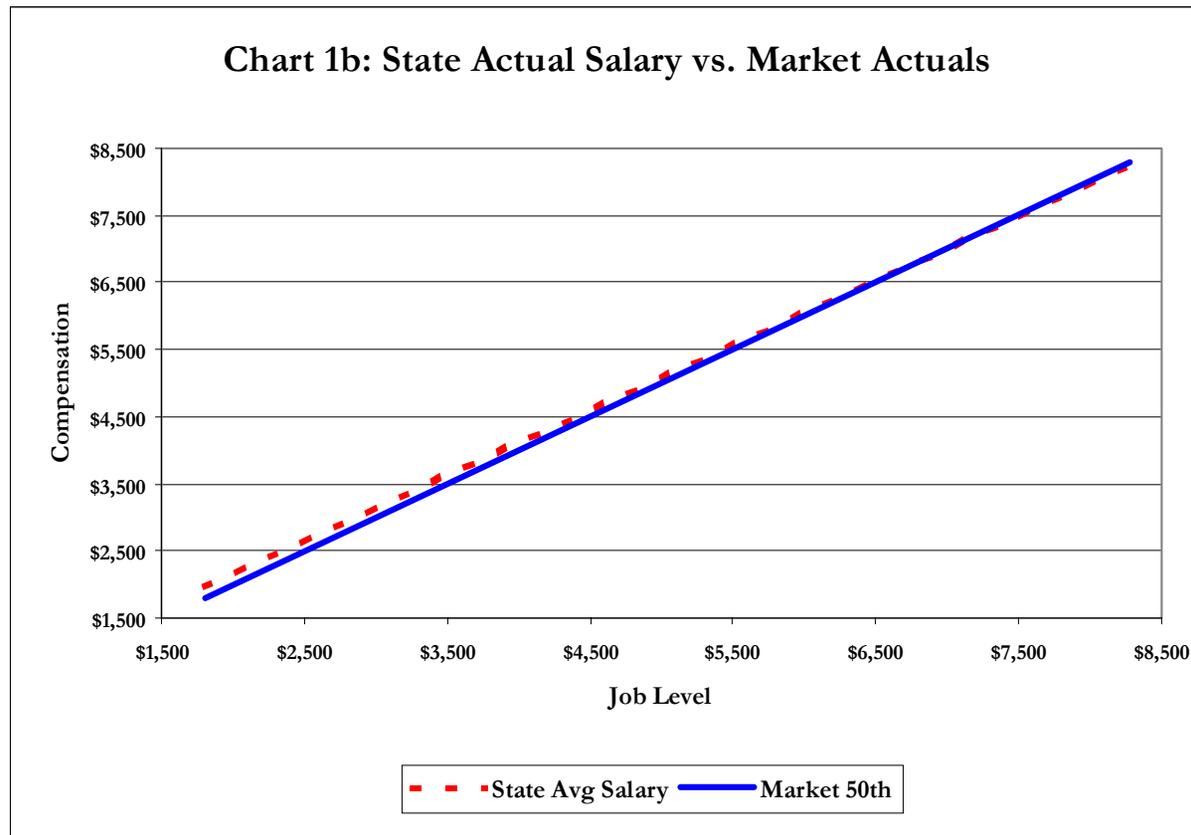
## Market Analysis of State Salaries

Overall, we found that compensation structures administered by DPA appear to be out of alignment with the market, undermining the State’s efforts to maintain a competitive total compensation package. As part of our initial analysis, we made two comparisons: actual state salaries compared to state midpoints and actual state salaries compared to actual market salaries. As Chart 1 shows, actual state base salaries tend to be above the state’s range midpoints.

(Note: In each of the following charts, the vertical axis (Compensation) reflects reported actual salary levels for the State. The horizontal axis (Job Level) represents the level or size of the job as the market measures it in pay dollars. Compensation practitioners think of job level/size in terms of pay grade, pay range midpoint, or “points” as produced from a formal job measurement system. For this analysis, we used market median pay as an approximation of job level/size for each benchmark position.)



The first observation then is that the State’s practice is to pay above range midpoints in general. Next, we determined that when all occupational groups are considered, actual state average pay appears to be aligned with the market 50<sup>th</sup> percentile. This suggests that the State has been quite effective in delivering base salaries at the middle of the market. This finding is consistent with prior years’ audits. This year, however, we looked deeper into this finding because of the variance that we noted when comparing DPA recommendations for occupational group adjustments discussed later in this report. While Chart 1b below suggests that base pay is competitive, when we analyzed individual occupational groups against the market data we found a different result. The results indicate that current actual pay in several occupational groups may be significantly different from the desired market levels.





As this audit was not an effort to determine whether the state does pay competitively according to statutory requirements, we can make no definitive conclusions in this area. What we can conclude is that the current process does NOT guarantee that state pay levels are consistent with desired market levels.

For example, from our analysis it appears that the State pays slightly above market at salary levels up to \$2,500 per month and at or slightly below for salary levels above \$2,500 per month. Since approximately 85 percent of state jobs have salaries higher than \$2,500 per month, salaries for most state jobs may be non-competitive compared to similar positions in the market.

Other data caused us to question whether the State's base salaries are truly *competitive* in the labor market. We analyzed two national compensation planning surveys published by Mercer Human Resources Consulting and World at Work. Compensation practitioners routinely rely on these surveys to develop recommendations for changes to both salary structures and merit budgets. Prior audits recommended using these published numbers to increase efficiency. The rationale was that rather than spending hundreds of hours collecting and analyzing salary range data from surveys to develop recommended adjustments, DPA could simply use the data from these surveys. DPA, however, has not implemented this recommendation. In addition, because DPA uses pay range data rather than actual pay data in its analysis, we found that its recommended pay range adjustments have been significantly different from published structure movement data over the past four years. As the following table shows, the result of DPA's approach is that the recommended adjustments have been significantly higher than the published adjustments across all occupational groups.



Table 1: Occupational Group Adjustments

Occupational Group	2003 (1)		2002 (1)		2001 (2)		2000 (2)	
	Published	DPA	Published	DPA	Published	DPA	Published	DPA
Administrative Support and Related	2.4%	3.1%	3.7%	5.8%	3.2%	4.2%	3.1%	3.9%
Enforcement and Protective Services	2.4%	3.5%	3.7%	4.2%	3.2%	5.7%	3.1%	4.5%
Financial Services	2.7%	2.6%	2.7%	5.6%	3.3%	3.1%	3.3%	5.3%
Health Care Services	3.4%	6.7%	2.6%	6.1%	2.9%	5.2%	2.9%	2.3%
Labor, Trades & Crafts	3.0%	3.1%	2.3%	4.8%	3.1%	4.8%	3.1%	3.7%
Physical Sciences and Engineering	2.9%	1.1%	2.3%	5.2%	3.3%	5.7%	3.3%	4.6%
Professional Services	2.7%	3.2%	2.6%	4.1%	3.2%	5.0%	3.1%	3.0%
Teacher	2.0%	4.9%	2.4%	3.5%	3.0%	3.6%	2.9%	3.1%
<b>Average</b>	<b>2.7%</b>	<b>3.5%</b>	<b>2.8%</b>	<b>4.9%</b>	<b>3.2%</b>	<b>4.7%</b>	<b>3.1%</b>	<b>3.8%</b>

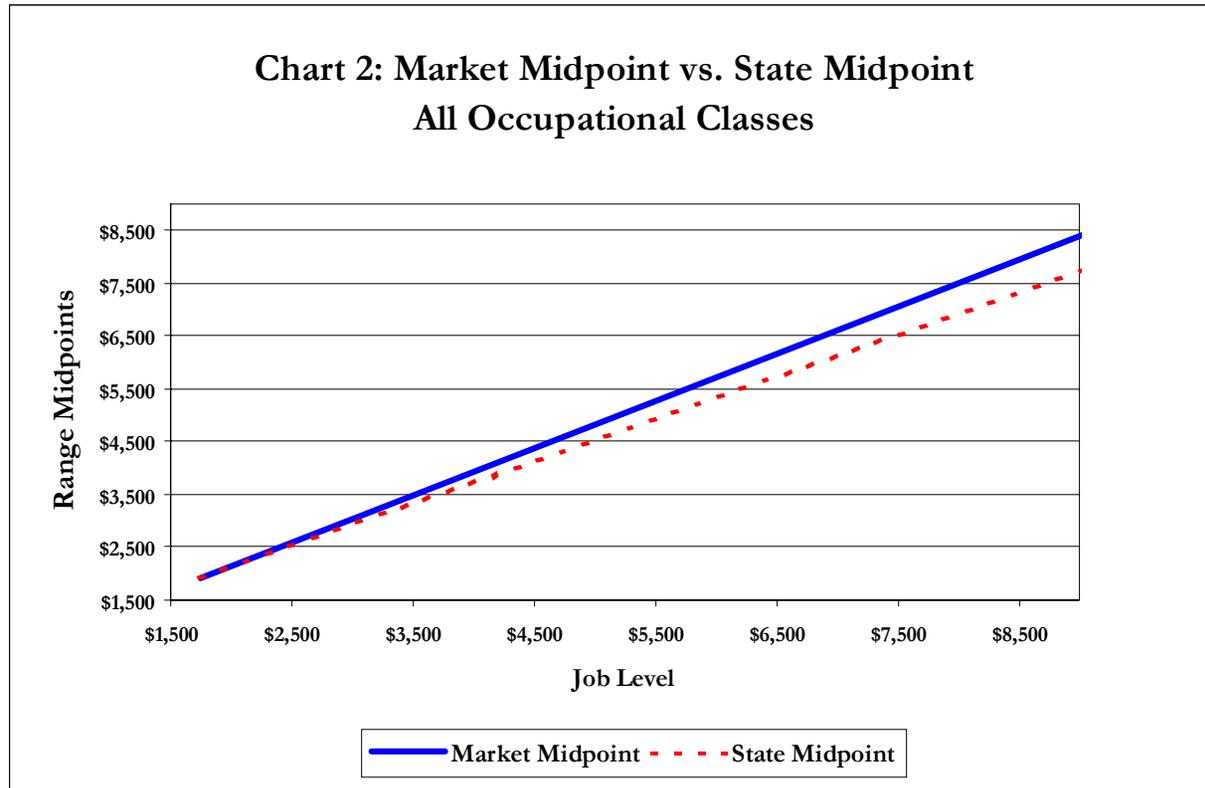
(1) Source: WorldatWork Salary Planning Survey  
 (2) Source: Mercer HR Consulting Compensation Planning Survey

We also examined the impact of DPA’s practice of relying on pay range data to develop recommended adjustments. Our analysis indicates there are problems with this practice that may produce unintended results. The table above suggests that DPA’s process is no longer effective in determining pay range adjustments. An evaluation that primarily relies on determining changes in salary ranges from year to year may:

- Ignore changes in actual pay for jobs (meaning that the market may have moved certain jobs into different ranges because of competitive pressure);
- Perpetuate a faulty, original pay range by simply adjusting it according to changes indicated by survey data.

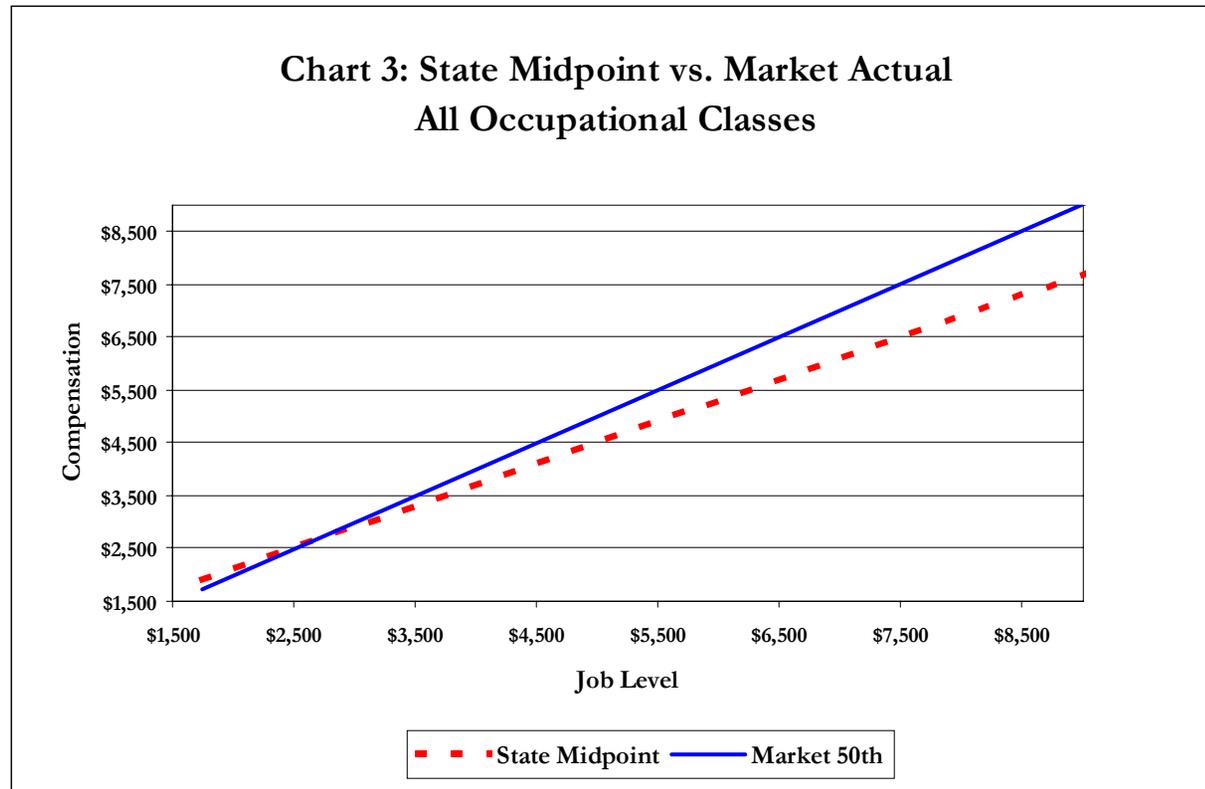
The fact that the State has provided occupational group adjustments that tend to be higher than market averages over the past few years might lead to the conclusion that state pay is higher than market as a result. However, our analysis of the data does not confirm that conclusion. As Chart 1b illustrates, actual pay among state employees appears to be at or below the market median in general. Because we cannot confirm the appropriateness of the original occupational group pay ranges, nor could this audit determine the effect over time of the adjustments described in the table above, we cannot fully explain these data. What we do know is that the Department's practice of determining pay structure adjustments using pay range data is not widely used nor robust in its accuracy. These concerns prompted us to undertake a more comprehensive analysis of the data.

