
Who Will Teach? Experience Matters

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NATIONAL COMMISSION ON
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The National Commission on Teaching and America's Future (NCTAF) is a nonprofit, nonpartisan advocacy and action organization dedicated to providing every child with quality teaching in schools organized for success. With a network of 27 state coalitions, strong school district partnerships, and links to professional education organizations across the country, NCTAF provides leadership for innovation and improvement in teaching and learning in America's schools. Visit www.nctaf.org for more information.

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The Opportunity for 21st Century Teaching

We have a once-in-a-generation opportunity to create a teaching profession that can educate 21st century students for college, work, and civic engagement.

To make this possibility a reality, we will first have to abandon the 20th century human capital solutions that have become 21st century problems. To develop a modern education workforce, we will have to rethink the teaching career from recruitment through retirement.

Current human capital policies in education are woefully out of sync with the needs of 21st century schools.

During the late 1960s, and throughout the 1970s, Baby Boomers (people born between 1944 and 1964) flooded the teaching ranks. By 1976, the average age of teachers was 36 years old, and we had one of the youngest teaching forces in history. More than three quarters of these Baby Boom teachers were women who often encountered limited options in other professions. They made a career

commitment to education. By 2004, there were close to 1.8 million Boomers in our classrooms – they accounted for more than half of our teachers (54%) and their average age (42.5) was older than it had been in more than half a century.

These seasoned veterans, hundreds of thousands of whom are among our most accomplished educators, have had decades to develop effective teaching practices. Many of these 20 and 30-year veteran teachers are concentrated in our highest performing schools and districts, where the quality of their teaching contributes to outstanding student achievement year after year. These teachers educated students who built the technology

industry, landed science experiments on Mars, and launched the current “green” movement. Many of them are eager to continue to prepare students for 21st century challenges, but they are locked into pension systems that are driving them out of the workforce in massive numbers.

The average teacher retirement age is 59, considerably lower than in other professions, but retirement practices and pension policies in many states often move teachers into retirement at age 56 or even earlier. We can expect

to lose as many as a million and a half veteran teachers to retirement during the next eight years.

The National Commission on Teaching and America’s Future (NCTAF) conducted a comprehensive study of the education workforce, with special attention to educator retirement. Our questions focused on:

- Who is leaving or staying?
- How fast are they going?
- Will we replace them? How?
- How are teacher retirement policies influencing teachers’ career choices?
- What can policymakers do to turn the potential crisis into an opportunity to improve education?

The National Commission on Teaching and America's Future (NCTAF) released an early warning about the impact of this retirement tsunami in an April 2009 report, *Learning Teams: Creating What's Next*. Now, using the latest National Center for Education Statistics (NCES), *Schools and Staffing Survey* data for 2007-08, we are able to confirm that the exodus is well under way. Between 2004 and 2008 more than 300,000 veteran teachers left the workforce for retirement.

Twentieth century human capital policies call for a simple solution to this problem: recruit new replacements, simply swap veterans for bright young beginners, and perhaps save money on compensation in the bargain. Lulled into security by the Boomers' long-term service, education leaders have operated for decades as if they were managing a smoothly functioning "career pipeline," in which large cohorts of young teachers will continue to enter classrooms in their 20s and exit for retirement after a successful career of 25 or 30 years. If only it were true.

First-year teacher attrition has been steadily increasing since 1994. After five years over 30% of our beginning teachers have left the profession. Many of these teachers leave before they have had time to become proficient educators who know how to work with their colleagues to improve student learning. And their departure is expensive – NCTAF estimated that the nation's school districts spent at least \$7.2 billion a year on teacher turnover and churn.¹ Industrial-era recruitment and replacement practices are no longer educationally sound nor economically viable.

This staff churn affects every school district in the country, but it is concentrated and has always had its greatest impact on teaching effectiveness in chronically underperforming schools serving low-income children. These schools rarely close the student achievement gap because they never close the teaching quality gap – they are constantly rebuilding their staff. Their students struggle year after year with a passing parade of inexperienced beginners, while students in high performing schools enjoy the support of teams of accomplished veterans who sustain a culture of success in their schools decade after decade.

Now even that is about to change. In addition to hemorrhaging teaching talent at the beginning of the career, we are about to lose accomplished teaching talent at the veteran end of the career on an unprecedented scale. The teaching career pipeline is collapsing at both ends. Even our highest performing schools and districts are about to lose much of the expertise that has been at the core of their success for decades. Teaching effectiveness in virtually every school district in the country will be affected, just as we are challenged with educating a 21st century workforce that can keep us competitive in a global economy.

The Opportunity Begins with Understanding the Problem

We have an urgent need and an unprecedented opportunity to develop a 21st century education workforce. To help make this possibility a reality, NCTAF has conducted a one-year study of the teacher workforce policies and demographics that have brought us to this point.

¹NCTAF's study and an interactive calculator on the Cost of Teacher Turnover calculator is at: http://www.nctaf.org/resources/teacher_cost_calculator/teacher_turnover.html

We found that more than half of our accomplished veterans are on the exit ramp toward retirement, but we also learned that many of these teachers want to stay engaged in education. They are eager to join with their younger colleagues to create 21st century learning organizations, but they are locked into a retirement system that was designed for an earlier time.

We found that public employee pension systems that were designed to engender long-term teaching commitments are alarmingly underfunded in many states. (Novy-Marx and Rauh, 2009) Keeping these retirement promises will put a serious strain on public finances that are already suffering as a result of the recent economic downturn. We also found that, while these pension systems may once have appealed to Boomers, they are not as attractive to today's beginning teachers, who are discouraged by long vesting periods, and the fact that they are asked to accept low pay today in return for a large pension at the distant end of a long career.

We found that teacher retirement policies and pension systems are often at odds with the nation's goals for improving teaching effectiveness and school performance. Teachers work in an education system with expectations and goals that are at times in conflict with the incentives and benefits of the pension system that governs a considerable portion of their lifetime compensation.

We found that traditional teacher recruitment and replacement practices are just driving us deeper into the hole every year. We can't recruit our way out of this problem.

We found that with the loss of veterans and the high turnover of beginners, the base of teaching experience in our schools is becoming thinner and thinner. During the course of the study we encountered an emerging conventional wisdom that "experience doesn't matter." This is a belief that may add comfort to those who staff their schools year after year with inexperienced beginners, but we find little acceptance of this notion among school leaders in high-performing schools who are dedicated to recruiting and retaining accomplished veterans.

We have concluded that the leadership in every state should act now to create a comprehensive workforce development plan for education. These long-term, strategic plans should align retirement practices and public employee pension policies with teaching effectiveness and school performance goals. Many states need to plan for significant reform of pension plans to bring them into alignment with the expectations of a 21st century workforce. The work of participating policymakers and state leadership should be based on in-depth research in their home states and an understanding of other states' successful reform efforts, and should make provisions for well-evaluated pilot demonstrations of 21st century workforce development strategies and career paths.

For a full discussion of NCTAF's recommendations, please see page 19.

