

MANAGEMENT ANALYSIS & PLANNING, INC.

**WYOMING EDUCATION FINANCE
Wyoming School District Employee
Compensation Report**

Revised Errata Sheet - January 31, 2002

- Erratum 1:** Table 12 - For 1999 the number of migrating teachers was 37 not 13. Their average salary as a teacher outside of Wyoming was \$27,051 not \$26,495.
- Erratum 2:** Page 34 - The highest annual outflow was 37 teachers in school year 1999 not 2000.
- Erratum 3:** Page 38 and Table 14 - Based on the most recent data average teacher salary increases from \$36,854 to \$36,871, and average teacher experience increases from 12.02 to 12.438. Higher average years of experience increases the experience payment for teacher with the average years of experience from \$9,276 to \$9,615, and lowers the educational premium from \$2,269 to \$1,907. These changes are also made in Table 14.
- Erratum 4:** Table 21 was changed to reflect the new average salary numbers and the resulting higher fringe benefits that would result. The following changes were made: "\$36,854" to "\$36,871", "\$7,002" to "\$7,005", "\$48,746" to "\$48,766".
- Erratum 5:** Page 44 – Subsection on District Administrators was replaced with the following:

District Administrators

We analyze the determinants of central office staff compensation using Wyoming Department of Education data. Our dependent variable is the FTE salary of central office administrators in Fall 2001.¹ Our model relates administrative salaries to measures of supervisor experience and education, and district size. We also control for the job title of the administrator (Job). Our measures of education are whether the person holds a master's degree (MA) or a doctorate (DOCT). Finally, we have a measure of the years of district experience in the job classification. To estimate the effect of these variables, we fit an OLS regression model:

$$\text{FTE Salary} = B_0 + B_1 \text{ Job} + B_2 \text{ DistSize} + B_3 \text{ MA} + B_4 \text{ DOCT} + B_5 \text{ Experience} + e$$

Selected regression coefficients and related statistics for central office administrators are reported in Tables 17 and 18 below.

Table 17: Central Office Staff: Mean Salaries, Fall 2001

	Mean FTE Salary
Superintendent	\$80,737
Asst. Superintendent	\$77,428
Business Manager	\$49,845

¹ The regression is limited to Superintendents, Assistant Superintendents, and Business Managers as other central office administrative staff are funded elsewhere in the funding model.

Table 18: Central Office Administrators Earnings Regression^a
 Dependent Variable = Fall 2001 FTE Salary

Variable	Mean	Coefficient	t-value
District Enrollment	2360.8	3.16	9.83
District Experience	5.32	159.5	4.47
MA	.630	4353.4	1.26
Doctor	.180	9167.4	3.94
Adj. R-Sq.	---	.836	---
N	100	100	100

- a. The regression model also includes two indicator variables for job classification.

The regression equation explains 84% of the variation in central office staff administrative pay. Three of four regression coefficients are statistically significant at the 5 percent level or higher. The regression shows that holding all else equal, each additional student in the district raises average pay of administrators by \$3.16. Each additional year of district experience raises pay by \$159.5. Administrators with an MA, on average, earn \$4,353 more than those with less schooling, all else equal. Administrators with a doctorate earn the MA premium plus an additional \$9,167.

We recommend that the funding formula incorporate these regression results by comparing each districts enrollment and central office administrative staff's experience and education profile to the state average, and adjustments to funding be made accordingly.²

² The effect of continuous independent variables such as enrollment in a regression equation should be interpreted as changes around the mean. Thus, on average, administrators with one additional student above the Wyoming mean earn \$3.16 more and administrators with one student below the Wyoming mean earn \$3.16 less.