DPA's goal is to set state pay range midpoints in line with market pay range midpoints because the midpoint typically reflects an organization's target level of pay for a seasoned, fully competent employee. The midpoint of the State's pay range is the approximate average (or median) market value for a job in that range. Our analysis indicates that the Department is not achieving its goal of aligning its pay range midpoints with market midpoints. Chart 2 is a comparison of the trend line for state pay range midpoints compared to market pay range midpoints.



The chart shows that state midpoints are below market midpoints for jobs with monthly salaries above \$2,500. As mentioned previously, approximately 85 percent of state jobs have monthly range midpoints above \$2,500. In other words, the majority of state jobs have a pay range midpoint lower than similar jobs in the market.

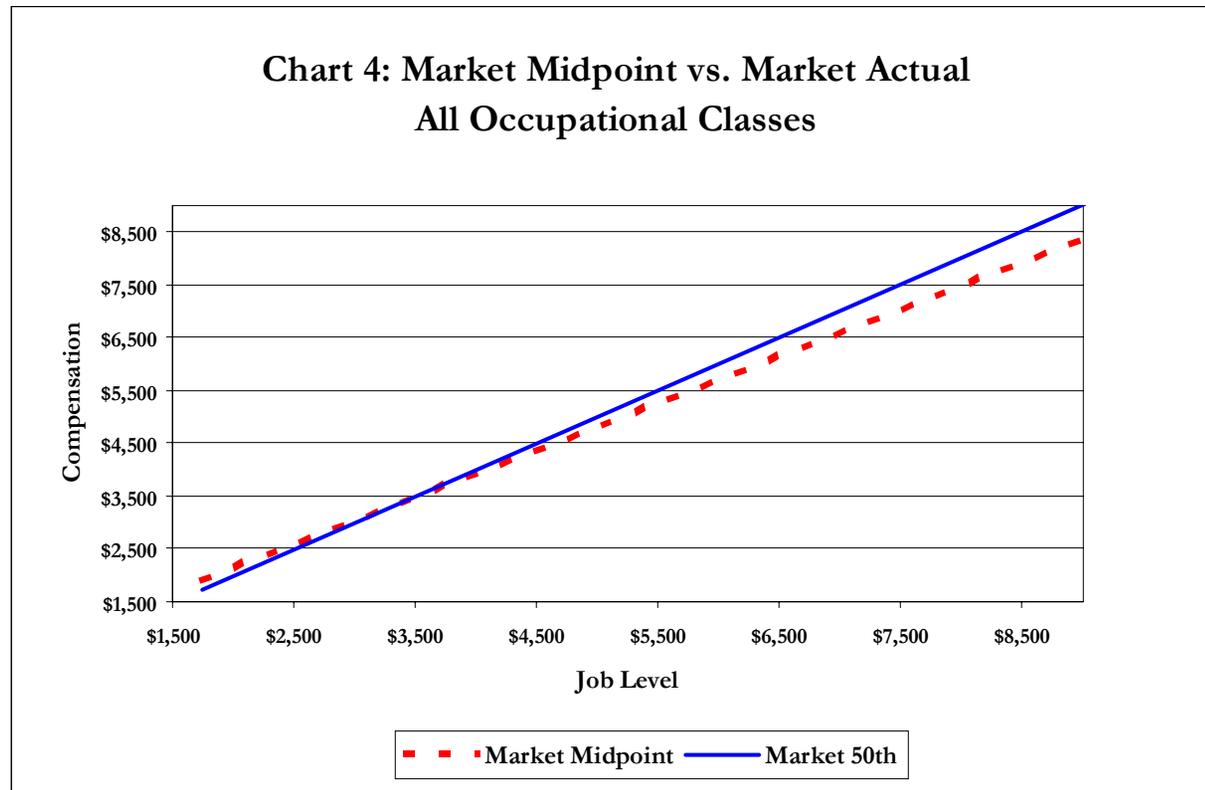
The same result occurred when we compared state pay range midpoints with actual market salaries for all occupational classes. State midpoints appear to be above market for positions paying below \$2,500 per month and below market for positions paying above \$2,500 per month. Chart 3 below illustrates this result and suggests that the State’s pay practice for higher level positions may be non-competitive.



(Note: there are eight state jobs with midpoints above \$8,500/month, one classified as Senior Executive and seven in the medical field.)

The charts in Appendix B illustrate the same pattern of outcomes for specific occupational groups. As a result, the State may become non-competitive in its actual pay practice for a majority of state positions.

This finding was further confirmed when we compared market range midpoints with actual market pay (50<sup>th</sup> percentile) for all occupational groups. As Chart 4 below shows, for lower paying jobs, the market's, range midpoint is slightly above actual pay, while for higher paying jobs, which are most of the state jobs, the reverse is true.



The preceding chart also demonstrates that the market does not fully rely on ranges to administer pay; i.e. other organizations are paying their higher paying jobs at levels ABOVE their own range midpoints. A number of explanations for this phenomenon are possible:

- The market for labor talent at higher salary levels has been more competitive and required organizations to offer salaries above their own salary structure guidelines.
- Organizations have allowed their salary ranges to slide relative to the market because of recent volatility in compensation practices.
- Higher paying positions experience lower turnover and thus will tend to have employees who command above market levels of pay over time.

In the following sections, we discuss the impact these salary issues have had on certain overarching policy issues related to the State's total compensation package, as well as how they specifically affect the salary survey. Recommendations follow each discussion item.

## Impact of Total Compensation on State Work Force

As mentioned previously, the State seeks to provide “prevailing total compensation” in order to recruit and retain a qualified work force. In order for the State to provide a competitive total compensation package, the Department must analyze both salaries and benefits and recommend changes to ensure the State is successfully competing in the labor market. As illustrated throughout the prior discussion, our analysis indicates that the Department’s approach to analyzing how state salaries compare with the market is flawed. We would expect this approach to have a negative impact on the State’s ability to recruit and retain qualified employees. However, the DPA has not to date had a method to evaluate recruitment and retention as part of an overall total compensation package. The Department needs to make such an assessment in order to determine if the statutory objective is being met in terms of total compensation, cash and benefits. As we discuss later in the report, the Department properly surveys and analyzes benefits, but is not able to factor them into a total pay recommendation. When making employment decisions, employees consider the total compensation package. Therefore, it is important that the Department look at the impact its total compensation package has had on its recruitment and retention of qualified employees.

---

### Recommendation 1:

The Department of Personnel & Administration should assess and report to the General Assembly the impact its total compensation package has had on the State’s ability to recruit and retain employees.

### DPA Response:

**Agree.** Because the state’s pay philosophy is to provide prevailing total compensation to recruit and retain a qualified and competent workforce, DPA will formalize its ongoing efforts to evaluate the impact of its total compensation package. Specifically, DPA will:

- Examine existing statewide turnover data, including specific reasons given for separation and any links to the total compensation package. Begin implementation with this survey report due August 1, 2003;
- Explore an employee assessment or survey to obtain input on the relative importance or priority of the components of the total compensation package. Implement such an assessment for the survey report due August 1, 2004;

- Examine standardized ways (e.g., standardized exit interview) to collect data and analyze agencies' recruitment and retention experiences to the extent possible. Work on this piece will begin with the next survey cycle (2005) and implementation of any methods will be done as quickly as feasible.

In order to take a more proactive role in evaluating the impact of the state's compensation package as suggested by this audit, DPA will require a reallocation of existing resources.

---



## Policy Issues Affecting Total Compensation

Two overarching policy issues affect the State's efforts to implement true total compensation practices. Historically, the State has separated budgeting for salary from budgeting for benefits. This partially undermined the State's ability to provide the optimum balance between salary and benefits in the effort to compete in the labor market. Second, the Colorado Constitution requires pay equity for all jobs having similar duties regardless of geographic labor market differences. This requirement has resulted in the State overpaying in some regions of Colorado and underpaying in others.

### House Bill 03-1316

As mentioned previously, Section 24-50-104, C.R.S., calls for "prevailing total compensation" to employees in the state personnel system in order to recruit and retain a quality work force. Recent legislative changes will have a positive impact on the State's ability to remain competitive as an employer in the labor market. Prior to these changes, mandated budget processes separated the funding of cash compensation allocations from decisions related to non-cash compensation (benefits). For example, annually recommended salary increases were automatically funded but the State's employer contribution to health insurance premiums was frozen in statute at specified dollar levels. In addition, elements of cash compensation have been handled separately. The State recently moved to performance-based pay. The funding for performance pay awards has been limited to the amounts historically budgeted for automatic anniversary step increases. This meant that the State was unable to alter its competitive mix of cash compensation by reducing high annual base salary adjustments and increasing the dollars available for performance incentives. This fragmented funding process severely limited DPA's ability to ensure that the State delivered a total compensation package that is competitive with the market. This was due to the State's inability to readily allocate funding to those components of the total compensation package upon which job applicants and current employees place the most value, as well as those elements deemed desirable by the employer for effective performance management.

House Bill 03-1316 addresses this budgeting issue. It also mandates that decisions related to total compensation funding be made as part of the same process. This change will allow DPA to:

- ✓ Alter the mix of compensation to better reflect strategic pay philosophy and/or market practice.
- ✓ Adjust each element of compensation to reflect existing budget needs and future cost projections.

- 
- ✓ Directly ensure that the total compensation package meets the desired goal of being competitive among its identified peer group. (Currently, the separation of benefits from cash compensation in the budget process limits the State's ability to evaluate possible adjustments to either cash or benefits to achieve the best competitive mix.)

In order to implement these changes, DPA will need to examine on a job-by-job basis, the value of total compensation (salary, incentives, and non-cash benefits). There are a variety of approaches that DPA could adopt to meet the requirements of the bill, ranging from somewhat complex to extremely complex. Any approach must include an analysis of the value of: total cash compensation (base salary plus bonuses/incentives), group benefit plans, retirement benefits, performance awards, premium pay practices, and leave.

---

#### **Recommendation 2:**

The Department of Personnel & Administration should immediately develop the procedures necessary to implement the provisions of House Bill 03-1316. These procedures should include:

- Selection of survey sources of total cash information.
- Development of a process to combine actual salary and incentive data for jobs with benefits values.
- Development of a process to determine the "value" of health and disability insurance, retirement, time off, and other non-cash benefits.
- Development of a method to assess the appropriate "mix" of pay elements for state employees.

#### **DPA Response:**

**Partially agree.** DPA has published a process for the selection of survey sources, including the collection of actual salary and incentive data. In addition, by August 1, 2003 DPA will establish all the necessary processes in order to fully implement HB03-1316 by August 1, 2003. While DPA acknowledges the importance of the "value" of health and disability insurance, retirement, time off, and other non-cash benefits, the determination of such "value" is a time-consuming and costly project. Previous efforts to accomplish this valuation have proved to be difficult, not cost effective, and too subjective to be useful for statewide planning. Employers using a "valuation" process are often dependent on annual consulting contracts. It should be noted that the Department is currently involved with a total

reward project sponsored by the National Association of State Personnel Executives (NASPE), which presents another opportunity to further evaluate the cost-effectiveness of a valuation approach. Given the limited resources within the Division, the Department does not believe it is appropriate to dedicate resources toward this effort with its minimal return. However, if the General Assembly believes that valuation is critical, it will be necessary to appropriate additional resources to DPA, including the commitment of consulting dollars for future years.

---



## Statewide Pay Equity

An additional issue affecting the State's competitiveness as an employer relates to the State's definition of salary equity. The Colorado Constitution defines "equity" to mean that pay must be the same for similar work, regardless of a job's geographic location within the State. This definition is in direct conflict with Section 24-50-104, C.R.S., which requires the State to offer "prevailing" (or competitive) compensation for the following reasons:

- ✓ Jobs in markets where the cost of labor is lower than the Front Range are paid more than their local peers, resulting in above market compensation. These include markets such as Pueblo and Mesa counties.
- ✓ Jobs in markets where the cost of labor is higher than the Front Range are paid less than their local peers, resulting in below market compensation. These include markets such as Vail, Steamboat Springs, and Aspen.

The Governor's Commission on Civil Service Reform was established to review Colorado's civil service system and to identify and recommend constitutional reforms to better serve the needs of state government, public employees, and taxpayers. The issue of statewide pay equity may best be addressed by the Commission.

---

### Recommendation 3:

The Department of Personnel & Administration should propose that the Governor's Commission on Civil Service Reform review the current constitutional definition of "equity" and recommend changes that would allow the State to consider a position's geographic location when determining what constitutes "prevailing total compensation."

### DPA Response:

**Agree.** DPA will forward this recommendation to the Commission for their review. The Commission's report is due September 1, 2003. Current constitutional constraints do not allow compensation to be based on geographic location.