The Study

Working with Richard Ingersoll, professor of Education and Sociology at the University of Pennsylvania, NCTAF examined and analyzed data from the “Schools and Staffing Survey” (SASS), the largest and most comprehensive source of data on teachers, gathered from a nationally representative survey conducted by the National Center for Education Statistics (NCES), the statistical division of the U.S. Department of Education.

To better understand the impact of current teacher retirement systems, NCTAF and the Third Mile Group conducted a policy inventory of 14 states, which were selected to represent a balance of older and younger teachers in their workforces, inclusion or exclusion from the Social Security system, and geographic diversity. The analysis was conducted by gathering documents on state retirement systems, reviewing existing national reports on retirement systems,² and sifting through states’ materials about their own retirement and public employee pension plans. The inventory explored how pension systems are structured, including examining incentives for retirement, incentives for early retirement, and portability agreements. We also explored requirements and disincentives for continued work in teaching, options and regulations for teachers to return to work after retirement, and opportunities for non-educators to enter the education workforce. We analyzed current and pending legislation regarding retirement policies in education as well as current media coverage of the issues.

Case studies completed on five states – built on these data and supplemented by interviews – establish a basis for policy development and strategic planning (see Appendix). Interviews with key pension plan and education department stakeholders validated the information in the case studies and provided additional helpful information.

It is significant that many of our research questions were not easily answered, which is in and of itself an important policy point. In many cases, the data needed to assess the impact of teacher retirement systems in creating and sustaining a high quality teacher workforce is not available. For example, some of the information that was difficult to obtain included: clear evidence of incentives for early retirement for teachers, and whether or not teachers’ decisions to retire are based on those incentives or other factors; the extent to which teachers “double dip” in the system, i.e., retire from teaching, then return to the profession and receive a salary and retirement benefits; and whether states are experiencing a pattern of early retirement that inhibits the overall teaching quality in the state.

In addition to drawing on the studies of teacher pensions conducted by experts such as Robert Costrell, Janet Hansen, and Michael Podgursky, we have also analyzed Baby Boomer demographics and workforce policies in the economy at large.

²NEA and Vanderbilt University

RESEARCH FINDINGS

The Teaching Workforce is Aging

NCTAF's analysis of 20 years (six cycles) of SASS data clearly demonstrates an alarming reality: Almost half of the teaching workforce is made up of Baby Boomers who are at or near retirement. In 1976, when young Baby Boomers were flooding into the ranks of teaching, the average teacher age was 36; in 2007-08 it was 42 (SASS data). We now have the oldest teaching workforce in more than half a century. The number of teachers over age 50 has increased from about 530,000 in 1988 to 1.3 million in 2008. Analysis of the SASS data by Richard Ingersoll and NCTAF indicates that the most common age (modal) for teacher retirement is age 59.

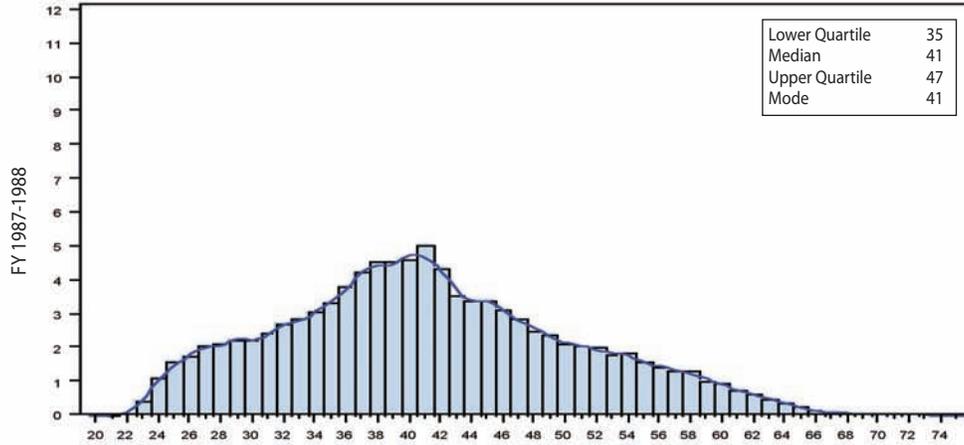
The following three age distribution graphs below show that in 1987-88, the education workforce was balanced in age distribution like the broader workforce – the most common age of teachers was 41 – but as time passed, the teaching workforce has become older (2003-04). The final graph shows that by 2007-08, the most common age of teachers was 55, and the wave of retirements started in the 2003-04 academic year had begun to hit the education workforce.

National Teacher Age Distributions: Schools and Staffing Data Trends

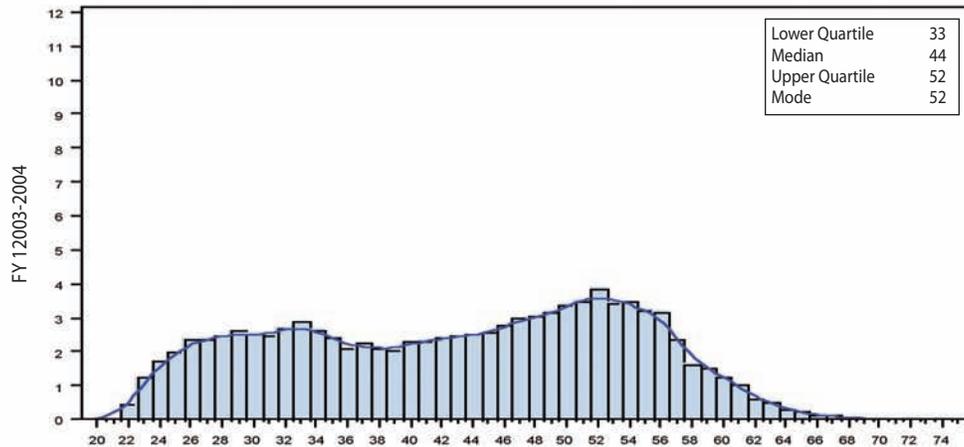
from 1987-88, 2003-04, and 2007-08

(percent scale – x = age, y = percent)

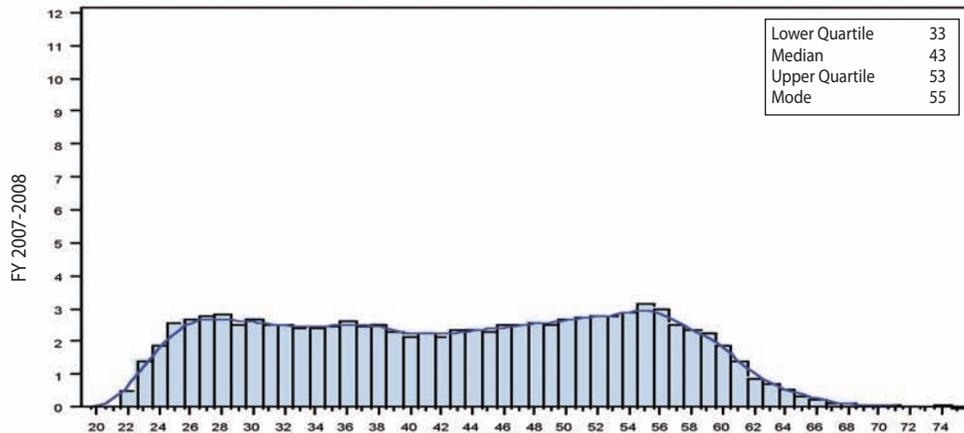
Public School Teacher Age Distribution



Public School Teacher Age Distribution



Public School Teacher Age Distribution



Source: original analyses of the Schools and Staffing Survey by Richard Ingersoll and Lisa Merrill, University of Pennsylvania.

