

## Recruitment, Retention and Teacher Salaries

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## Thanks

- Linda Atwood, Madalyn Quinlan, OPI
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## Questions

1. How are recruitment and retention related to salary and other factors?
2. How would salary increases affect recruitment/retention?

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### Research Methods

- Many Factors Affect Recruitment and Retention
- These Factors are Confounded
- Findings Based on Regression Analyses
- Present: One Factor at Time

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### Assessing the Effect of Salary on Recruitment and Retention

- Compare Experience of MT over Time
- Compare Experience of MT with Other States
- Compare Districts within MT

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### Schools and Staffing Survey (SASS)

- National Survey 1987-99
- Waves in 1987, 1990, 1993, 1999
- 1078 Teachers in MT in 1999
- 168 Schools
- 124 Districts

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### Recruitment and Retention Indicators in SASS

- Turnover Rate = New Hires/Positions
- Size of Pool
  - % New BAs who leave MT for another state
  - % New BAs from other states who come
- % Schools report "Very difficult"
- % Teachers w/o Major/Minor in Field
- % Teachers Uncertified in Field

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### Recruitment and Retention Over Time in Montana

	MT Salary/ US Avg.	5 Yr Student Growth	% New Hires	% New BA leave	% Report Difficult
'87	.85	-9.3%		37	
'90	.88	-2.3%	10		41
'93	.79	7.8%	7	26	42
'99	.76	-4.8%	12	44	42

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### Findings: MT 1987-1999

- Turnover in 1999 Highest
- High Salary and Student Population Growth Decrease % of new BAs Who Leave Montana
- Difficulty Hiring Unrelated to Salary

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### Cross State Comparisons in 1999

	Salary/ US Avg	10 yr Stud Growth	% New Hires	% New BA leave	% New BA come
ND, SD	.71	-9.8%	10	58	27
<b>MT</b>	<b>.76</b>	<b>-6.3%</b>	<b>12</b>	<b>44</b>	<b>15</b>
ID, WY	.83	-2.3%	11	33	35
AZ, CO, NV, WA	.92	34.8%	14	22	37

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### Cross State Comparisons in 1999 (continued)

	Salary/ US Avg	10 yr Student Growth	% Difficult	% No Major or Minor	% Not Certified
ND, SD	.71	-9.8%	42	14	3
<b>MT</b>	<b>.76</b>	<b>-6.3%</b>	<b>42</b>	<b>17</b>	<b>5</b>
ID, WY	.83	-2.3%	34	19	4
AZ, CO, NV, WA	.92	34.8%	48	23	8

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### Findings:

#### Cross State Comparisons

#### Higher Salaries Decrease

- Difficulty Hiring (Controlling for Student Growth)
- Fraction of New BAs Who Leave

#### Higher Salaries Appear Unrelated to

- Teacher Turnover
- % No Major/Minor in Field
- % Uncertified in Field

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### Analysis of Montana Districts

- FY 2003/2004/2005
- 3-Year Total of 1,311 District-Years with Data for Most Variables
- Missing Data
  - Recruitment Report (47%)
  - Salary (23%)

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### Statewide Turnover Rates

- Turnover = Teacher Openings/Teacher Staff (FTE)
- If Nonreporting Districts are Similar to Reporting Districts: Turnover = 12.3%
- If Districts Report Only if They Have Openings: Turnover = 8.7%

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### Recruitment/Retention Indicators

- Turnover
- Difficulty Hiring
  - 1: Easy (Several Qualified Apps.)
  - 2: Possible (Some Qualified Apps.)
  - 3: Difficult (Shortage of Apps.)
  - 4: Very Hard (No Apps., Not Filled, Emergency Measures)
- Misassigned Teacher

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### Salary Classes

(Based on Starting/Low Salaries)

Salary	% of Districts	% of FTE
≤ \$20,000	19	8
\$20,000 to \$23,000	38	35
≥ \$23,000	19	51
No Data	23	5

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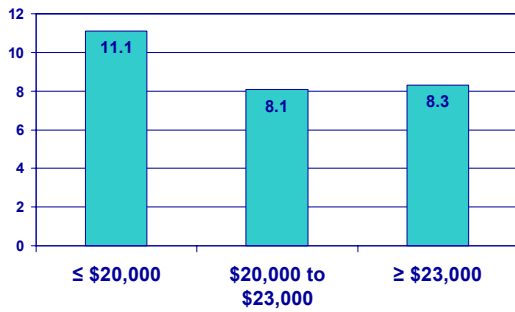
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### Turnover and Salary



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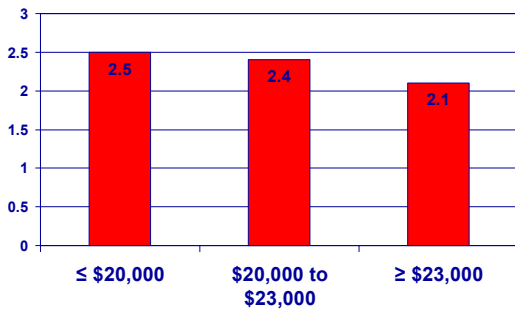
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### Difficulty Recruiting and Salary