---

## Salary Survey Procedures

We believe there are several salary survey procedures that account for discrepancies between state compensation practices and market practices. These include:

- DPA uses pay range data rather than actual pay data when making recommendations for salary adjustments (as discussed in Recommendation No. 4).
- State pay range widths are not established consistent with prevailing practices (as discussed in Recommendation No. 5).
- DPA's survey sources do not contain information on total cash compensation—base pay + bonuses/incentives (as discussed in Recommendation No. 6).
- The State uses separate pay structures for each occupational group (as discussed in Recommendation No. 7).

For each procedure discussed below, we have examined the impact on the State's ability to compete for labor talent and provided a recommendation designed to improve the process.

### Actual Pay Data vs. Pay Range Data

The State's goal of attempting to match State pay range midpoints to market pay range midpoints is flawed, in part because range data is not as useful as actual pay data. Our findings demonstrate that not even the market relies on range midpoints as the basis for setting competitive compensation. Exclusive reliance on pay range data (midpoints) may result in state salaries becoming less competitive over time. Using actual pay data and altering the method for establishing pay ranges based on the actual pay data will provide a more direct and consistent barometer of the competitiveness of pay practices.

DPA collects elements of salary that include actual market base salary (average, 25<sup>th</sup> percentile, 50<sup>th</sup> percentile, and 75<sup>th</sup> percentile), number of reporting organizations, and number of reported incumbents; however, DPA does not use these data to develop recommendations for annual salary adjustments to remain competitive. Instead, as noted previously, DPA gathers salary range rates to calculate the difference between the prior year's midpoint rate and the current year rate for every job surveyed. DPA gathers these range rates to calculate the market-driven pay range for each occupational group. We found that this process adversely affects the State's competitiveness with the market in setting salaries and is unnecessarily time consuming and labor intensive.

DPA's method of calculating pay range adjustments is significantly different from those used by most compensation practitioners today. Most practitioners divide this activity into two elements:

1. Using general survey information to adjust salary ranges. This is simple and results in typical salary structure movements of between 2 percent and 3 percent annually.
2. Using actual pay data to evaluate the appropriateness of pay ranges for individual jobs and to assess the effectiveness of the organization's pay administration system in delivering and maintaining competitive levels of pay across all jobs. This activity produces the kinds of analyses included here and allows the organization to determine how close its actual pay levels are to market practice. Merit (or annual increase) budgets are then usually developed by evaluating what other organizations are budgeting for salary increases for the coming year.

To ensure the State obtains a more accurate measure of competitive salaries in the labor market, DPA should seek out and use data on the actual dollars employers pay rather than analyzing pay range movement information.

In addition to the problems discussed above, DPA's practice of using pay range data is an unnecessarily time-consuming process. While the quality and the extent of the analysis is exceptional, we believe that these limited resources could bring greater value to the department if they were focused differently. While DPA's analytic techniques in compiling and aggregating these data meet and sometimes exceed professional standards, they are costly in terms of the allocation of time and limited internal resources. We estimate that collecting, cleaning, reviewing, analyzing, interpreting, and reporting range data takes staff more than 200 of the 600 to 700 total hours spent on the salary survey process. We believe that this time is not proportional to the value added and shifts the focus away from the Department's primary goal, which is ensuring competitive pay. DPA's resources would be better spent using published planning surveys to determine structure movement. Using these surveys would free DPA resources up to analyze actual pay data and current compensation levels. Information that is more valuable would result without any increase in cost. Planning surveys are relatively inexpensive (usually no more than \$150 to \$450 each) and DPA already acquires one or more of these.

**Recommendation 4:**

The Department of Personnel & Administration should improve its survey of salary data in order to help provide a competitive total compensation package for the State by:

- a. Thoroughly analyzing actual pay data collected during the survey effort and using this information when determining the competitiveness of state compensation levels each year and for recommending salary increase budgets.
- b. Using published compensation planning surveys to develop recommendations regarding structure adjustments for state pay ranges (either a single structure or structures for occupational groups).

**DPA Response:**

- a. **Partially agree.** DPA plans to analyze actual pay data to determine the competitiveness of state compensation levels in this survey cycle. Prior to 1987, the Department collected the actual pay to make recommendations for salary survey adjustments but found this historical practice to be unstable for the state's pay structure. Due to uncontrollable factors such as layoff or new hires, the variety of employer's pay practices and other market fluctuations, the Department found actual pay analysis resulted in erratic survey recommendations. The General Assembly changed the statute in 1987 to require the use of published surveys and occupational group recommendations in order to provide more stable salary survey recommendations. Since then, the Department has consistently applied market pay structure analyses to set pay structures for the state. The Department will continue to use pay structure movement in the market to recommend the state's pay structure adjustment, but will use actual pay data to determine the needed budget for adjusting employees' actual pay.
- b. **Partially agree.** DPA will use the published compensation planning surveys to verify the pay range structure movements and to make sure that the recommendations for occupational group adjustments are comparable to the labor market for comparable jobs.

### Pay Range Widths

We found that state pay ranges are not established consistent with prevailing practices. As previously noted, DPA sets pay range widths each year based on its analysis of pay range midpoints in the market for each occupational group. We have found that DPA's process for setting pay ranges differs markedly from other organizations. Most organizations set their pay range widths in a manner that supports their own unique compensation strategy. A typical market practice is to use ranges that are 35 percent wide for hourly (or FLSA non-exempt) positions. This practice is driven by several factors:

- Lower paying positions have short learning curves; and
- There are fewer opportunities for these jobs to become more complex and thus require narrower ranges of pay opportunity.

For professional and managerial (or FLSA exempt) positions, typical market practice has been to use ranges that are 50 percent wide or more. This practice is driven by factors similar to those for non-exempt positions:

- Higher paying positions take longer to master because of their complexity; and
- There are more opportunities for these jobs to grow by taking on greater responsibilities while still performing the basic job functions (thus requiring a wider range of pay opportunity).

A variety of factors may influence an organization's decisions regarding pay range width. These factor include:

- ✓ *Range of pay opportunity.* An organization may have 15 pay ranges. Ranges 1 – 5 could have a range width of 40 percent, ranges 6 – 10 could have a range width of 50 percent and ranges 11 – 15 could have a range width of 60 percent. In this example, the organization recognizes and follows a market-driven practice that accounts for the smaller learning curve at lower pay grades with narrow, pay range opportunity. Range of pay opportunity increases as an employee moves up through the pay structure into larger jobs.
- ✓ *Compensation based on individual attributes.* Pay ranges that provide pay opportunity based on the acquisition of competencies by the individual. Often, these ranges have widths tied to affordability.

- ✓ *Flexibility in management of pay program.* Broadbands of pay that promote non-hierarchy and job-sharing. These ranges may be 100 percent or more in width.
- ✓ *Clear delineation between job responsibilities.* Narrow range widths that support job hierarchies, career ladders and multiple job families.

Once jobs have been placed into a competitive market range based on actual pay data, the need for unique salary ranges for each occupational group is eliminated. Jobs receive a pay opportunity that corresponds with the market value of the work. This approach would eliminate the need for the State to maintain a multiplicity of ranges with varying widths, increments from range to range, and separate occupational groups. DPA should adopt a pay range strategy that is more consistent with prevailing best practices in a market driven approach.

---

**Recommendation 5:**

The Department of Personnel & Administration should establish pay range widths that are consistent with “best practices” in the market and reflect organizational hierarchy and other work-design objectives. Pay range widths should generally be:

- a. Narrower for lower paying positions.
- b. Wider for higher paying positions.

**DPA Response:**

**Agree.** The Department believes that pay range width is established for equitable pay opportunity. For example, a narrower range width may be more suitable for jobs with shorter learning curve, such as Administrative Support and Related jobs. A wider pay range provides pay opportunity for employees to progress within a range while acquiring broader competencies for a job, such as Professional Services jobs. The Department also believes that it is appropriate to determine pay range width based on the unique requirements of each occupational group and needs of the organization (i.e., the state), as recognized by the auditor. Prior to 1987, the state used a single pay grid with uniform pay range width but found it did not recognize the difference in scope of assignments and market adjustments for different groups. In order to provide flexibility for managers to manage pay administration and for employees to broaden their careers, an

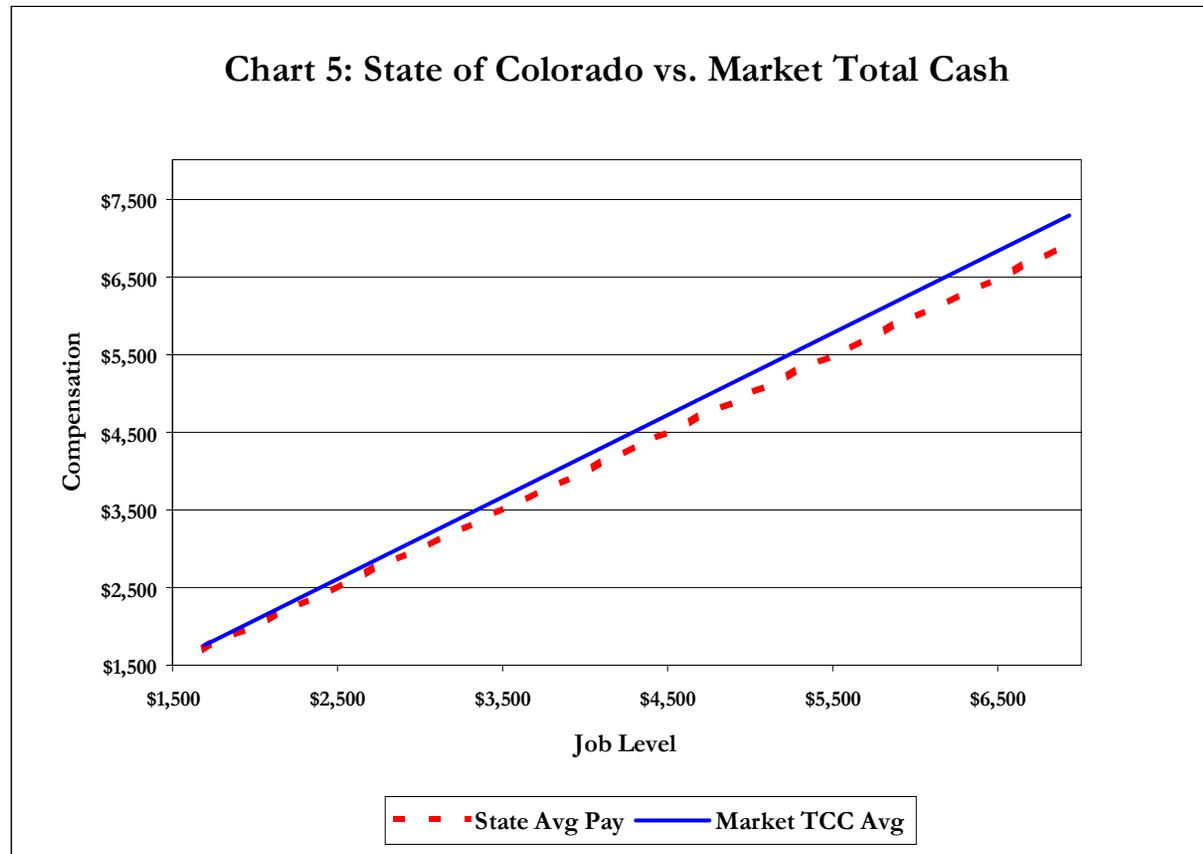
even wider pay range may be needed in order to allow this possibility. The Department will continue to monitor market trends and evaluate the system and operational needs in determining range width for state jobs.

---



**Total Cash Compensation**

The element of cash compensation (salaries) in the State’s total pay package may not be effective in achieving the intent of the statute for a third reason. DPA’s survey sources do not contain information on total cash compensation (base pay + bonuses/incentives). The State excludes a significant element, namely bonuses or short-term incentives, from consideration. We reviewed total cash compensation for 35 jobs using a single, national salary survey. These included jobs such as Accountant, Social Worker, and Equipment Operators. We found that the market provides an average of 5 percent of base salary in a cash bonus not reflected in the Department’s analysis. DPA’s recommended pay range adjustments do not take into account this additional 5 percent of compensation. As Chart 5 illustrates, the failure to include total cash compensation in its analysis adversely affects the State’s ability to remain competitive with the market.



---

**Recommendation 6:**

The Department of Personnel & Administration should purchase and use salary surveys that include total cash compensation (base salary plus bonuses/incentives).

**DPA Response:**

**Agree.** The Department recognizes bonus pay and incentive pay as part of a total compensation package and is integrating this into the 2004 survey due to the passage of HB1316. In addition to purchasing third-party surveys that include incentive and bonus pay along with compensation data, the Department is conducting a direct survey in order to collect this information from the labor market. Unfortunately, from past experience, organizations are reluctant to provide such information on surveys. Therefore, the Department has also obtained several salary planning surveys as recommended by the auditor to collect budget planning information and trends to examine how employers integrate this component into their total compensation package. The Department has begun its effort to collect this information from all possible sources but acknowledges it may not be wholly available and may require additional operating funds to purchase more surveys.