Recruiting New Teachers Isn't the Solution

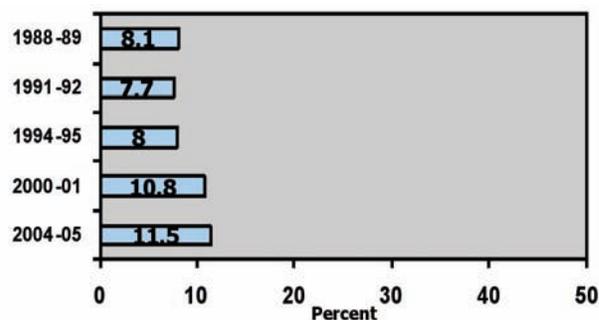
The surge of teacher retirements has prompted some researchers to estimate a need to hire between 2.9 and 5.1 million full-time teachers between 2008 and 2020 (Aaronson & Meckel, 2008). This echoes earlier calls for recruitment, such as Secretary Richard Riley's appeal in 1994 for 2 million new teachers. In response to his challenge, the U.S. hired approximately 2.25 million teachers over the next decade.

Between 1995 and 2005, schools and districts lost 2.7 million teachers due to steadily increasing attrition among beginning teachers and normal retirements. (Carroll, 2007) Now we are facing an unprecedented wave of retirements, on top of beginning teacher attrition that has grown worse over the past 15 years. There is no way that current recruiting strategies – even in hyper drive – can meet this challenge.

Simply hiring new teachers to keep the pipeline supplied is no longer a viable solution. Today's teachers do not stay on the job as long as earlier generations did. As illustrated by the graph that follows, beginning teacher attrition has increased by more than 40% during the last 16 years for which data is available.

Trends in Annual Percent First Year Public School Teacher Attrition

(leavers only) Analysis by NCTAF/Ingersoll



Since “the relative odds of young teachers departing are 184% higher than for middle-aged teachers” (Ingersoll 2001, p.17), the traditional practice of continually hiring new teachers does not provide a reliable solution to staffing challenges and it undermines our efforts to improve teaching effectiveness. Even as the attrition rate of new teachers steadily increases, the country continues to pursue industrial-era recruitment practices that place under prepared, inexperienced individuals alone in the classroom – often in the most challenging schools and classrooms.

It is worth noting that the increase in turnover in the mid 1990s came at the same time the country ramped up its efforts to expand the pool of potential teachers via alternative pathways. The influx of more new teachers increased the speed of the revolving door into the teaching profession, but did not stabilize the teaching workforce, and did nothing to improve teaching quality in high-need schools.

Another problem with the industrial-era recruitment strategy is that it treats young

teachers like easily replaced, interchangeable units – rather than individuals who merit individualized professional development investments. The current structure assumes a continual influx of new teachers with little attention given to who is placed where and what is needed for teaching to succeed in a particular environment. This results in young, inexperienced teachers often facing assignments in the most challenging schools because that is where the openings are – but with little support, they burn out in a few years, feeding the churn of attrition and teacher turnover in these schools. (For an excellent discussion about how this practice impacts evaluation and assessment, see *The Widget Effect* by the New Teacher Project.)

Schools Are Filling with Inexperienced Teachers

The loss of veteran teachers also results in an experience gap for schools. NCTAF's analysis of SASS cycles shows a precipitous decline in the years of experience among the country's teachers over the past 20 years.

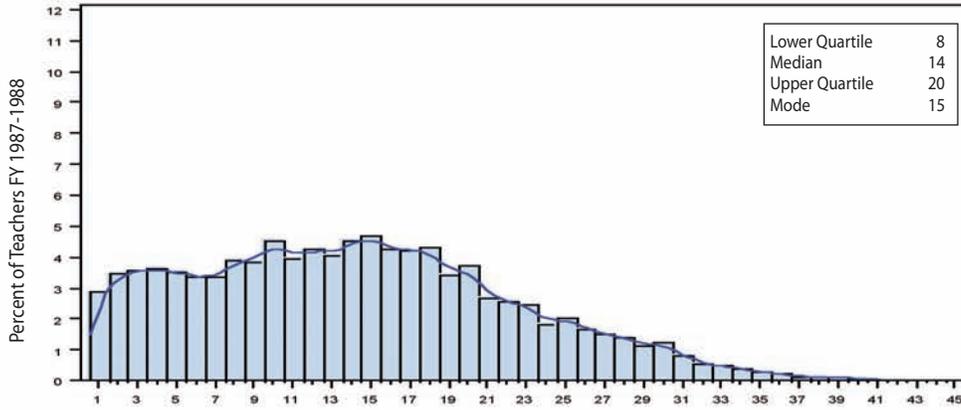
In 1987-88, the modal experience level was 15 years – the typical teacher had 15 years of experience and we had a robust pool of teachers with well over ten years of experience. By 2007-08, the mode was just 1-2 years of experience; 25% had five or fewer years of experience and 50% had 11 or fewer years of experience. On the state level, the Massachusetts case study on page 28 highlights how the base of experienced teachers is approaching retirement – leaving the Commonwealth's high quality, public education system in the hands of teachers with only a few years of experience and a propensity toward mobility into other professions.

National Teacher Experience: Schools and Staffing Data Trends

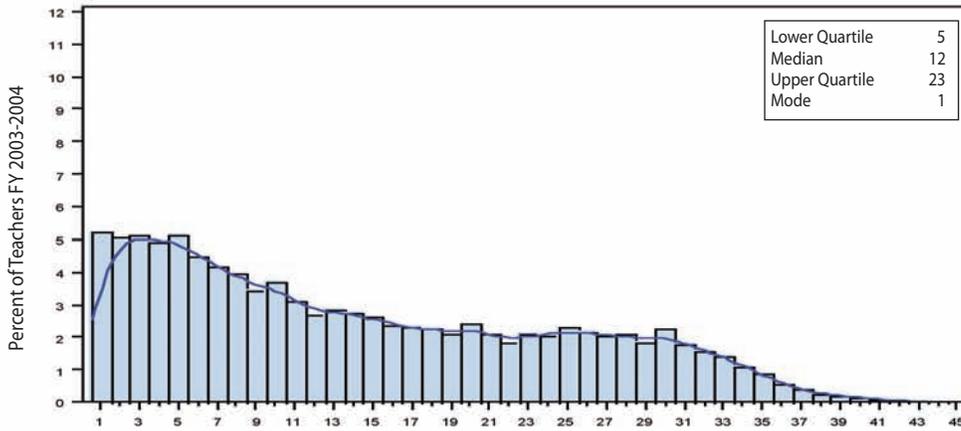
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(percent scale – x = experience, y = percent)

