

# Public Education Employee Retirement Trends and Educational Retirement Fund Solvency

**AGENCY:** Educational Retirement Board (ERB)

**DATE:** October 14, 2016

**PURPOSE OF HEARING:** To review retirement trends for educational employees in New Mexico.

**WITNESS:** Jan Goodwin, Executive Director, ERB

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**EXPECTED OUTCOME:** Better understanding of the educational retirement system and possible identification of strategies to keep teachers in the classroom.

## Retirement Eligibility of Active K-12 ERB Members As of June 30, 2015

<b>Eligible before FY16</b>	9.5%
<b>Eligible before FY17</b>	12.0%
<b>Eligible before FY19</b>	17.4%
<b>Eligible before FY21</b>	22.9%
<b>Eligible before FY26</b>	36.3%

Source: ERB

## BACKGROUND INFORMATION

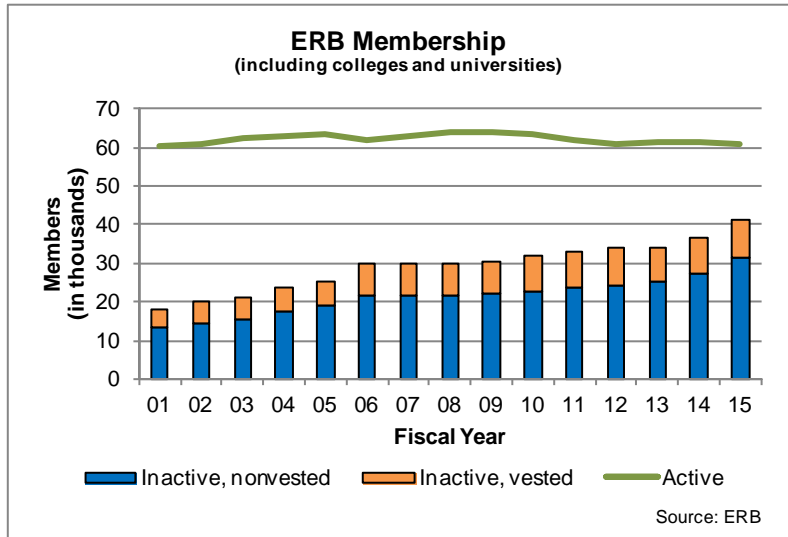
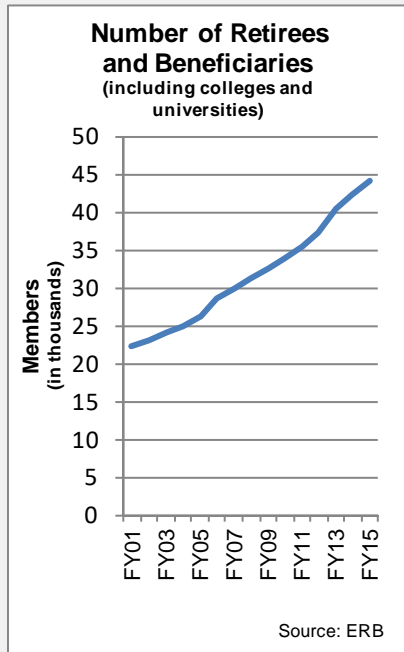
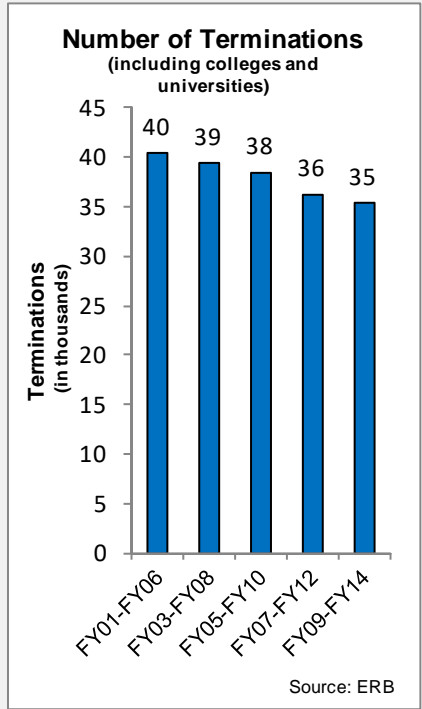
Studies at the national level suggest there is an emerging teacher shortage, produced by lower levels of enrollment in teacher preparation programs and higher levels of teacher attrition. Studies find that most pre-retirement attrition occurs early in a teacher's career. One strategy for minimizing increases in teacher vacancies is to retain existing teachers. This brief will look at data from the Educational Retirement Board (ERB) to review current retirement trends in New Mexico as well as current actuarial assumptions adopted by ERB.