---

**Salary Structure**

Finally, we found that DPA should reconsider its practice of using separate pay structures for each occupational group. For example, a Food Services Manager III is currently in grade H-45 in the professional services occupational group, with a minimum salary of \$3,881 and a maximum salary of \$5,622. A Rate/Financial Analyst II, on the other hand, is in grade B-39 in the financial services occupational group, with a minimum salary of \$3,882 and a maximum salary of \$5,601. Because the Department maintains pay ranges by occupation and examines the market accordingly, pay ranges are set and adjusted somewhat independent of the rest of the pay structure. While this practice appears to provide a more “specific” link to the market (by establishing pay levels that are tied directly to jobs in that occupational category), the same result can be achieved with a simpler approach. That approach involves the adoption of a **single salary structure** (or two if there is cause to separate non-exempt hourly and exempt managerial/professional positions). In the example provided above, a single salary structure would assign both of these jobs to the same grade with the result that minimums and

maximums would be the same (as is normally the case in the market). Again, we point out that while multiple structures provide the appearance of stronger linkage with the market, the variability in market practice (and in the data itself) and DPA's current focus on range data eliminate the linkage. The state's practice of using multiple salary structures creates a number of negative by-products in our estimation. These include:

- Unnecessary complexity.
- Excessive time and resources required.
- Communication challenges.

On the other hand, we believe a single structure provides a number of benefits, which include:

- Ease of maintenance.
- Simplicity and ease of understanding by employees.
- Equivalent ability to maintain market-competitive salary levels for every position.
- More consistent and defensible use of market information.

The State can develop a market-driven pay system that is flexible, easy to maintain, and easy to communicate without the current multiple structures or pay ranges. DPA should eliminate the practice of establishing multiple sets of pay ranges in isolation, according to specific occupational groups, and adopt a single cohesive pay structure linking all pay ranges to the overriding compensation philosophy. This new approach would be a first step toward better aligning the State's compensation structure with the market. Coupled with pay range and survey improvements discussed above, the State will be better positioned as an employer to ensure its competitiveness in the labor market.

---

#### **Recommendation 7:**

The Department of Personnel & Administration should adopt a single pay structure rather than using multiple pay ranges tied to various occupational groups.

**DPA Response:**

**Partially agree.** DPA developed its market pay ranges in response to previous auditors' recommendations. Historically, the state used a single pay structure but the creation of occupational groups presented the ability to be more reflective of markets for the variety of state occupations, some of which are unique to state government. While the Department agrees with the auditor that fewer occupational groups are appropriate, we are concerned that a single pay structure would not facilitate prevailing wage and market comparability, which could result in recruitment issues and is not reflective of the statutory intent to provide prevailing compensation for the breadth of state occupations. For example, the 2003 survey recommended a 6.7% adjustment for the Health Care occupational group in reflection of the high demand in the health care workforce, while an average of 3.0% was recommended for the other occupational groups. If there were no occupational group differentiation, a statewide average adjustment would mean an under-adjustment for the high-demand occupational group, and over-adjustments for the other groups. The Department is reviewing and revising its current job evaluation and compensation system. Uniformity and flexibility as recommended by the auditor are also considered in this effort. A model for the new system will be finalized by July 1, 2003, and the first implementation is planned for July 1, 2004. This effort will reduce the number of classes and pay ranges.

---

## Benefits (Non-Cash Compensation)

Non-cash compensation includes benefits such as health and dental insurance, retirement plans, short- and long-term disability, and leave. As part of the Total Compensation Survey process, DPA must assess the State's non-cash compensation package to determine how it compares with the market. DPA's method of benefits analysis is aligned with what the State considers the "value" an employee receives from the benefit. This value is then compared with market values to determine whether non-cash benefits are competitive.

We assessed the surveys DPA uses to analyze state benefits, as well as its findings and recommendations in each benefit area. We then compared DPA's survey findings with broad benefit practices reported in national surveys. Since the previous audit, DPA has maintained a consistent number of benefit survey sources. DPA uses the Colorado Municipal League and Mountain States Employer Council as its sources. We believe that DPA's survey sources provide comprehensive and credible information regarding current benefit expenses and practices in the Colorado marketplace; DPA's findings are consistent with our independent review. However, the State's actual benefits may not be aligned with prevailing market practices in several areas, including health insurance contributions and leave practices. Although DPA does a good job of surveying and analyzing prevailing benefits, this does not mean that the State is competitive as an employer in the labor market. As mentioned previously, the State's ability to provide a competitive total compensation package has been limited by the budgeting process in effect prior to the implementation of House Bill 03-1316. Within this process, salaries and benefits have been funded separately each year. As a result, the State's fragmented approach does not ensure the State's limited compensation dollars are flexibly allocated from year to year toward the appropriate mix of total compensation components necessary to achieve the optimum value point in the labor market.

We agree with DPA's conclusion that the State's contribution to employee health insurance premiums may be below the market. Although a detailed analysis of the State's health benefits structure is beyond the scope of this audit, we believe a comprehensive analysis of this area needs to be completed. The Office of the State Auditor is presently conducting a separate audit of DPA's health insurance benefits practices to recommend possible improvements in this area. It is important to note here, however, that employees place tremendous value on employer health insurance. Employee surveys indicate that health insurance is the single most important benefit to employees. The value employees place on benefits is another reason why it is important that the Department assess the impact benefits have had on the State's recruitment and retention of employees. This finding reinforces the need in a competitive environment for an integrated analysis of salary and benefits funding, as called for by HB 03-1316, to ensure the State is offering a package that focuses on the appropriate overall value.



As part of our review of the State’s non-cash compensation practices, we analyzed typical employer paid time-off practices. We evaluated benefit trends as reported during the last three years in national surveys by Buck Consultants, Hay Group, U.S. Chamber of Commerce, and Watson Wyatt. We found that consolidated leave programs, typically known as “pooled time-off” or “PTO” plans are very common in Colorado. PTO’s are plans in which vacation, sick leave, and personal leave are combined into a single pool from which employees are granted time off, without regard to the reason. PTO plans can provide significant benefits to organizations seeking flexibility and choice for employees as well as controlling costs on the employer side. The Mountain States Employer Council reported 49 percent of employers providing such a plan, while national surveys reported prevalence that varied from 18 to 25 percent. The difference here suggests that in the state of Colorado, PTO plans are more widely used than in the rest of the nation. Since the State recruits for labor talent only from existing residents, the widespread use of PTO plans among the State’s market competitors might indicate that such a plan is necessary to maintain a competitive total compensation package for state employees.

We also examined injury leave practices. The State currently provides ninety working days of paid leave for work-related injuries qualifying for lost-time wages under the Colorado workers’ compensation program. Data indicate that it is uncommon for organizations to supplement an employee’s initial workers compensation benefit with paid time off beyond accrued sick and annual leave. The common practice is to allow employees to make up the difference between workers’ compensation payments (approximately 66 percent of salary) and full salary by using accrued sick or annual leave in approximately one-third day (33 percent) increments. This policy is generally called “make-whole.” Common market practice is to utilize short-term disability after an initial period (usually thirty days during which sick or annual leave is used to “make-whole” the employee) to supplement the injury leave so that the employee continues to receive full pay.

---

**Recommendation 8:**

The Department of Personnel & Administration should consider alternatives to the State’s current leave policies. These alternatives should include:

- a. Implementing a consolidated leave program; and
- b. Eliminating the State’s current injury leave benefit in favor of a make-whole policy that permits employees suffering compensable workers’ compensation injuries to maintain full salary during lost work time by using sick and annual leave in increments of approximately 33 percent per day.

**DPA Response:**

- a. **Agree.** The Department is moving towards implementing a pooled leave program beginning July 1, 2004 dependent upon legislative changes that will be necessary, and the development of a vigorous employee communication plan. The Department has a feasibility study and model, formulated a focus group, and developed a communication plan to accomplish the program.
- b. **Agree.** The Department has made two attempts to eliminate injury leave but have been overturned by the courts. Data on injury leave is not readily available in published surveys; therefore, the Department plans to conduct another direct survey. Depending on the results of the direct survey, the Department will determine the appropriate course of action. The Department believes that the results will support elimination of injury leave and will implement such action no later than July 1, 2004.
-

## Benchmarking

Although DPA does a good job of establishing valid benchmark jobs that match the market, DPA uses too few benchmark jobs in its analysis as compared to best practices in the market.

In order to complete the Total Compensation Survey, DPA selects a sample of state jobs that can be used as benchmarks when comparing state positions with positions in other organizations. DPA benchmarks are the jobs actually used to calculate the Department's recommended pay adjustments. Therefore, it is important that DPA select an appropriate number of jobs to be used as benchmarks.

DPA staff reviews job descriptions included in surveys to match with state classes. Survey data from the 20 Front Range counties are the primary sources for the annual survey process. In order to supplement the survey sample, data from statewide, multi-state, and/or national labor markets may be included. The Department has a policy that if regional or national survey sources do not have adequate geographic differential measurements and reporting, it will consider these types of data sources as references only.

According to industry standards, the following criteria should be used when selecting benchmark jobs to ensure a strong benchmark representation:

- ✓ Market comparability: Select positions that are commonly found in other organizations.
- ✓ Organizational hierarchy: Select positions that represent the full range of size of positions across the State's job hierarchy.
- ✓ Employee representation: Select positions that represent large numbers of employees whenever possible.
- ✓ Cross-functional representation: Select positions that represent all of the functions within the State, from information systems to health care to parks and recreation.

We reviewed the list of jobs the DPA used as benchmarks against these criteria. Overall, we found that DPA has done a good job of selecting appropriate benchmarks. As indicated in prior audits, however, we believe DPA needs to expand the number of benchmark jobs selected each year. For its 2003 Total Compensation Survey DPA selected 198 of the 485 jobs (41 percent) found in the state personnel system. This is up from the 36 percent of state jobs selected for the 2001

Total Compensation Survey. These 198 jobs satisfied the DPA practice of utilizing a sufficient survey sample of Priority 1 (Front Range) market data. The following chart displays, by occupational group, the total number of state jobs and the number ultimately used as DPA benchmarks.

Benchmark Analysis			
Occupational Group	Total Jobs*	DPA Benchmarks	% of Total
Administrative Support and Related	51	24	47%
Enforcement and Protective Services	38	9	24%
Financial Services	57	12	21%
Health Care Services	78	39	50%
Labor, Trades & Crafts	70	48	69%
Senior Executive Service	1	1	100%
Medical	6	2	33%
Physical Sciences and Engineering	55	25	45%
Professional Services	122	37	30%
Teacher	7	1	14%
<b>All Occupational Groups</b>	<b>485</b>	<b>198</b>	<b>41%</b>
Source: DPA data			
*Jobs with employees			

Although DPA has increased the number of jobs selected as benchmarks, we believe that further improvements are desirable. Specifically, DPA should select at least 75 percent or roughly 360 of the total state jobs as benchmarks. Prior audits have commented that a pay system “driven” by the market should seek to collect market data on more than 50 percent of an organization’s jobs/positions simply because market-based systems rely on market data. As many jobs as possible should be directly linked to actual market data in order to validate the “market orientation” of the system. Additional benchmarks allow the effective execution of our other recommendations regarding collecting and analyzing actual pay levels.



DPA could also improve its survey process by reducing the number of benchmark jobs for which it collects specific pay information each year. As mentioned previously, DPA currently collects this information for all 198 benchmark jobs, representing 41 percent of all state jobs. There is no compelling reason, however, to collect data on this number of jobs each year. Instead, we recommend focusing the data collection on a limited number and then analyzing more closely actual pay practices relative to state pay levels for the selected benchmarks. We believe that DPA should collect information for one-third of its benchmark jobs each year so that after a three-year cycle, all jobs have been thoroughly evaluated. This means the State should use 360 of its 485 jobs (75 percent) and annually collect information on 120 of those 360 jobs. This approach, which should focus on actual pay, is a more cost-effective use of DPA resources and will provide more valuable data from which to assess total compensation competitiveness.

---

**Recommendation 9:**

The Department of Personnel & Administration should select at least 75 percent of the total state jobs as benchmarks for its Total Compensation Survey. The Department should then analyze approximately one-third of those benchmark jobs each year so that within a three-year cycle, roughly 75 percent of state jobs will have been reviewed for market competitiveness.

**DPA Response:**

**Partially agree.** The Department continues efforts to increase benchmarks to the extent possible. While it would be ideal for DPA to have survey data for 100% of state jobs, that is not practical. With the unusual nature of many state jobs found only in the public sector and specifically state government, third-party survey data is not available for many state jobs. Currently, the Department includes approximately 41% of job classes in its survey process annually. In order to expand the survey sample, the Department would need to conduct more direct surveys and include other state or national surveys, which will require more complex methodologies, e.g., geographic adjustments for regional or national data. This means the Department will have to allocate more resources to the survey process. For example, prior to changing to the current survey process, before 1987, the Department had to commit about six staff members full-time to do on-site data collection for several weeks. One primary reason the legislature directed the use of third-party surveys in the 1987 statutory changes was based on their dissatisfaction with the large number of staff resources needed to perform direct market surveys. With the number of data records collected from the third-party surveys as required by the statute, the Department believes that its survey process provides a representative market sample and benchmark jobs to make

equitable survey recommendations. It is necessary to balance the amount of time and effort with the resulting benefit. The Department believes that any expansion of benchmark jobs at the expense of more staff and cost would not be cost-effective for the purposes of the survey process.

---



## Succession Planning

We reviewed the processes DPA has established to transfer knowledge of Total Compensation Survey procedures and preserve the integrity of analytic techniques in the event of employee turnover, transfer, etc. We found that DPA has prepared a training document that provides directions and outlines the steps necessary for completing each step of the survey process. Currently one DPA employee is responsible for completing the survey and for preparing the annual Total Compensation Survey Report. Another employee has received training and is able to perform the procedures outlined in the training document. During the present survey cycle, four additional employees are being trained on the procedures and will perform aspects of future survey work. In addition, DPA is working on refining the existing training document and writing new procedures as the survey has evolved over time. Although DPA is taking steps to train additional staff, we are concerned that DPA's current process is too dependent upon the undocumented expertise of one person. Therefore, we recommend that DPA should create a more comprehensive succession plan to ensure the continuing quality of its survey process.