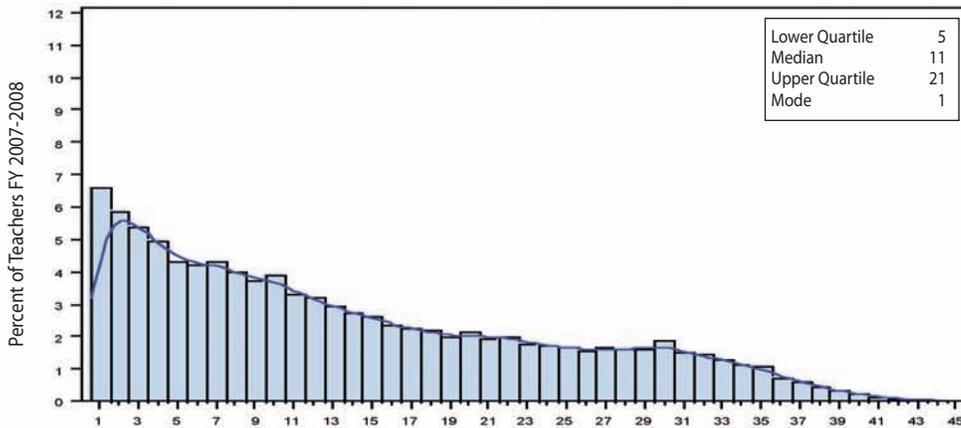
Public School Teacher Experience Distribution



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Source: original analyses of the Schools and Staffing Survey by Richard Ingersoll and Lisa Merrill, University of Pennsylvania.

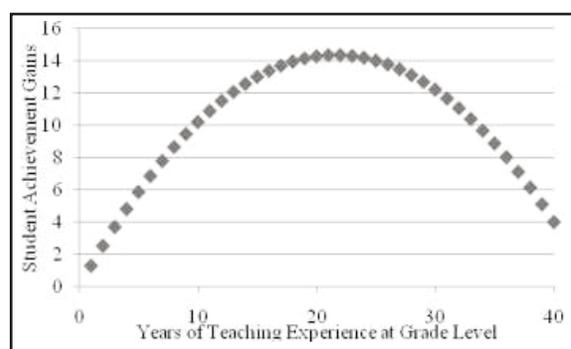
Losing seasoned teachers not only deprives the school of wisdom as departing, veteran teachers take years of experience and professional development investments with them, their departure also robs schools of many effective teachers with just the skills and experience that schools desperately need – especially for mentoring and coaching new teachers. Not all veteran teachers should stay – but even if schools kept just the top 10% to 20% of retiring teachers, those tens of thousands of effective teachers could help stabilize and support their schools.

Experience Matters

While young teachers and the fresh ideas they can bring are essential to improve teaching effectiveness, experience always matters in teaching. Research clearly shows that with each year of experience, teachers improve their proficiency and effectiveness during the first seven years. National Board for Professional Teaching Standards (NBPTS) certification demonstrates that many teachers are still gaining in proficiency and improving their effectiveness after an average of 11 years of teaching. The National Board teachers' pursuit of a rigorous additional certification indicates that a subset of our most accomplished teachers continue to grow, and are eager for new professional challenges throughout their career. Moreover, a 2009 study by Francis L. Huang and Tonya Moon at the University of Virginia found that additional years of teaching experience at the same grade level add to direct positive impact on student achievement for up to 20 years of teaching experience. (Huang, 2009) In

fact although gains per year start to decline after 21 years of experience, the drop is such that a teacher at 30 years at the same grade level is still performing at a level of effectiveness that is higher than the performance of teachers during their first ten years (see graph below). This careful study indicates that teaching experience has significant impact on student achievement.

Student achievement gains per additional year of teaching experience at grade level.



State-by-state 2007-08 Teaching Experience Distribution graphs are available at www.nctaf.org/.

Retirement Policies Impact the Workforce

NCTAF's study of impending retirements required an understanding of how retirement policies drive retirements, attrition, and the loss of teaching experience. In addition, NCTAF wanted to better understand how retirement obligations resulting from the peak of the retirements in 2010-11 will be funded. Therefore, NCTAF conducted a review of the literature about teacher retirements, a national scan of retirement policies and pension plans, and looked closely at five states in greater depth.

Implications and More Questions

This research lays the groundwork for exploring how retirement systems may need to adapt to the current changes in the education workforce:

- If teachers work longer in different roles, how might this impact their personal benefits and the larger public pension systems?
- Could we create a system in which flexible or phased retirement supports extended but part-time work?
- What is the impact of the education workforce that is currently “double dipping”?
- To what extent do retirement plans and policies impact the career decisions teachers make?

Teacher pension plans are based on back-loaded benefits, where accrual of benefits is slow at the beginning of the career, then rises rapidly toward the late-middle and end of a career. This high ratio of pension to salary can shorten the length of a professional teaching career (Harris & Adams, 2007) because the compensation post-retirement is as or more attractive than compensation during the career.

This compensation structure was designed to encourage valued employees to embrace long-term career commitments to a single employer and then leave for retirement – and based on the age distribution graphs on page 8, the strategy worked. However, this strategy also results in decisions about whether accomplished veterans stay or go being driven by personal financial considerations rather than efforts to improve or sustain teaching quality. As one example of how incentives impact career decisions, when the state of Ohio began offering an enhanced benefit to members who achieve 35 years of service, the percentage of teachers who worked to 35 years increased from 6% (pre-enhancement) to 40%.

NCTAF’s interviews with pension plan representatives and educators confirmed that

public teacher retirement plans present an implicit incentive for retiring around the age of 55. Teachers tend to retire when they have their “time in,” and their retirement benefits are available to them. If the teacher stays on the job much beyond the normal years-of-service retirement date, pension wealth can actually begin to decline in a traditional, defined benefit plan. (Hansen, 2009) Therefore, working longer can become an unappealing and complicated option.³ This will increasingly cause a problem as Baby Boomers work longer, aren’t interested in traditional retirement, and are eager to give back to their communities through education and work with youth. (MetLife Foundation/Civic Ventures, 2005)

The teacher pension plans we reviewed have provisions for teachers who want to return to work after retiring, and 20 states do have reciprocity among retirement benefits. However, should a teacher pursue post-retirement work, the number of hours, the pay, the impact on pension earnings and contributions, and the ongoing adjustments all vary by state and are complicated at the school, district, and individual levels. Depending on the state plan, pension plan members are

³Teachers who retire early, before they have achieved the required number of years of service, receive reduced benefits “usually computed based on the normal retirement formula, and then reduced by either a specified annual percentage or by an actuarial reduction applied according to the number of years that the early age retirement precedes the normal age retirement” (NEA, 2008, 29).

required to stay out of the public teacher workforce for as long as one year or as little as one day. In some states, a teacher who returns to teaching may have his or her retirement benefit suspended or put into escrow while earning a teaching salary (and in some cases that salary is capped at a certain amount).