**Limitations of this Report.** In addition to public school teachers, ERB provides benefits to employees of New Mexico's public colleges and universities, as well as non-instructional staff of public schools such as school bus drivers, custodians, and food service employees. The reports referenced in this brief include information on all ERB members. Fundamental differences in staffing patterns among these groups may bias the data provided.

To attempt to provide the committee with more detailed information on public school teachers, ERB provided LESC staff with a FY16 list of active ERB members. LESC staff hopes to use forthcoming information from the Public Education Department (PED) to identify which school districts and charter schools have the most teachers eligible for retirement. This will allow the committee to consider if certain kinds of schools are likely to see a large number of teacher retirements in the near future. Repeated analysis in future years will allow LESC staff to identify New Mexico specific retirement trends, pre-retirement attrition, and retirement benefit levels for New Mexico teachers.

**Data Sources.** LESC staff reviewed experience studies and actuarial valuation reports published by ERB to find the reported information. Actuarial valuation reports contain the number of active, inactive, and retired members, as well as information on the age and years of service of members. Experience studies are conducted by ERB's actuaries every two years and cover the previous six fiscal years. These studies compare actual rates of retirement or termination as well as salary increases and payroll growth. The most recent study covers FY09 through FY14. A study covering the period until June 2016 is due next year.

**Active Membership.** ERB experience studies and actuarial valuations contain data on the number of active and retired ERB members. Since 2001, active membership in the fund (those currently paying into the fund and accruing benefits) has been relatively flat at just over 60 thousand, although membership did reach nearly 64 thousand just before the recession.



**Inactive Membership.** Since 2001, the number of inactive members (those who are no longer employed but have not retired) has more than doubled from 18 thousand in FY01 to 41 thousand in FY15. The number of inactive, non-vested members increased from 13 thousand to 32 thousand. While this may indicate an increase in teacher attrition, ERB’s experience studies indicate the number of employees who leave employment for a reason other than death, disability, or retirement has decreased over this same period. These data show a general downward trend in the number of terminations from the FY01 to FY06 period through the FY09 to FY14 period. It is not clear why terminations appear to have decreased while the number of inactive, non-vested members has increased.

**Retirement.** As with other retirement plans, ERB has seen an increase in the number of retired members, however this may have more to do with increases in life expectancy. According to Gabriel, Roeder, and Smith, the actuarial consulting firm for ERB, teachers tend to live longer than members of the general public, so it is reasonable to anticipate increased numbers of retiree members as overall life expectancy increases. ERB is a mature pension plan, meaning it pays benefits from pre-funded contributions and investment earnings. In a given year, A mature pension plan may pay out more in benefits than it receives in contributions.

In addition to reporting the number of retirees, ERB projects the percent of eligible retirees it expects to retire by age. Prior to the recession, actual retirements were a bit more than expected, but during the FY07 to FY12 period, fewer people than expected decided to retire, possibly a reflection of economic uncertainty around the recession. Aside from this period, overall retirement numbers were generally in line with expectations.