---

### Recommendation 10:

Assess succession plans, career development initiatives, and internal skill sets as they relate to the Department's ability to conduct the Total Compensation Survey. In the event that current staff are unavailable to conduct the survey, a formal plan to ensure the ability of the Department to maintain this service is essential. DPA should develop a formal plan that considers the following elements:

- ✓ Active participation in the process (by two or more DPA employees) that includes analysis, documentation, and reporting activities.
- ✓ Documented steps and procedures for each task associated with the survey.
- ✓ An annual assessment by DPA management of individual employee's capabilities and career development as it pertains to the annual survey effort.
- ✓ Development of a long-term succession plan that considers how key members of the survey effort will be replaced in the event of DPA turnover.

**DPA Response:**

**Agree.** DPA agrees with the criticality in maintaining the knowledge, skills, and abilities required to conduct the annual survey process and the need to document the steps and procedures for each task. Presently, three staff members are in training to perform parts of the 2004 survey methodology, including data analysis, documentation, and reporting. Staff capabilities are assessed through performance management and the Division's strategic planning efforts. The Department will continue its efforts to ensure adequate succession planning for this and other positions within the Department.

---

## Follow Up to Prior Audit Recommendations

This effort focused on the recommendations presented to DPA in the last audit (2001) and an analysis of the extent to which DPA implemented those recommendations. Overall, the 2001 audit made nine recommendations. Out of these recommendations, we have concluded that three were fully implemented (Recs. 1.1, 1.2, and 5.1), four were partially implemented, and two were not implemented. Excluding the three that were implemented, status of the remaining recommendations is as follows:

### Recommendation 1.3:

- ◆ The DOP should purchase and utilize annual pay range movement surveys that are specifically intended to provide the recommendations that the DOP makes each year.
- ◆ **Partially implemented.** DPA continues to utilize the recommended surveys only in an effort to check and validate its own analyses. The intent of our recommendation has not been fully implemented and as a result, we have seen disparities between the results listed in published salary planning surveys and those used by DPA.

### Recommendation 2.1:

- ◆ The DOP should continue to expand its effort to collect actual pay data on a greater number of positions at the State.
- ◆ **Partially implemented.** While DPA continues to gather actual market pay rates for the positions surveyed, it does not include these data in its calculation of range adjustments, which we believe is the appropriate use of such data.

### Recommendation 2.2:

- ◆ The DOP should conduct a detailed survey of pay practices for approximately one-third of its benchmark jobs each year.
- ◆ **Not implemented.** As with prior year recommendations, this was made contingent upon DPA utilizing published range movement data to determine occupational group movement. Since DPA has not adopted our range movement recommendation, the Department has not adopted Recommendation 2.2.

**Recommendation 3.1:**

- ◆ The DOP should continue to broaden its survey sources.
- ◆ **Partially implemented.** DPA did increase the number of surveys gathered since the last audit; however, its policy of excluding survey sources that do not provide range information prevents it from gathering additional, substantial, and pertinent data.

**Recommendation 4.1:**

- ◆ The DOP should discontinue its practice of setting market-driven pay range widths by occupational classification.
- ◆ **Not implemented.** DPA continues to apply market-driven pay range widths by occupational classification, while monitoring range width by functional area. We believe this practice will continue to place a strain on the State's higher level positions because of a lack of true market-driven pay opportunity. The consequences will be the State's pay structure becoming non-competitive at higher level positions.

**Recommendation 4.2:**

- ◆ The DOP should use published market data to determine the appropriate target bonus level for groups of classifications.
- ◆ **Partially implemented.** DPA conducted preliminary research for its recommendations and plans to conduct a more thorough survey to collect market practices in bonus pay.

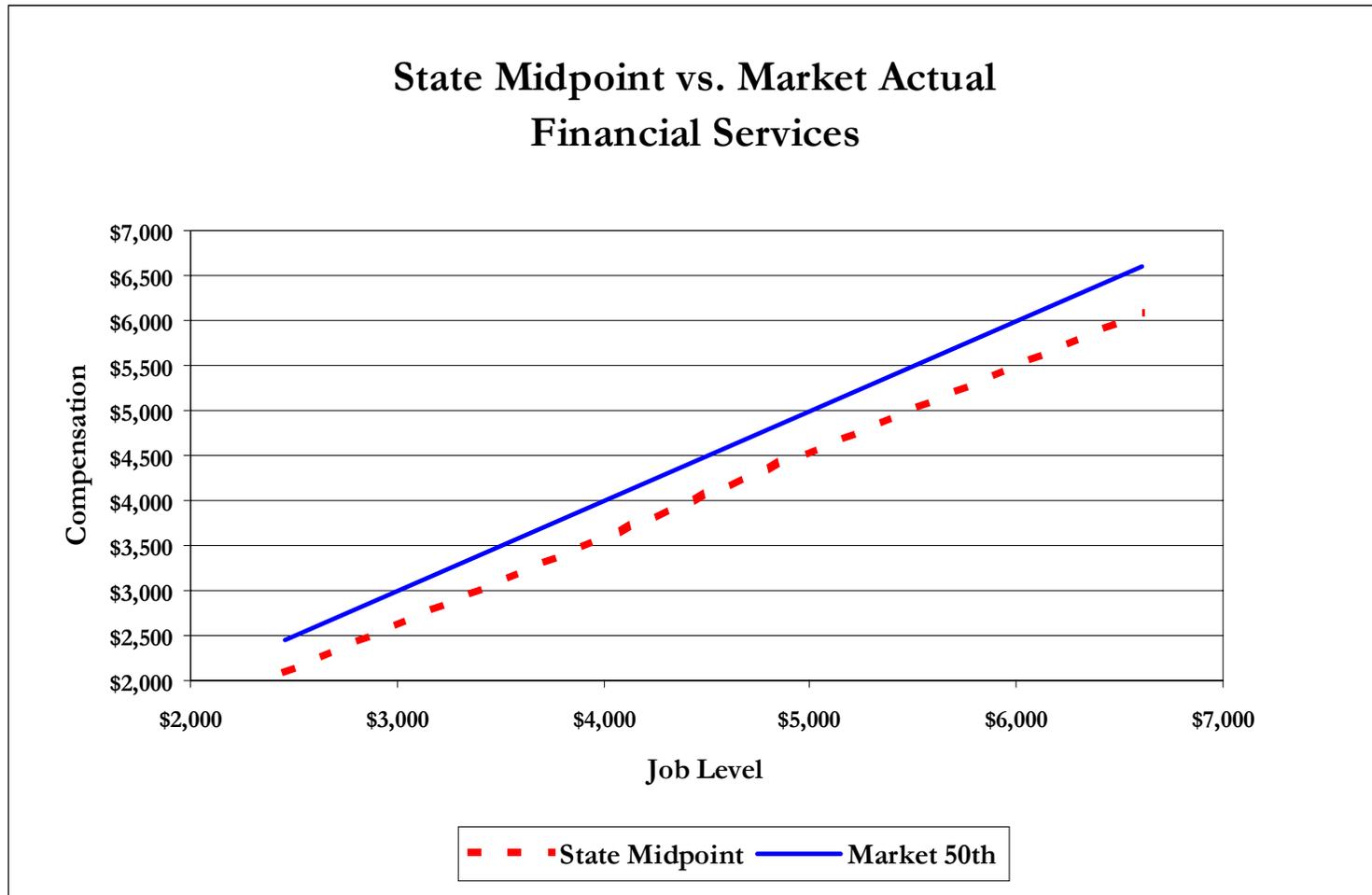
Class	Title	Milliman Market Avg	State Market Avg	% Diff*	Comments
A1D2	Corr/Yth/Clin Security Officer I	\$3,156	\$3,297	4%	matches are consistent as are the market data
A2A2	Criminal Investigator I	\$4,812	\$4,368	-9%	matches are consistent as are the market data
A9A1	ANG Patrol Officer I	\$3,359	\$3,359	0%	matches are consistent as are the market data
B1A2	Accountant II	\$3,880	\$3,973	2%	matches are consistent as are the market data
B1A3	Accountant III	\$5,184	\$5,400	4%	matches are consistent as are the market data
B1C2	Accounting Technician II	\$2,695	\$2,879	7%	matches are consistent as are the market data
B1C4	Accounting Technician IV	\$4,219	\$4,561	8%	matches are consistent as are the market data
B2A5	Auditor IV	\$6,361	\$6,862	8%	matches are consistent as are the market data
B2F2	Budget Analyst II	\$4,753	\$4,700	-1%	matches are consistent as are the market data
C4L2	Social Worker/Counselor II	\$3,568	\$3,359	-6%	matches are consistent as are the market data
C4M2	Psychologist I	\$5,571	\$5,114	-8%	matches are consistent as are the market data
C5L2	Therapy Assistant II	\$2,770	\$2,759	0%	matches are consistent as are the market data
C6R1	Health Care Technician I	\$2,092	\$2,560	22%	DPA matched this position at a higher level than Milliman
C6S3	Nurse III	\$4,312	\$4,776	11%	DPA matched this position slightly higher than Milliman
C8B2	Dietitian II	\$3,542	\$3,727	5%	matches are consistent as are the market data
C8E3	Pharmacy III	\$7,959	\$7,970	0%	matches are consistent as are the market data
D6A2	Electrical Trades II	\$4,270	\$4,297	1%	matches are consistent as are the market data
D6C2	Pipe/Mechanical Trades II	\$3,738	\$3,700	-1%	matches are consistent as are the market data
D7B1	Equipment Operator I	\$1,981	\$1,972	0%	matches are consistent as are the market data
D7B4	Equipment Operator IV	\$3,241	\$3,433	6%	matches are consistent as are the market data
D8B1	Custodian I	\$1,877	\$2,038	9%	matches are consistent as are the market data
D8C3	Dining Services III	\$1,883	\$1,884	0%	matches are consistent as are the market data
D8G4	Materials Supervisor	\$3,531	\$3,582	1%	matches are consistent as are the market data
G1C2	Telephone Operator I	\$1,912	\$1,863	-3%	matches are consistent as are the market data
G2D2	Data Entry Operator I	\$2,137	\$2,152	1%	matches are consistent as are the market data
G3A2	Admin Assistant I	\$2,241	\$2,436	9%	matches are consistent as are the market data
G3A5	Office Manager I	\$3,513	\$3,804	8%	DPA matched this position slightly higher than Milliman

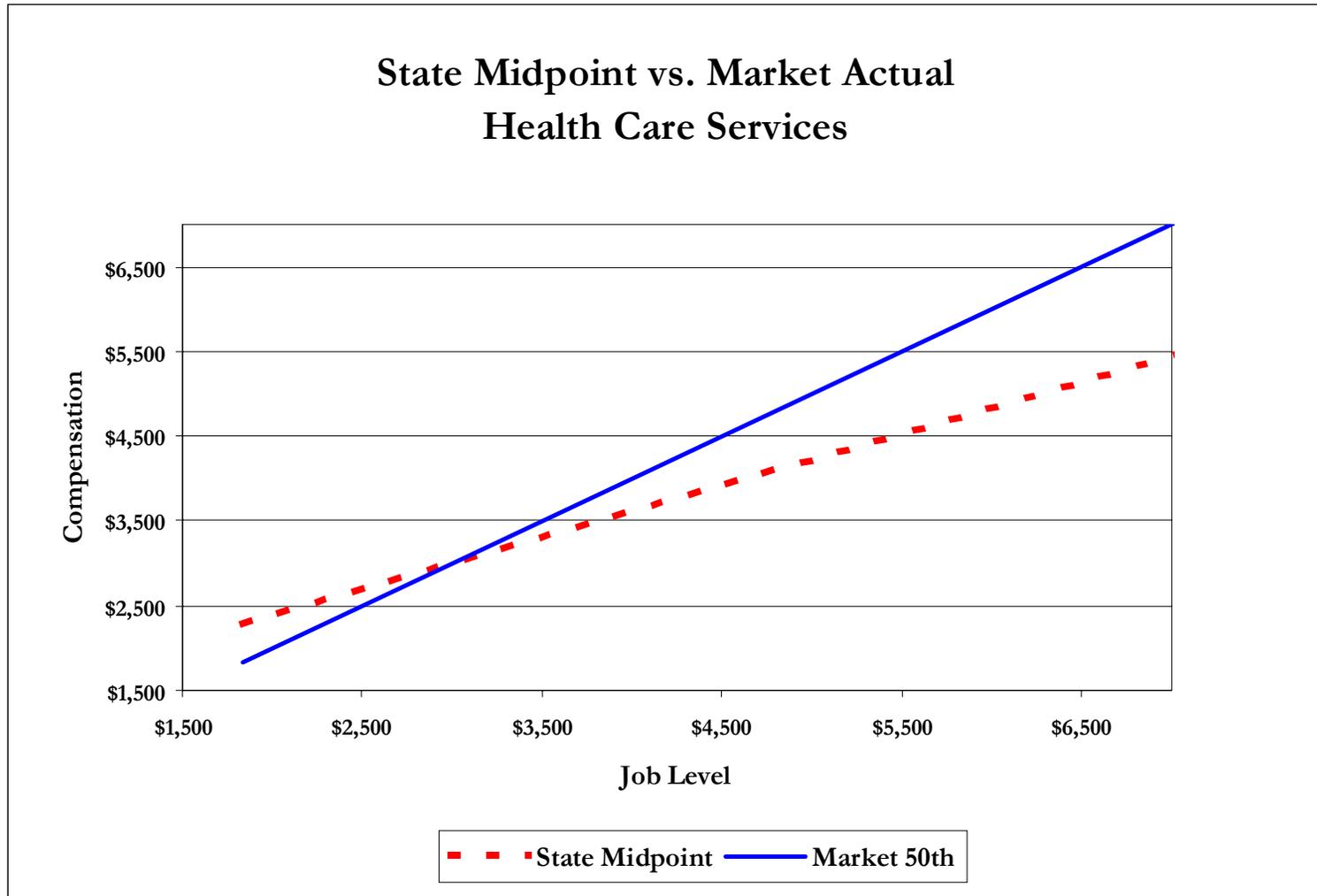
Class	Title	Milliman Market Avg	State Market Avg	% Diff	Comments
G3C3	Library Technician I	\$2,836	\$2,880	2%	matches are consistent as are the market data
G3D2	Medical Records Technician II	\$2,583	\$2,596	1%	matches are consistent as are the market data
H2I2	IT Technician II	\$3,738	\$3,986	7%	matches are consistent as are the market data
H2I7	IT Professional V	\$6,773	\$7,170	6%	matches are consistent as are the market data
H3U4	Arts Professional II	\$3,275	\$3,275	0%	matches are consistent as are the market data
H5E2	Legal Assistant II	\$3,619	\$4,595	27%	DPA matched this position at a higher level than Milliman
H6H2	Archivist II	\$3,231	\$3,231	0%	matches are consistent as are the market data
H6P5	Park Manager V	\$6,500	\$6,059	-7%	matches are consistent as are the market data
H6V1	Youth Services Counselor I	\$3,957	\$3,703	-6%	matches are consistent as are the market data
I2C6	Professional Engineer III	\$8,335	\$8,419	1%	matches are consistent as are the market data
I3A3	Environmental Protection Spec II	\$4,579	\$4,322	-6%	matches are consistent as are the market data
I3B2	Physical Science Res/Scientist I	\$4,227	\$4,137	-2%	matches are consistent as are the market data
I5E2	Electronics Specialist I	\$3,172	\$3,211	1%	matches are consistent as are the market data