At the other end of the career, vesting requirements penalize teachers who leave after fewer than 10 years, those who enter teaching mid-career, and those who move from one state to another. No current retirement policies – other than limited *ad hoc* programs – take into account the impact of pension policies on the school staffing and teaching effectiveness goals of school districts.

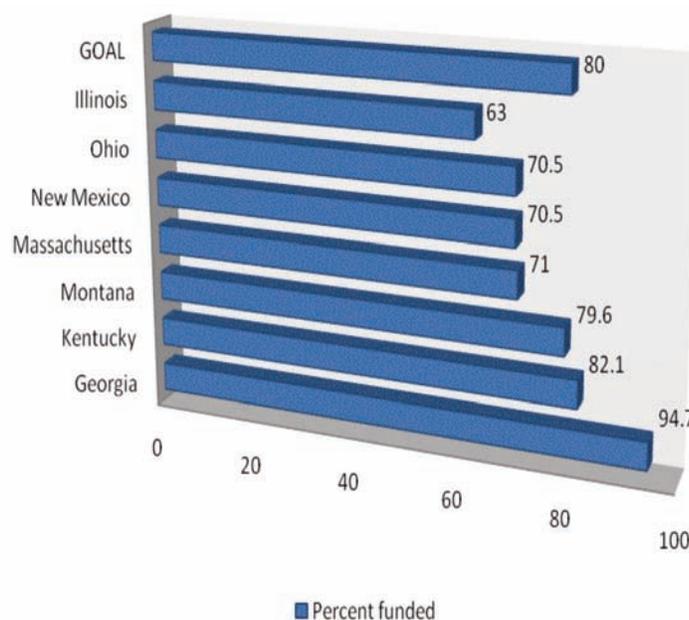
Teachers therefore are often forced to make career decisions based on their retirement plans' benefits and penalties to the detriment of teaching quality in their schools. Some teachers stay in teaching when they should probably go only to get to the next "bump up" in pension benefits that adds wealth to their pension fund. Others who are accomplished veterans retire when they would rather stay in order to maintain the best retirement benefits. (Costrell and Podgursky, 2009)

Decisions made by or about teachers in this regard have very little to do with the quality of the teaching effort or with student achievement.⁴ (Werneck, 2001)

States' Financial Costs Will Grow

Finally, the financial solvency of public employee pension plans is increasingly at the

forefront of public and policy discussions. At issue is whether the projected values of plans' assets are adequate for the projected liabilities. A fully funded pension plan will have assets that match its liabilities, and if the ratio of assets to liabilities is less than 100%, the plan is described as under-funded. The National Education Association recommends that 80% of a state's retirement plan be funded, but only three of the 14 states NCTAF examined met this threshold – Georgia at 94.7%, Kentucky at 82.10%, and Montana at 79.6%; several states were well below (Massachusetts: 71%; New Mexico: 70.5%; Ohio: 70.5%; Illinois, 63%).



Signs abound that there are major cracks in the foundations of public employee pension systems. For instance, to improve the pension system solvency in New York City, current teachers pay just 3% of their salaries toward their pension for only the first 10 years, but teachers hired after January 2010 will have to pay 3.5% of their salary toward their pension for

⁴In 2001, the Government Finance Review forecasted emerging policy dilemmas as districts are forced to decide between holding on to veteran teachers, or younger less expensive teachers.

as long as they work. Another indicator of trouble from the broader public funding world is that for the first time since cost of living increases were put in place in the 1970s, Social Security administrators have said they will not allow COLA increases for at least the next two years (Associated Press, 2009). The increasing number of Baby Boomers drawing Social Security benefits is part of the reason: when Social Security started in 1935, there were 16 working age adults per retiree; in 2007 there were 3.3 workers per retiree, and in 2030 it will be just two workers per retiree (Freedman, 2007).

Other associated costs loom on the horizon as well. According to the Pew Center on the States, states have promised at least \$2.73 trillion in pension, health care and other retirement benefits for public employees over the next three decades; states have saved enough to cover about 85% of their long-term pension costs, but only 3% of the funds needed for promised retiree health care and other non-pension benefits. (Pew, 2007) As highlighted in the case studies, some retirement policies cover disability for employees after 10 years regardless of age attained and some cover spousal health care costs and benefits.

Additional data available at: www.nctaf.org/

NCTAF ANALYSIS

DEMOGRAPHIC CHANGES BRING NEW OPPORTUNITY

As evidenced by the data presented in this report, the education workforce has changed significantly over time, and it is continuing to change rapidly. The pipeline career model we used to develop and deploy the teachers of earlier generations is no longer viable. The ages at which teachers enter and leave the field are different, and the workforce and the world outside schools have changed significantly, as have states' financial circumstances. Embedded in all these changes is a remarkable opportunity to transform teaching for the 21st century.

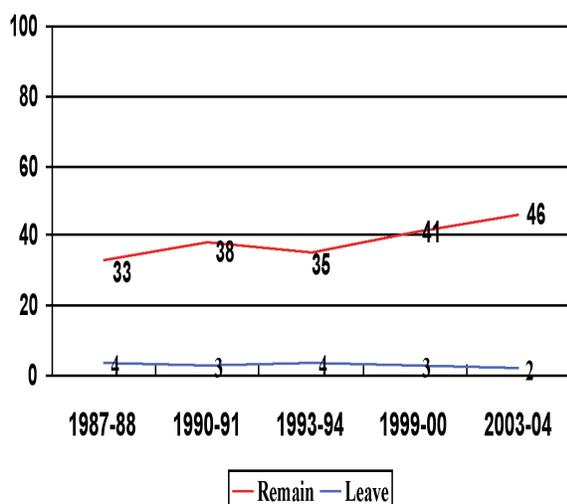
Baby Boomers are not interested in retiring the way their parents did. The idea of a 30-year career in a single job followed by leisure time does not appeal to the generation that has transformed society. Baby Boomers make up the largest, healthiest, and best educated generation ever in the U.S., but they are shackled by retirement policies and pension systems designed to meet the needs of a different generation.

In fact, more than three quarters of currently employed workers (77%) expect to work for pay even after they "retire", according to a 2006 Pew Research Center survey, and it is primarily because they will want to, not because they will have to. (Taylor, Kunk and Craighill, 2006) In a recent survey, 85% of Boomers employed in a school setting said they expect to work after retirement. (Frey, 2007)

The Baby Boomers are the generation that built the space program, created the technology industry, and launched the modern environmental movement. Most of them are not interested in the traditional path of retirement that means stopping work, moving away, and severing their community connections. Rather, they are ready for an “encore” challenge – and millions of them are eager to contribute to education (MetLife Foundation/Civic Ventures, 2005).