**Average Age of Active ERB Member**

2002	45.2	2009	46.3
2003	45.3	2010	46.5
2004	45.6	2011	46.8
2005	45.6	2012	47.0
2006	45.7	2013	47.0
2007	45.9	2014	46.6
2008	46.1	2015	46.5

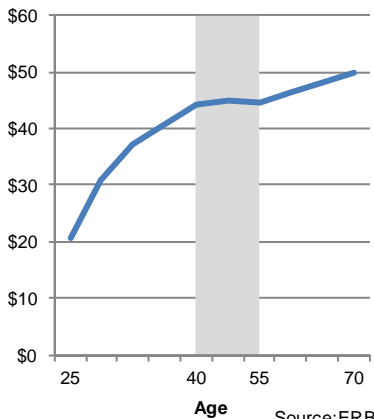
Source: ERB

**Active Members Over 50 Years of Age  
% of workforce**

	2002	2015
50-54	17.7%	14.7%
55-59	11.0%	14.2%
60-64	4.8%	9.7%
65+	1.8%	4.7%

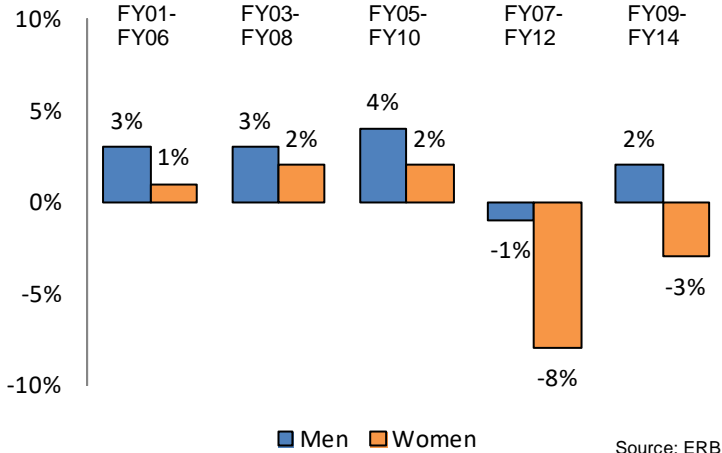
Source: ERB

**FY15 Average Pay by Age Group  
(thousands)**



Source: ERB

**Difference Between Projected and Actual Retirement in ERB Experience Studies**



Source: ERB

While overall the number of retirements are in line with expectations, one potentially problematic data point is the larger-than-expected number of retirements for those under age 60. For example, ERB's most recent experience study showed that during the FY09 to FY14 period 265 ERB members retired at age 50 or less. If more teachers look to retire as soon as they are eligible, it may be more difficult to fill teaching vacancies. Complete retirement tables from the 2014 study for both male and female ERB members are included as an attachment.

**Age of Membership.** Higher than expected levels of retirement in one study may simply be an outlier. Overall, ERB membership was older in 2015 than it was in 2002, which is consistent with national studies of the teaching workforce. However, while the percentage of membership over age 55 has increased (and percentage over age 65 has more than doubled), the percentage of the workforce aged 50 to 54 has decreased since 2002.

Compensation may be one reason some choose to retire in their early 50s. The average pay of ERB members increases steadily for members in their 20s and 30s, but pay levels off after age 40. Average compensation begins to rise again for those in the 55 to 60 year-old group. It is possible that after 10 years of level pay, those who are eligible for retirement see little financial incentive for continued service and choose to retire as soon as possible.

**Salary Increases and Payroll Growth.** ERB estimates salary increases for ERB members based on length of service. Recent ERB experience studies have found lower than expected wage growth for employees with 10 or more years of service. For example, between FY09 and FY14, wages increased 1.9 percent, which was only slightly above inflation (1.4 percent) and well below the assumed rate of 4.3 percent. According to the American

**Statewide Average T&E Index**

<b>FY06</b> 1.100	<b>FY12</b> 1.102
<b>FY07</b> 1.109	<b>FY13</b> 1.101
<b>FY08</b> 1.104	<b>FY14</b> 1.095
<b>FY09</b> 1.099	<b>FY15</b> 1.088
<b>FY10</b> 1.098	<b>FY16</b> 1.083
<b>FY11</b> 1.100	<b>FY17</b> 1.080

Source: LESC Files

Academy of Actuaries, a higher wage growth assumption for senior employees can overstate fund liabilities since it assumes members will receive higher pensions.