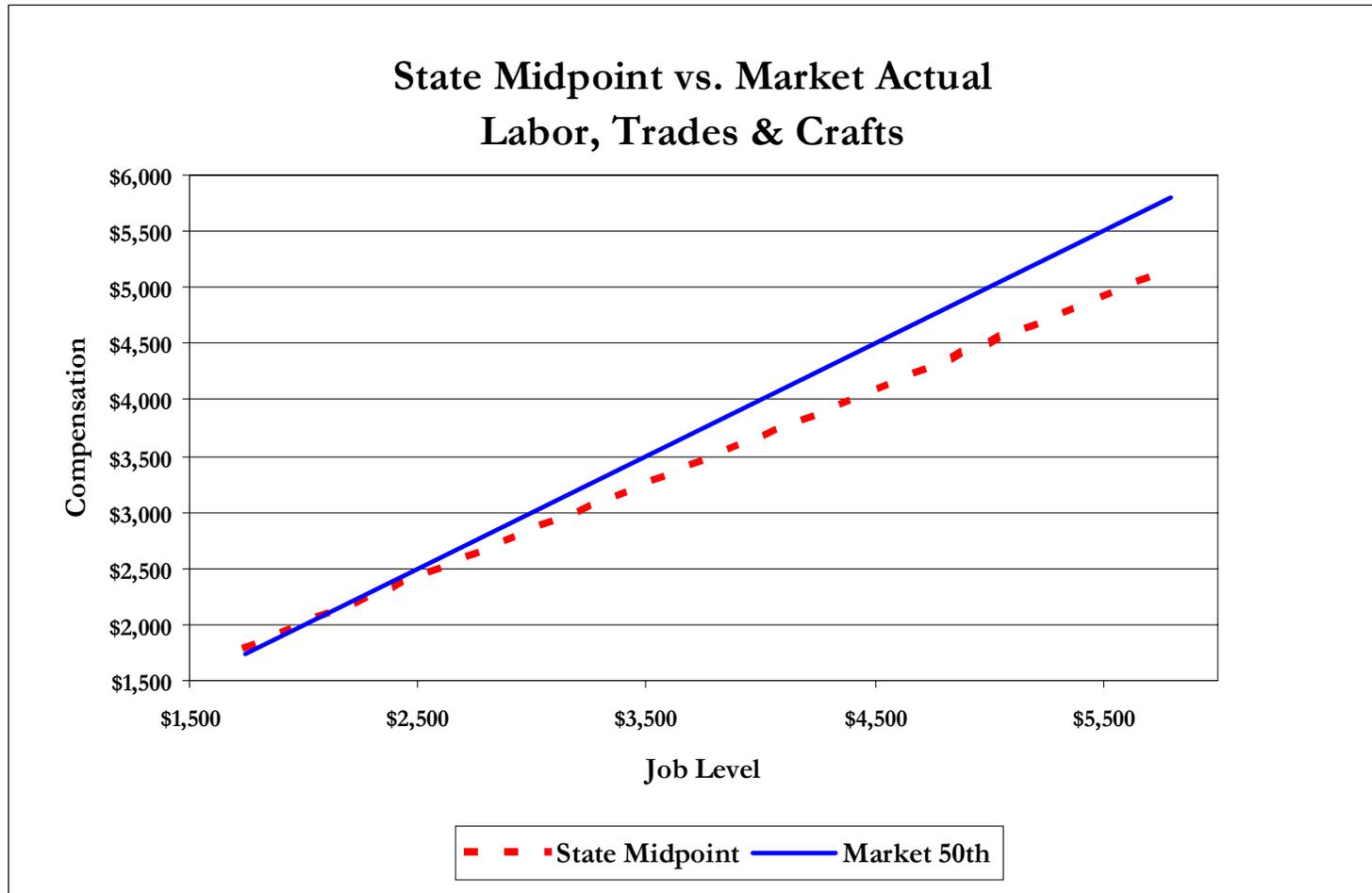
\* We expect some variability here even if the matches are consistent. Normal variation caused by survey participation and other influences ranges from +/- 5% to +/-10%, depending on the "commonness" of the benchmark job.

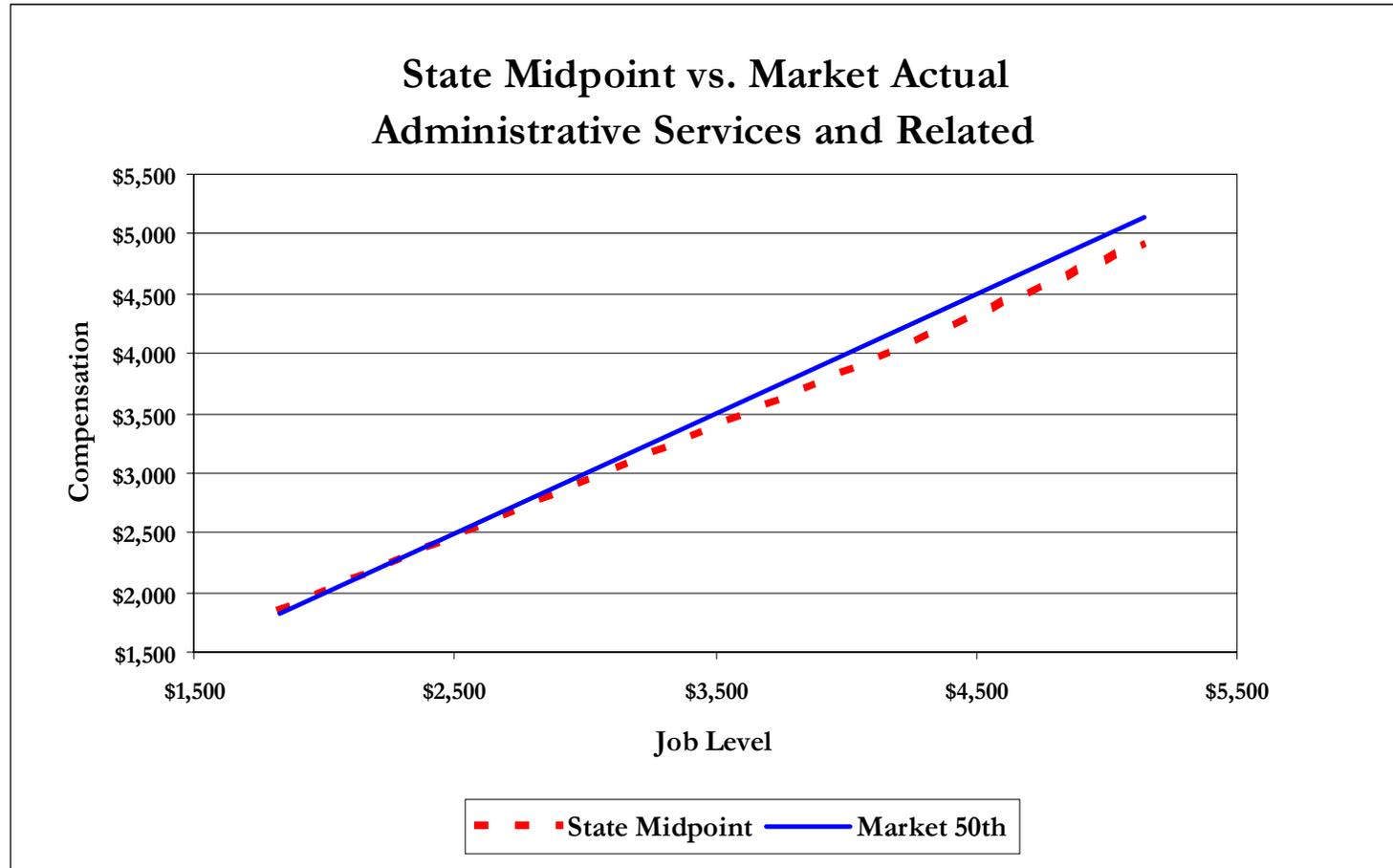
Data for this activity were drawn from the identical surveys as those used in the DPA's Total Compensation Survey. The Milliman Market Average and the State Market Average are displayed in simple average reporting format.