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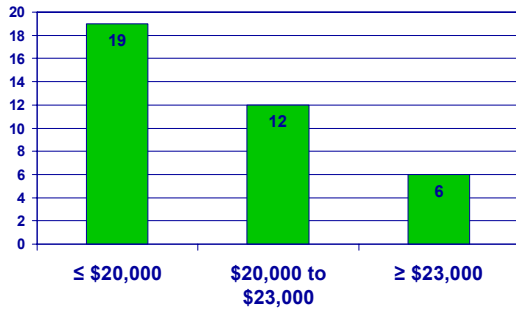
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### Misassigned Teachers and Salary



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### Montana Findings

- Low Salary Districts:
  - Have Higher Teacher Turnover
  - More Difficulty Attracting Qualified Applicants
  - Are More Likely to Have Misassigned Teachers

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### Montana Findings – 2

- These Findings Continue to Hold When Controlling for:
  - District Size (FTE)
  - District Type (Elem., HS, K-12)
  - Region
  - Student Characteristics (Nonwhite, Reduced Price/Free Lunch)
  - Isolation

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### How Can "Isolation" be Measured?

Square Miles per Student	% of Districts	% of FTE
≤ 1	22	62
1 to 10	51	33
≥ 10	27	5

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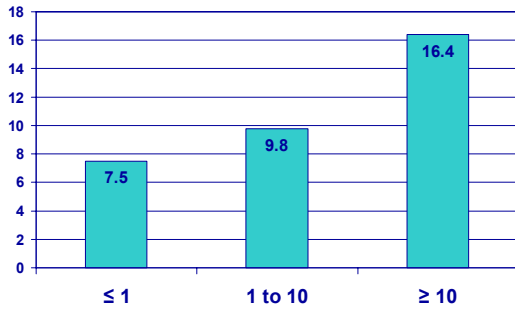
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### Turnover and Isolation



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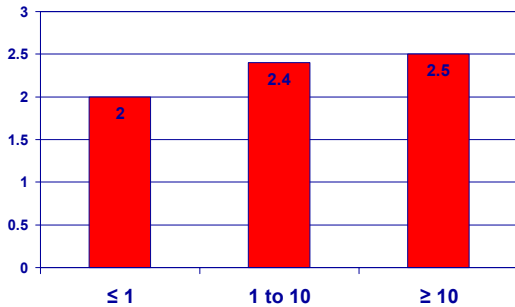
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### Difficulty Recruiting and Isolation



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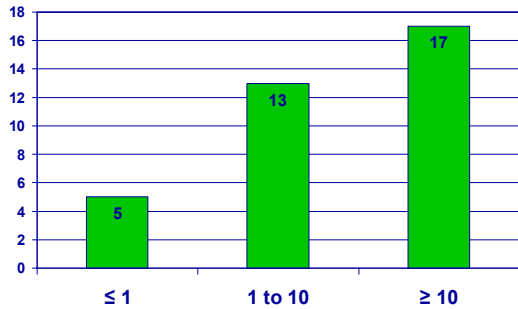
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### Misassigned Teachers and Isolation



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### Montana Findings - 3

- More Isolated Districts:
  - Have Higher Teacher Turnover
  - More Difficulty Attracting Qualified Applicants
  - Are More Likely to Have Schools with Misassigned Teachers

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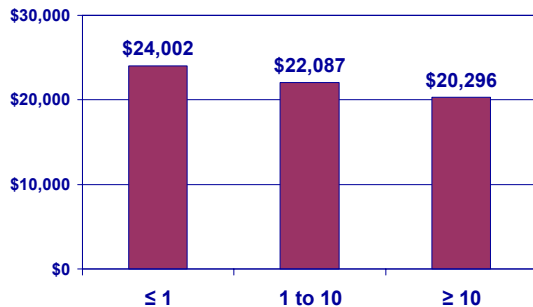
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### Salary and Isolation are Related

Average Salary



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### Other Findings

- Smaller Districts have Higher Turnover and More Difficulty
- Districts with More Generous Insurance Plans Have Lower Turnover and Less Difficulty
- Districts with Higher Salary Growth Have Lower Turnover
- High School Districts Report More Misassigned Teachers

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If Starting Salaries in the Lowest Paying Districts Are Raised to \$21,400, the Estimated Impact Would be to Reduce...

- Turnover by Approximately 2%
- Teacher Difficulty by .2
- Misassignment by 6%

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If Starting Salaries are Raised in the Most Isolated Districts ...

- A District with 20 Square Miles per Student has 2% Higher Turnover than an Urban District
- Raising Starting Salaries in Low Paying Districts by \$2,000 Would Approximately Offset that Difference in Isolation

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Suggestion to Improve Future Work

- Better Data Collection
  - Teacher Openings
  - Compensation

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Written Report  
By September 30

- Details of the Findings
- Openings and Difficulty Hiring for Non-teaching Personnel
- Salary Comparisons Between Schools and Other Employers for Non-teaching Occupations

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