While salary increase assumptions are used to project future benefits, payroll growth is used to amortize the unfunded liability of the pension plan. Between FY09 and FY14, the average rate of payroll growth was lower than the expected rate. Similarly, between FY07 and FY12 payroll growth was slower than expected. According to the 2014 ERB experience study, one possible explanation for this is an increase in the number of older teachers leaving the workforce. Because younger teachers are generally paid a lower salary, this can result in lower payroll growth. During both the FY07 to FY12 period and the FY09 to FY14 period, the statewide average training and experience index fell slightly, but it has fallen by even more since FY11, meaning payroll growth may again be lower than expected in the next ERB experience study. Payroll growth is also affected by increases in membership. Due to flat or decreasing membership in ERB, actuaries have recommended that ERB assume no growth in membership.

A lower than expected payroll growth rate does not increase fund liabilities but does increase the amortization period for accrued unfunded liabilities. While payroll growth has been slower than expected since the recession, adjusted payroll growth was 3.5 percent between 1994 and 2014. ERB is currently assuming a growth rate of 3.5 percent.

**QUESTIONS**

What effect does the increased number of retired members have on the health of the fund? Does an increase in the number of inactive members have an impact on the health of the fund?

In the early 2000s, average teacher salaries increased by more than 20 percent, from \$38,196 in FY04 to \$46,569 in FY09. During this time, ERB reported higher than expected payroll growth, but average 20-year payroll growth is only slightly above the 3.5 percent assumed rate of growth. If school districts are unable to increase salaries due to lower public school support appropriations (in addition to significant cuts to higher education appropriations), will ERB need to reduce this assumption? What effect will lower payroll growth have on the amortization period of accrued unfunded liabilities?

**RETIREMENT EXPERIENCE  
MALE**

Age	Actual Retirement	Total Count	Expected Retirement		Actual/Expected	
			Current	Proposed	Current (2) / (4)	Proposed (2) / (5)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Under 50	100	442	66	66	151%	151%
50	48	234	42	42	114%	114%
51	73	415	58	58	127%	127%
52	78	542	70	70	111%	111%
53	90	666	76	76	118%	118%
54	124	796	80	80	155%	155%
55	118	915	107	107	110%	110%
56	134	996	120	120	111%	111%
57	156	1,102	137	137	113%	113%
58	163	1,155	149	149	109%	109%
59	202	1,212	168	168	121%	121%
60	240	1,223	244	244	98%	98%
61	304	1,140	316	316	96%	96%
62	279	1,020	306	306	91%	91%
63	189	848	235	235	80%	80%
64	215	736	217	217	99%	99%
65	284	923	317	317	90%	90%
66	178	679	180	180	99%	99%
67	130	532	141	141	92%	92%
68	90	374	99	99	91%	91%
69	67	305	81	81	83%	83%
Total	3,262	16,255	3,210	3,210	102%	102%

**RETIREMENT EXPERIENCE  
FEMALE**

Age	Actual Retirement	Total Count	Expected Retirement		Actual/Expected	
			Current	Proposed	Current (2) / (4)	Proposed (2) / (5)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Under 50	165	975	146	146	113%	113%
50	100	574	103	103	97%	97%
51	142	889	135	135	106%	106%
52	167	1,146	160	160	104%	104%
53	208	1,483	185	185	113%	113%
54	269	1,811	209	209	129%	129%
55	330	2,207	297	297	111%	111%
56	375	2,536	386	386	97%	97%
57	413	2,801	470	470	88%	88%
58	463	3,022	539	539	86%	86%
59	650	3,105	619	619	105%	105%
60	628	3,013	596	596	105%	105%
61	790	2,812	809	809	98%	98%
62	639	2,339	768	768	83%	83%
63	462	1,861	498	498	93%	93%
64	498	1,585	460	460	108%	108%
65	560	1,747	675	675	83%	83%
66	320	1,166	310	310	103%	103%
67	205	802	213	213	96%	96%
68	144	570	151	151	95%	95%
69	121	447	118	118	102%	102%
Total	7,649	36,891	7,847	7,847	97%	97%