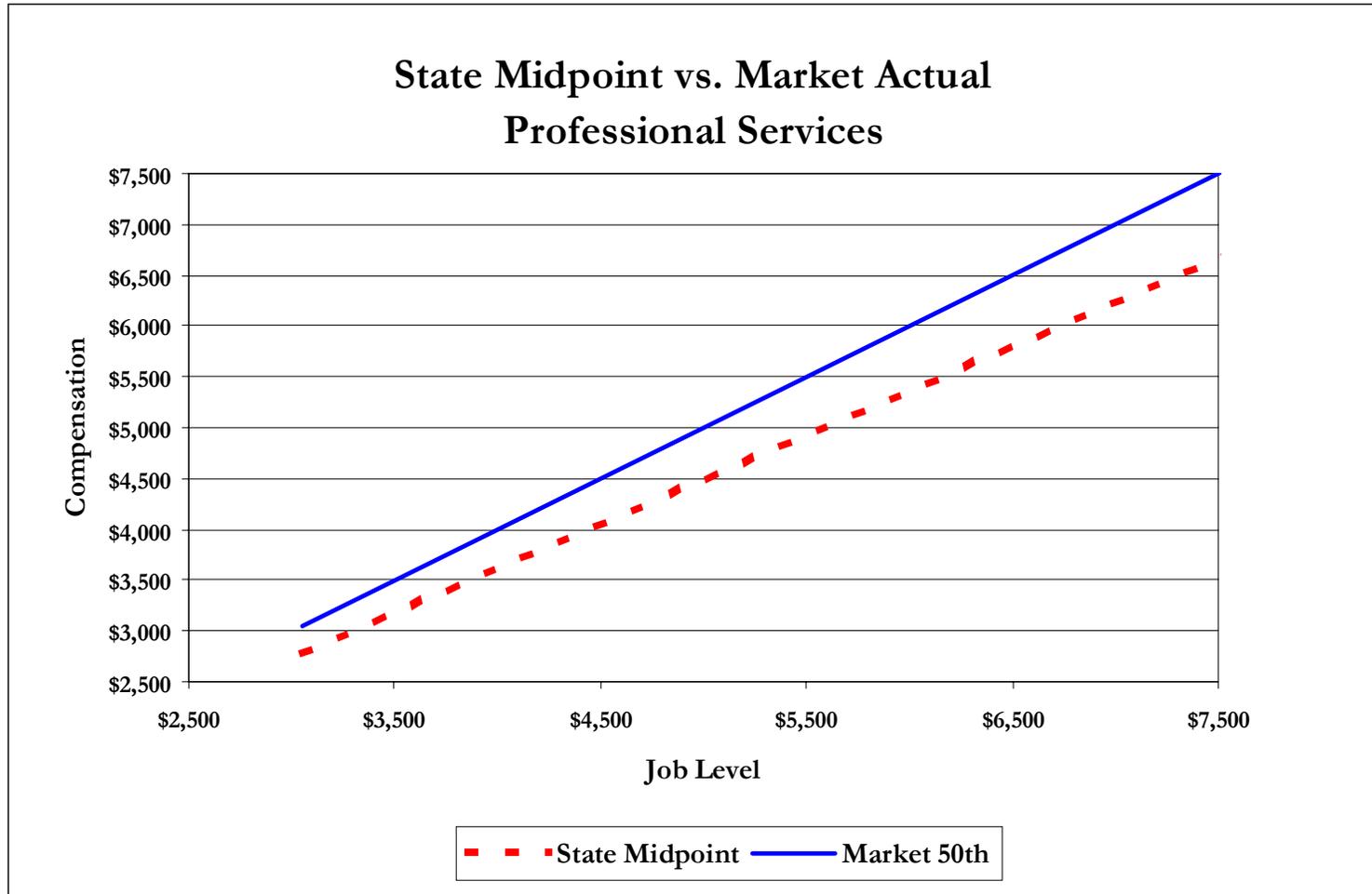


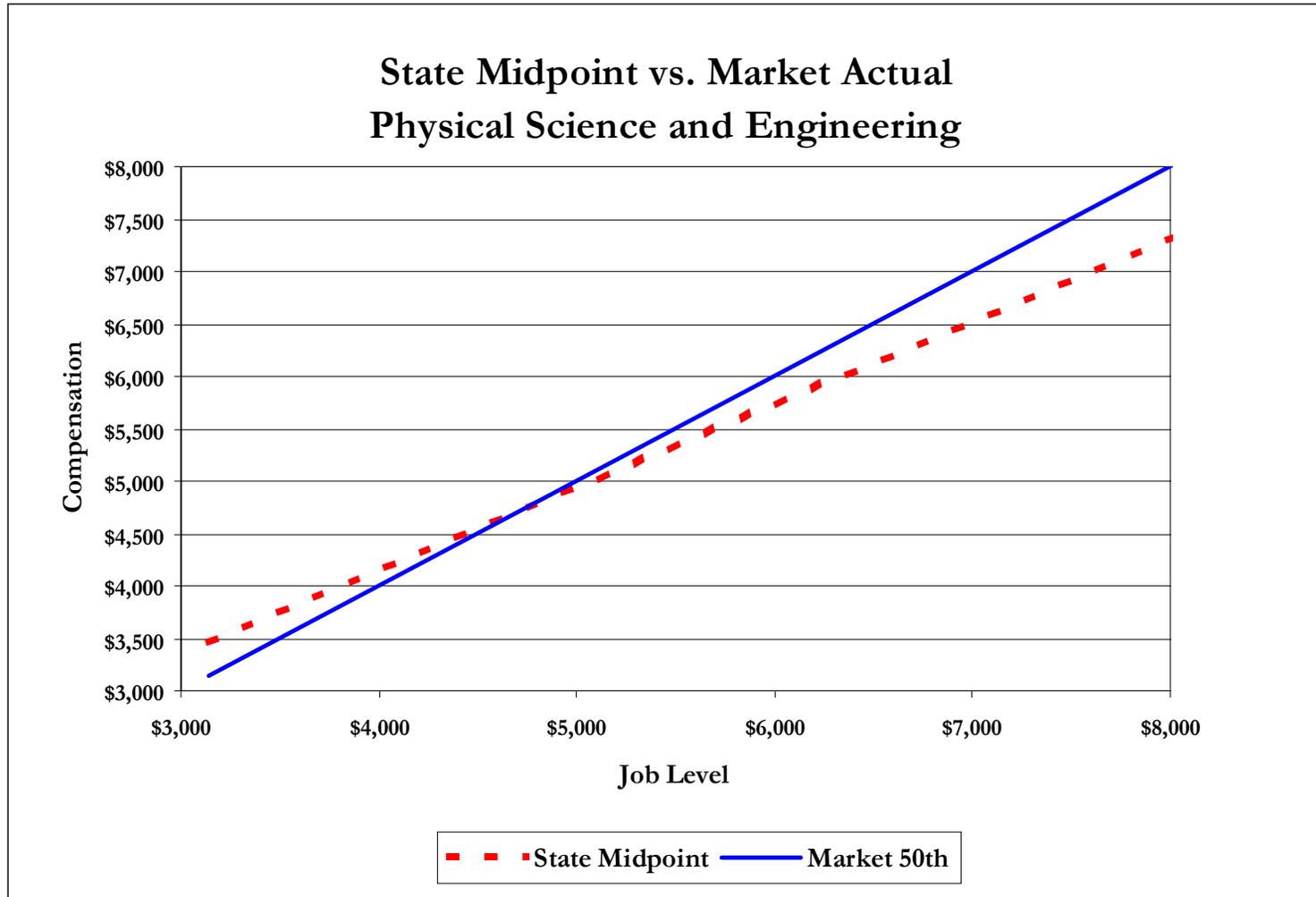




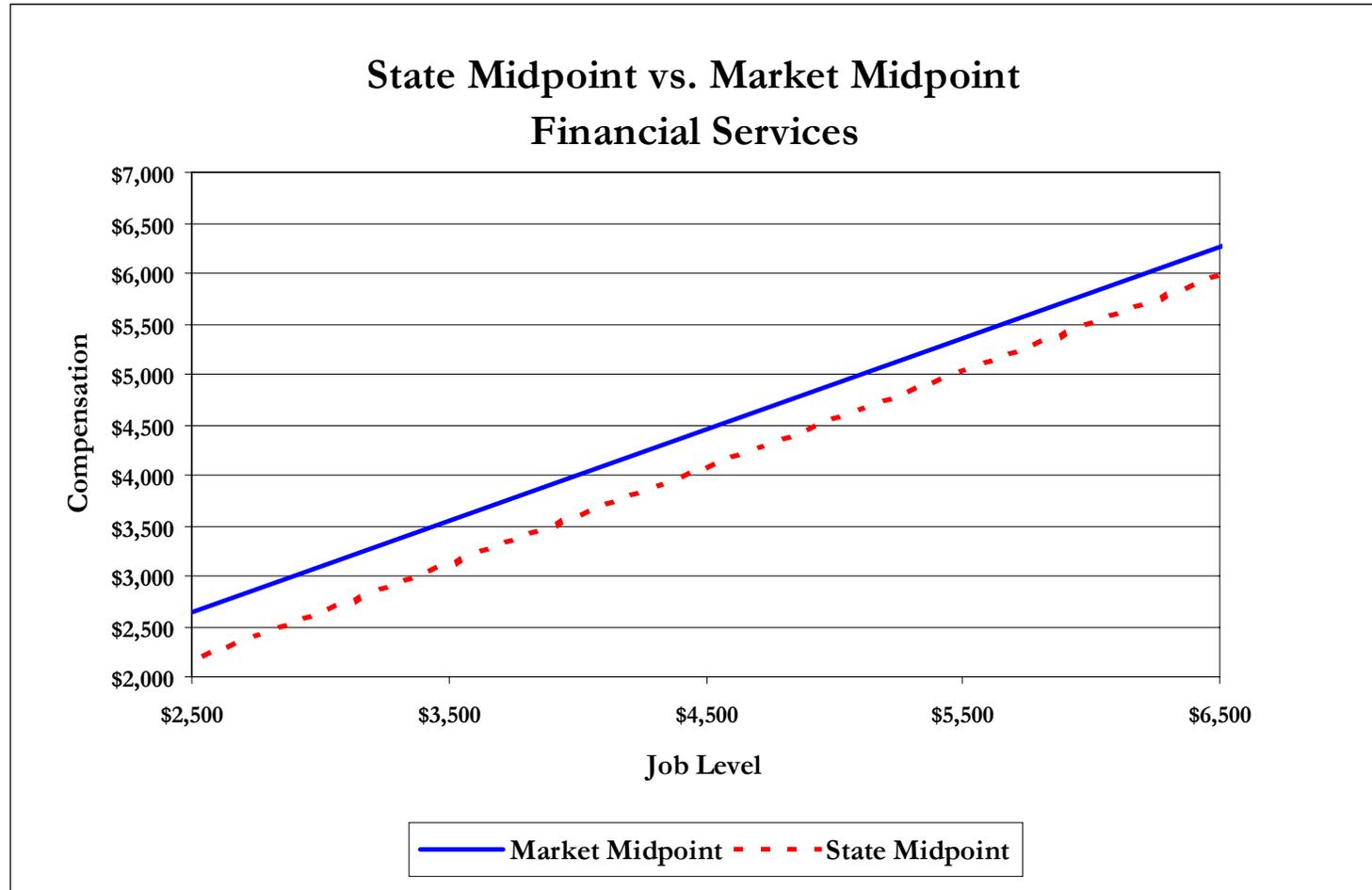


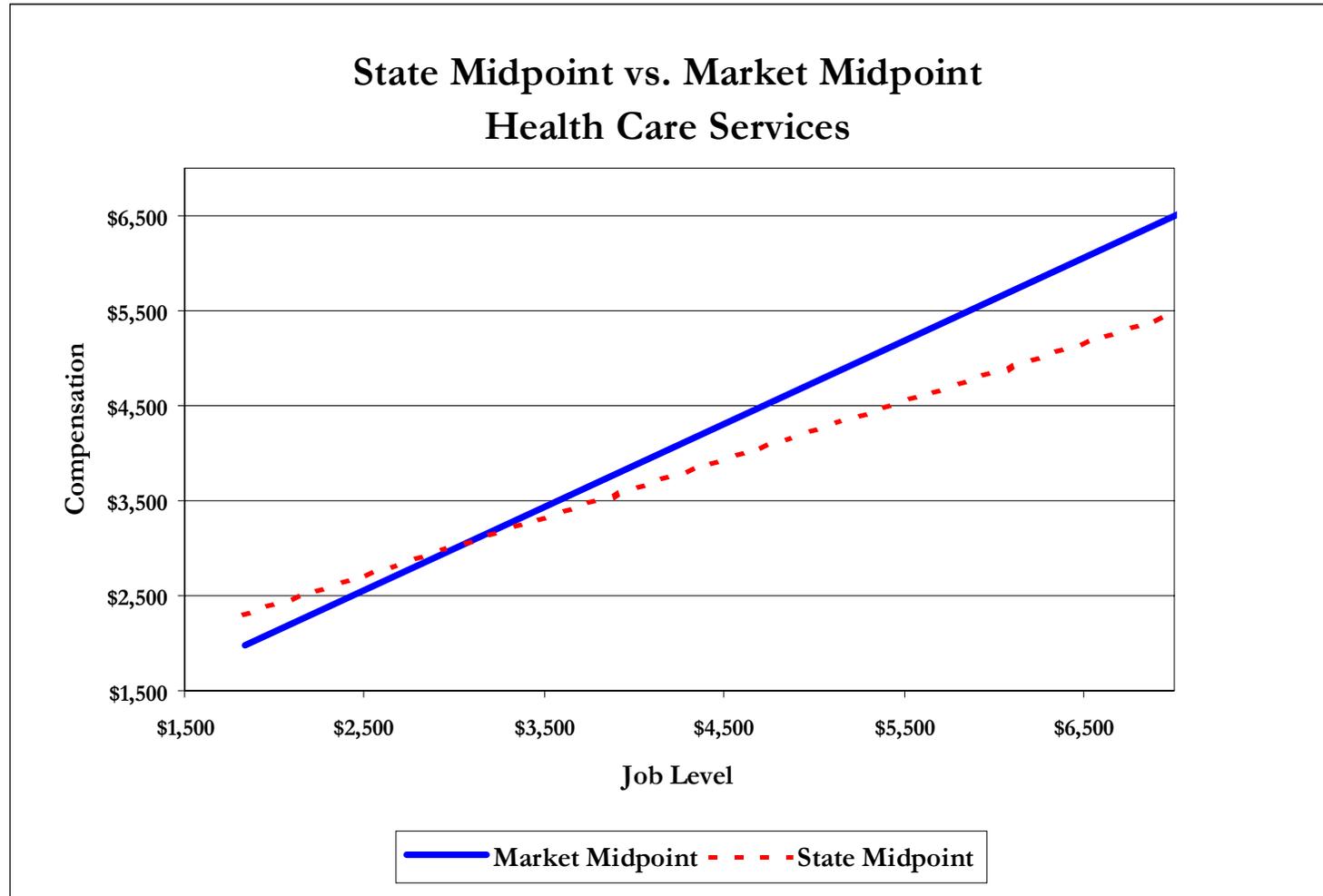


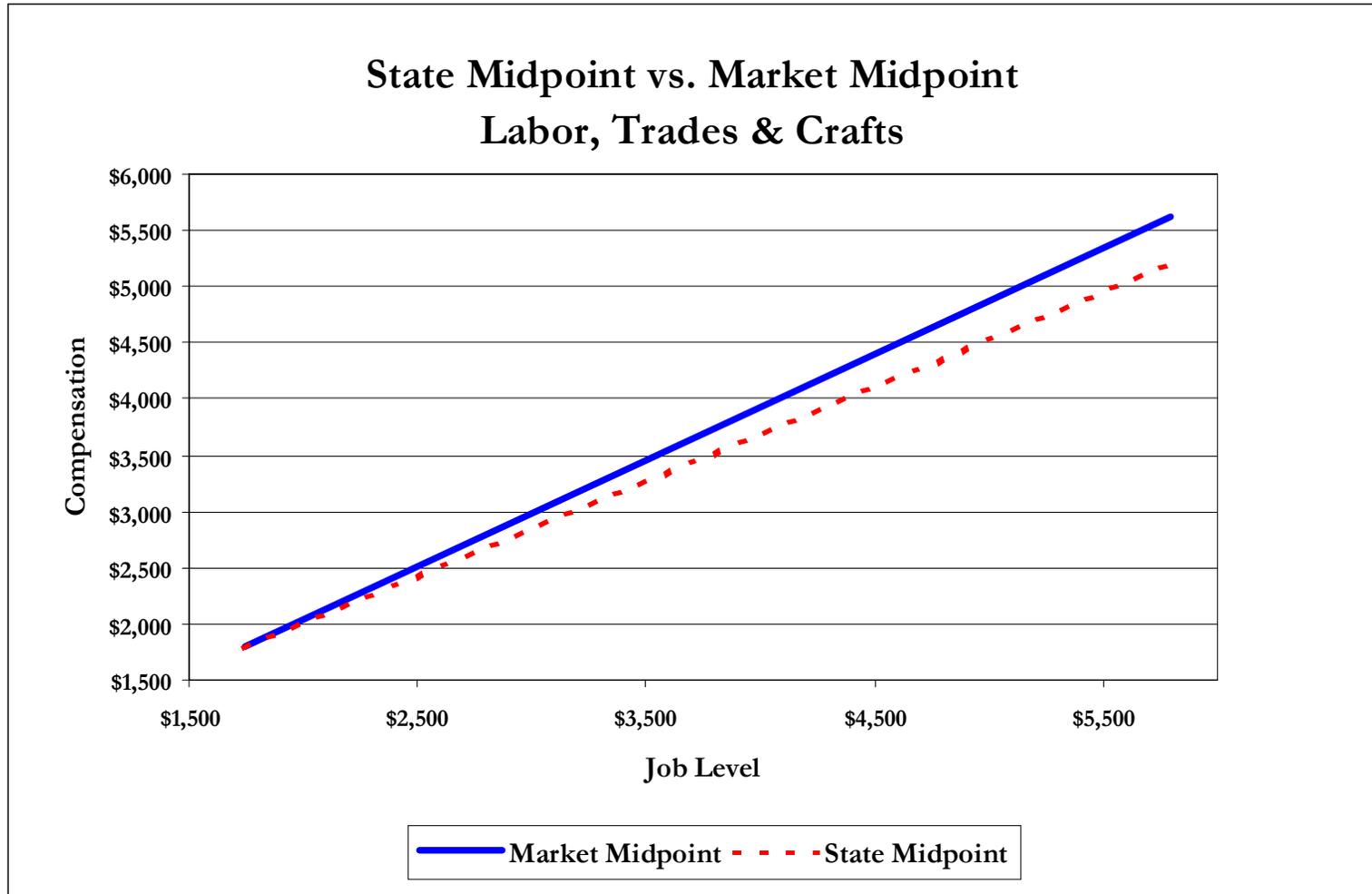


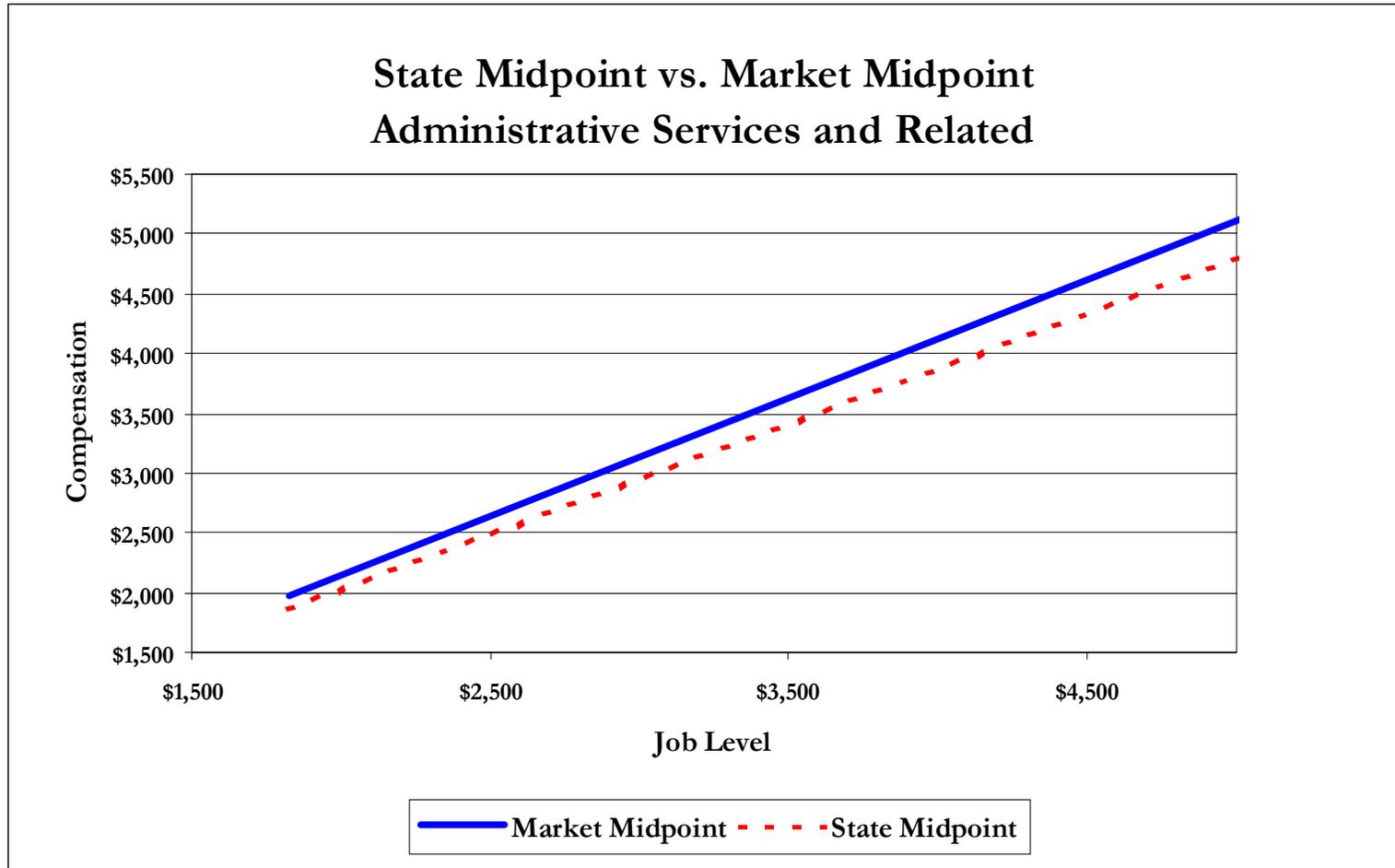


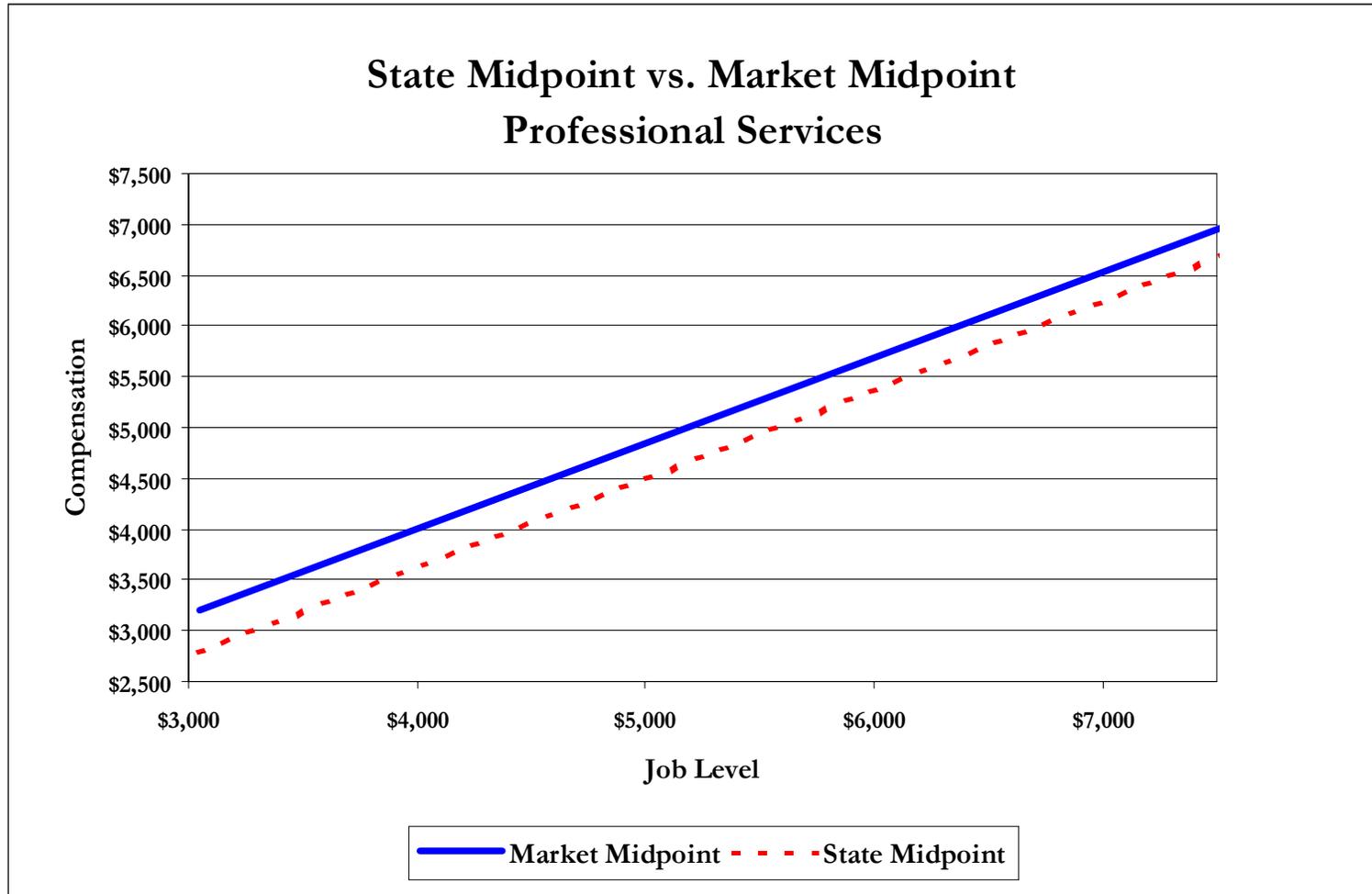
Note: Physical Science and Engineering is the one group where state midpoints tend to be at or above market midpoints. This is further evidence that reliance on range movement analysis does not ensure competitive pay practices or pay ranges.