The SASS data trends reflect this inclination among teachers as well, with the percentage of teachers reporting they **would like** to stay in teaching as long as they are able steadily increasing.⁵

Percent of Teachers Reporting They Plan to Remain in Teaching as Long as Able or Leave



This shift in attitude pushes us to reconsider what retirement means and whether it is still a relevant social construct. It also calls for a re-examination of current retirement policies that are based on an assumed teacher retirement age of late 50s. As discussed earlier, there are

opposing incentives for teachers to retire. The results of this conflict are seen in the practice of “double dipping” – by which teachers retire but return to teaching at a lower salary than when they retired, and continue to receive retirement benefits and a salary. (See box on “double dipping” on page 17) Teachers also commonly retire from one state or district and then teach in another so as not to impact their retirement benefits, or work for consulting groups that provide services to schools. These arrangements embody two realities: a desire among veteran teachers to continue to teach and work in schools, and the policy disconnect that prevents them from simply extending their careers.

Education workforce policies must be redesigned at both ends of the teaching career.

Over the years, the general consensus has been that the education workforce pipeline that was developed for young teachers in the 1960s would continue to be filled at the front end with young teachers who would stay into their late 50s. These committed individuals were paid comparatively low salaries in return for job security, satisfying and meaningful work, and deferred income upon retirement. It was the right arrangement for the time: Baby Boom teachers, the majority of whom were women with more limited professional options than they have today, made career commitments to education and served as the stalwart core of our education enterprise for decades. Much of the success of high performing school districts during those decades may be attributed to the experience and expertise they developed over the years.

⁵Note that the 2007-08 data for this survey question has not yet been released, but we anticipate the trend will continue, and likely has risen at a greater rate in the last four years.

What is the Impact of Double Dipping?

Individuals, legislators, and the media are increasingly questioning the cost to the state of **double dipping**, which is the practice of collecting a pension and a salary at the same time. One state official calls it "retiring without terminating employment." This strategy is legal in nearly every state and is especially common among educators, who retire relatively young after 20 to 30 years on the job. Advocates say rehiring retirees is a cost-effective way to tap experience especially because retirees don't require health benefits; others claim it is a double burden on taxpayers.

Context is everything, however. An education leader in New Mexico noted that teacher and superintendent shortages are substantial enough in her state that the legislature *cannot* roll back the rule that allows double dipping because positions need to be filled, even by educators who have retired. A pension plan representative in Ohio noted that this practice is not, in fact, "double" dipping and there is no harm to the taxpayer. Researchers argue that the impact on taxpayers is real, however, even though a retiree who returns to teaching receives benefits that have been contributed to and accrued from the *pension plan*, and receives a salary from the *school district*. In Ohio the salary for a returning retiree is less than the final average salary at retirement. The school district would be paying a teacher to fill the position, and whether they are paying a salary to a retired teacher or someone else is immaterial.

These examples encourage further examination of retirement decisions, including an exposition of costs to taxpayers, whether teachers plan their career paths based on market realities, and how best to facilitate a productive discussion about the pros and cons of double dipping among education and retirement policymakers.

Our mistake was in believing that the education pipeline we constructed in the 1960s would work and remain relevant and appropriate forever. As the workforce changed, the pipeline became a myth. The linear and inflexible path constructed earlier cannot accommodate young teachers who do not stay until their 50s or those who periodically stop out or move states, and teachers in their 50s who are not ready to stop working.

NCTAF's analysis of retirement policies and our earlier research on teacher turnover illustrate that the policies that shaped the workforce in

the past are not responsive to today's workforce. Our 20th century solutions have become our 21st century problems. Antiquated policies cannot adapt to relevant shifts in demographics or to school staffing needs, and in fact often act in contradiction to efforts to develop and maintain a high quality teaching workforce.

At the same time that the promises made in earlier times are underfunded, these promises are not always as appealing as they first seemed. In addition to the Baby Boomers discussed earlier, the current career and

compensation structure too often holds little value and even less credibility for today's beginning teachers. Many of them don't see retirement benefits as an incentive to take on challenging work today – and don't believe those benefits will be there for them to collect 30 years from now.

The retirement and pension systems can be levers to develop a 21st century education system. Several educators we interviewed stated that retirements departures free up slots that offer principals the funds and flexibility to hire newly prepared teachers – at entry-level salaries – who are better prepared for using standards-based instruction, technology, and understanding data and accountability systems. If in fact the retirement decisions address both teacher quality and cost concerns, it is of benefit to the school. But we can do better than that. Eliminating barriers to returning to work after retirement would enable principals and districts to retain or rehire experienced master or other highly qualified teachers to build a balanced team of veteran and newer teachers – creating new roles for accomplished veteran teachers who could coach and mentor novice teachers. Pension changes could ease the beginner teacher retention crisis. New plans for future hires should honor past promises while taking modern realities into account. In Ohio, for instance, the vesting period, calculation of benefits, survivorship options and return-to-work provisions vary by hire date and employee choice.

An Illustrative Study: Pennsylvania

While little research has been done on the direct impact of legislation on the early retirement of teachers from the perspective of retaining teachers, Furgeson, Strauss, and Vogt (2006) studied the effect of pension policy enacted in the 1990s by the Pennsylvania Legislature with the intent to entice older teachers to retire early. The state adopted early retirement incentive plans (ERIP) in order to give older teachers a strong incentive to retire (Ibid, 324). This study found that teachers did retire early, and therefore found that the Pennsylvania Legislature could directly control the retirement rate of teachers by manipulating state policy. While the early retirement incentive is at odds with trying to address efforts to develop a new workforce model that keeps effective veteran teachers, this study confirmed that legislative action can directly affect the retirement rates of teachers.

We Need to Act Now

The exodus of retiring teachers has already begun. We can't recruit our way out of this problem – the industrial-age pipeline doesn't work anymore. Retirement policies are encouraging experienced teachers out of the profession and acting as obstacles to those who want to stay or return to teaching. The retirement and pension policies are disconnected from the country's goal of sustaining a highly qualified and effective teaching workforce. Our research compels us to take action now – before we test states' capacity to provide the benefits they have promised.

Based on the realities uncovered and documented in this study, NCTAF has developed several recommendations to help schools, districts, and states develop 21st century workforce policies.

RECOMMENDATIONS

Create state leadership coalitions to focus on developing comprehensive 21st century education workforce plans that go beyond recruitment and replacement strategies.

While recruitment is an essential part of replenishing a professional workforce, other strategies must be pursued to staff schools effectively. In industries other than education, retirement benefits and transition planning are part of a comprehensive strategy to manage the workforce. Private sector companies and some government agencies are actively developing and implementing plans to manage and sustain the quality of their workforce through this demographic shift. Absent well-designed workforce development plans, schools and districts will continue to face chronic and staggering rates of teacher turnover – churn that consumes vast amounts of precious public resources. States' and districts' strategic plans should align retirement practices and policies with their goals for teaching effectiveness and school performance, based on in-depth research about their own workforce demographics and an understanding of others' successful reform efforts.

Align retirement policies with workforce and educational goals. Put simply, the education leaders who are responsible for teaching quality and the policymakers responsible for retirement and pension systems are not working with each other. As a result, teachers are too often whipsawed between the conflicting goals and priorities of two different systems. NCTAF's

interviews revealed that key state leaders in education and key retirement fund managers often do not interact with each other, much less have policy alignment discussions. In addition, whether a board of trustees or a government agency manages the pension plan, the role of the legislature (other than funding) is not always clear. In addition, state policies regarding teacher retirement and “re-retirement” do not reflect the shift in workers’ attitudes toward retirement. The very fact that policies invented the term “re-retirement” indicates that retirement was created for a different era, and we need to create a new stage of life and work for experienced professionals.