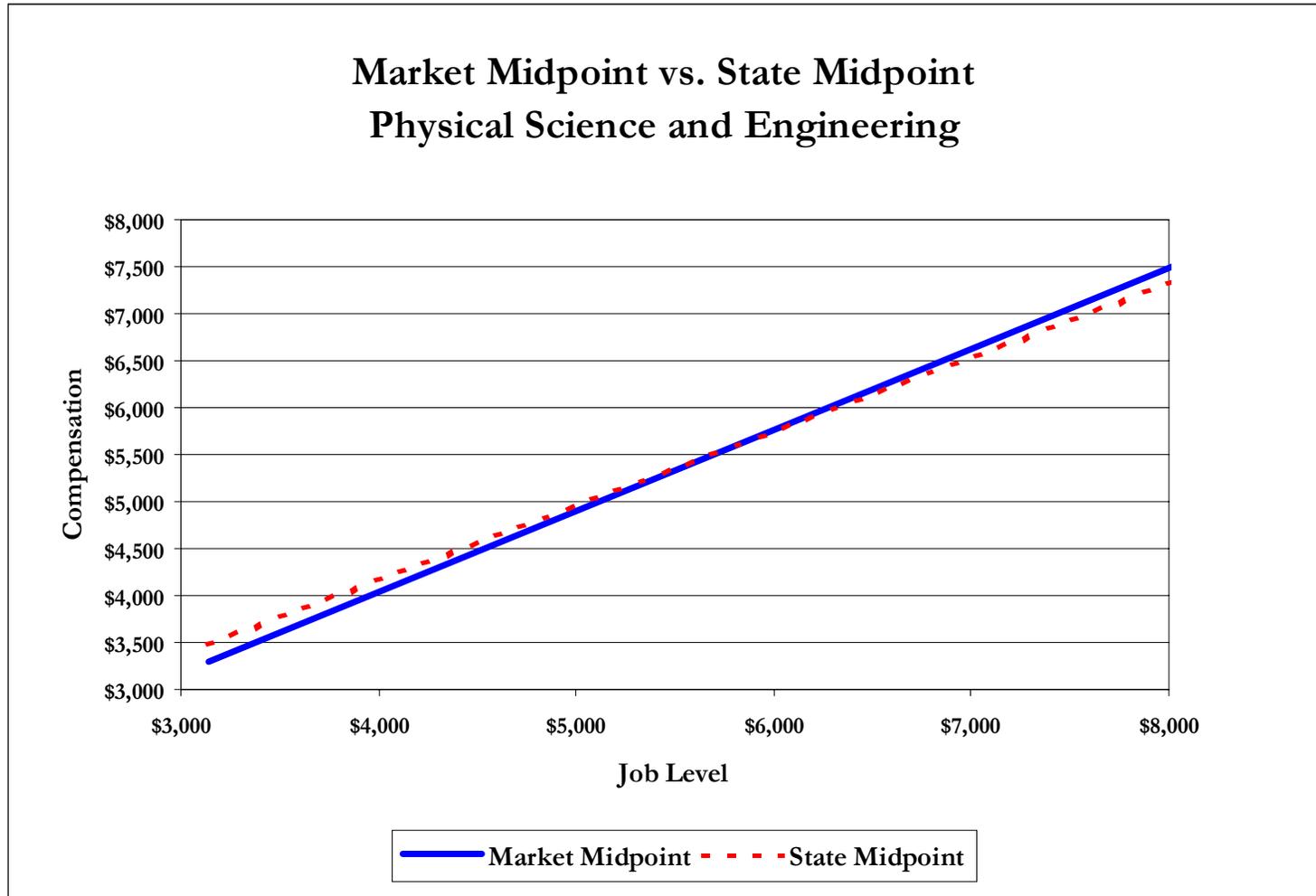












**DISTRIBUTION PAGE**

---

THE ELECTRONIC VERSION OF THIS REPORT IS AVAILABLE ON THE WEB SITE OF THE  
OFFICE OF THE STATE AUDITOR  
[WWW.STATE.CO.US/AUDITOR](http://WWW.STATE.CO.US/AUDITOR)

A BOUND REPORT MAY BE OBTAINED BY CALLING THE  
OFFICE OF THE STATE AUDITOR  
**303-869-2800**

PLEASE REFER TO THE REPORT CONTROL NUMBER BELOW WHEN REQUESTING THIS REPORT.

**REPORT CONTROL NUMBER 1510**