Examine and consider potential reforms to retirement plans.

There are options for restructuring retirement benefits in order to allow individuals the right to opt in or out of the new plan. For instance, cash balance plans share the risk of investments between employer and employee, and allow for increased portability. (See box on page 24 for pension plan definitions) Changes to plans for future hires can allow existing employees to either maintain their plan or opt into the new plan – such as the “Retirement Plus” strategy in Massachusetts or the change to service requirements recently enacted in New Mexico that are more strict for new hires. State legislators can also do their part: for instance in Georgia, any bill having a fiscal impact on a public retirement system must be funded in the year it is enacted, reducing deferred costs.

The retirement expectations of Baby Boomers is not the reason to reform the workforce – the achievement and success of the students of the next generation is the motivation.

Facilitate informed policy decisions by supporting additional research about the impact of early retirements on teaching quality, why individual teachers make the decisions they do, and how frequently teachers are leaving one district or state to teach in another district or state. Surveys and focus groups among new and experienced teachers will provide valuable information about how teachers envision their career path and about their expectations for future work and retirement. In response to NCTAF’s April 2009 report, we found that few states or school districts have studied the data and developed a comprehensive picture of the age and retirement projections of their current

workforce, or the trends in attrition and turnover. States and districts need to prepare for the combination of

retirements and the flood of inexperienced entrants to avert a severe negative impact on the quality of teaching and learning over the next generation.

Create systems to identify and assess veteran teachers who are effective and interested in continuing to work in education.

The National Board for Professional Teaching Standards (NBPTS) has a well-tested process for defining and recognizing effective teachers, and then helping them collaborate and take on leadership roles. Adapting this type of framework to include input from schools about their specific needs and using a mutually-agreed upon process to offer teachers approaching retirement new opportunities

would result in a cadre of effective, experienced teachers eager to support 21st century teaching and learning.

Pilot and fund new workforce development strategies and career paths. New roles and opportunities in schools enable experienced professionals (teachers and non-teachers alike) to contribute to education as adjunct teachers, content advisors, project coordinators, community liaisons, or long-term consultants to address needs identified by school and district leadership. Learning teams in which retired teachers and young teachers join with other team members with outside expertise are especially promising. Foundations and industry partners could fund part-time retired teachers in schools to demonstrate the business case for innovative workforce arrangements.

NCTAF's Learning Studios Approach

To create schools that respond to the 21st century demographic and workforce realities highlighted in this report, NCTAF is developing **Learning Studios** that draw upon the skills and knowledge of professionals of all generations to create collaborative, cross-generational learning organizations.

Learning Studios are similar to architecture and design studios: places where teaching and learning come “out of the box” to focus a wide range of experiences, technologies, methodologies, and individuals’ expertise on improving student achievement. **Learning Studios** are staffed by Learning Teams of

accomplished educators, tech savvy youth, skilled retirees, and experts from industry, government and universities.

The idea that a single teacher, working on her own, can know and do everything to meet the diverse needs of many learners is an idea whose time has passed. Developing learning cultures that facilitate mastery of 21st century competencies is a demanding challenge. Our teachers and youth deserve an opportunity to draw on the collaborative power of teamwork that has become the key to success in every high performing organization in our economy.

NCTAF is currently working with the NASA Goddard Space Flight Center and two Maryland school districts to implement **NASA 21st Century Learning Studios** to improve Earth Science teaching and learning. NASA professionals with deep content knowledge and experience work shoulder-to-shoulder with experienced and novice teachers in project-based Learning Studios. (For more about this initiative, visit www.learningteams.org.)

Learning Studios honor and strengthen the practice of teaching by developing opportunities that support continuous personal and professional growth throughout a career. By restructuring teaching to maximize effective collaborative relationships and partnerships – and focusing all our skills and experience on improving student achievement – we will meet the next generation of challenges.

APPENDIX

Five case studies

To better understand the day-to-day impact of retirement and workforce policies on teaching quality, we selected five states to study in detail: Georgia, Ohio, Massachusetts, New Mexico, and Texas. These states were selected based on input from NCTAF strategic partners and state coalitions, pension experts and researchers, and findings from the national policy inventory. Each state's policies related to teaching, retirement, and pensions were reviewed and compared to other states. Interviews with state education leaders and some pension plan representatives were conducted to both validate the information and gather comments or information about pending legislation and policy discussions.

These case studies attempt to draw out some of the specific regulations that hinder or enable states from developing comprehensive human capital management strategies. Policy and legislative changes designed to accomplish that goal have been highlighted, although NCTAF is aware that there are more such examples and we welcome additional information about these strategies.

State-specific figures, based on NCTAF and Ingersoll's analysis of SASS data about teacher age and experience distributions help illustrate the state's K-12 education workforce situation.

Defining Pension Plan Terms

Four general types of pension plans are offered in teacher retirement systems: **defined benefit (DB)**, **defined contribution (DC)**, **cash balance (CB)**, and hybrid plans that combine elements of one or more types of these plans. Defined benefit plans are the most prevalent in the public sector, including education.

- **Defined Benefit Plans** guarantee an annuity (a payment every year until death) of a set amount and places the risk of the investment and ability to cover pension costs with the employer – the downside of these plans is that because the formula is based on years of service in that particular system, they therefore discourage mobility among teachers.
- **Defined Contribution Plans** specify the responsibilities of both the employer and the employee regarding how, when, and what amount of financial contributions may be made. The amount the retiree collects after retirement is based on the contributions plus returns on investments, which can fluctuate, and therefore more risk (or opportunity) is placed on the employee.
- **Cash Balance Plans** are defined benefit plans but the benefits are similar in characteristics to those of a defined contribution plan. The retirement income promised is based on the value of a fixed contribution each year the employee is employed, plus the gains (or minus the losses) of the amount invested. The investment risks and rewards are borne by the employer, and plan beneficiaries can choose a lump sum payout upon retirement instead of an annuity.⁶

The vesting schedule refers to how long an educator must be employed by the state or district before he/she is eligible for participation in the benefit plan. Vesting is an important consideration especially regarding mobility and in discussions of changing plan types – changes to benefits impact vested employees only.

Contribution rules determine the mandated contribution that both the employee and the employer devote to the pension fund, regardless of what type of plan it is.

Disability retirement: retirement benefits to any member who is mentally or physically disabled prior to reaching the minimum number of creditable service years.

Pension portability the ability to maintain and transfer benefits from one state or district pension plan to another plan.

⁶http://www.dol.gov/ebsa/FAQs/faq_consumer_cashbalanceplans.html

Georgia

The Georgia Teacher Retirement System (TRS) serves all employees in the state of Georgia who are employed half time or more in covered positions of the state's public school systems, regional and county libraries, and Regional Education Service Agency units. The TRS offers a **defined benefit plan**, which provides service retirement benefits for any member with at least 30 years of creditable service regardless of age, or any member who has at least 10 years of creditable service and has attained age 60. TRS also offers **disability retirement** for any member who is mentally or physically disabled and who has at least nine years service credit (no age requirement). Benefits for both types of retirement are calculated using a percentage of salary formula. The weight of the calculations is on years of service— a formula that has been criticized as “non-neutral,” (NCTQ, 2008) meaning that pension wealth does not accumulate uniformly for each year a teacher works.

TRS members may select either the maximum plan of retirement, which produces the largest possible monthly benefit payable to the member only during his or her lifetime, with no survivorship benefits, or one of six optional plans that reduce the maximum monthly benefit and offer survivor benefits, including one option that offers a partial lump-sum distribution at the time of retirement. The **vesting** period is 10 years, high compared to other states.

Members who retire before the age of 60 receive a benefit calculated using the

percentage of salary formula reduced by the lesser of 1/12 of 7% or a fraction thereof for each year less than 30 years of creditable service. Members who terminate TRS covered employment may apply for a refund of contributions and interest, unless they accept other TRS covered employment.

Like most state retirement systems, retirement benefits in Georgia are determined by a formula that uses the years of service and the employee's highest average salary: the total number of creditable years of service, including partial years (not to exceed 40 years), is multiplied by two percent. This product is then multiplied by the average monthly salary of a member's highest consecutive 24 months of membership service. The resulting product is the monthly benefit under the Maximum Plan of retirement. Based on this formula, annual retirement benefits are approximately 55-75% of a teacher's final average salary, with a maximum of 80%. Cost of living adjustments (COLA), based on increases or decreases in the Consumer Price Index, are granted to eligible retirees. Members who retire with less than 30 years of creditable service and under age 60 are eligible for COLA after reaching age 60 or after obtaining 30 years of creditable service, whichever occurs earlier.

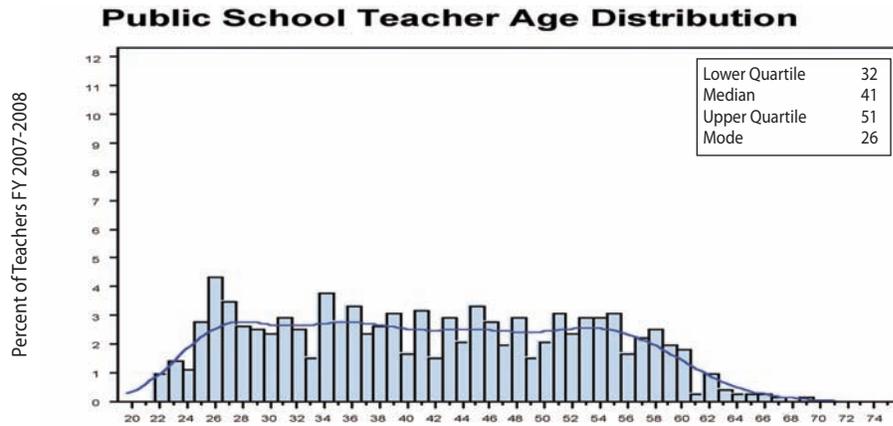
The Georgia TRS is financed through member contributions of 5.25% of annual salary; employer contributions of 9.74% of annual salary (rates effective as of July 1, 2009); and investment income. The contribution rates are determined by the results of the annual TRS

actuarial valuation, which is designed to measure the adequacy of the System’s funding progress. Georgia’s TRS is strong, as evidenced by a ratio of assets to liabilities⁷ of 94.7% in the fiscal year that ended June 30, 2007.⁸

Georgia ensures the fiscal stability of the retirement system by requiring that each bill having a fiscal impact on a public retirement system such as TRS must be funded in the year it is enacted. This “pay as you go” system ensures that future benefits are already paid for and do not depend on future appropriations.

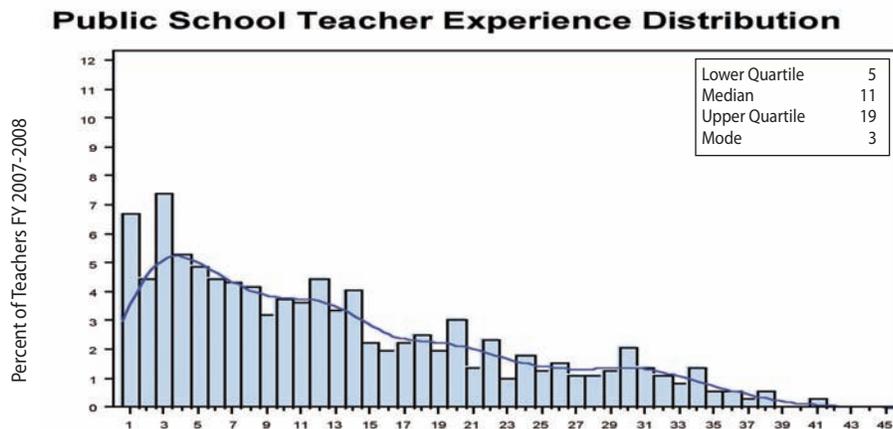
Georgia also encourages some portability of benefits by permitting teachers to purchase service credits for several types including out-of-state teaching, non-public school teaching, military service, graduate study, maternity leave, leaves of absence, unused sick leave, and for serving as visiting faculty. Typically, service credits may be purchased at the cost of the contributions the employees would have made to TRS if they had been employed by the system during that time.

Georgia



Like many states, Georgia faces teacher retirements over the next decade but is a relatively “young” state. The 2007-08 median age for public school teachers was 41 and the average age of retirement for Georgia public school teachers is 57.

The graph below illustrates the distribution of years of teaching experience in Georgia.



Source: original analyses of the Schools and Staffing Survey by Richard Ingersoll and Lisa Merrill, University of Pennsylvania.

⁷Actuarial values.

⁸Values may have changed since 2007; this is the most recent data available.

To address the need for qualified educational professionals in Georgia's public schools, the Georgia General Assembly passed Act No. 770 (SB 327) during the 2008 session. The legislation allows retired educators to return to the workforce and continue to receive retirement benefits. TRS retirees who retired under a normal service retirement continue receiving full retirement benefits provided that they have been retired for a minimum of 12 months. Returning retirees do not receive or make additional contributions to retirement. The legislation is very specific in defining a classroom teacher as a certified teacher (pre-K through grade 12) employed by the public

school system with the sole responsibility of academic instruction in a classroom. Principals cannot return to work in the same positions in the same schools from which they retired, and superintendents cannot return to work in the same position in the same school system from which they retired. It is worth noting that a TRS retiree returning to work may choose to terminate his or her benefit if it is to the member's advantage to accrue additional service credit and salary in an effort to increase his or her benefit upon re-retirement.

Massachusetts

The Massachusetts Teachers' Retirement System (MTRS) serves educators in all Massachusetts school districts except Boston Public Schools and all higher education faculty. Teachers are eligible for retirement at age 55 with 10 years of service, or at any age with 20 years of service. However, if teachers retire before age 65, the replacement rate in their pension benefit formula is docked by .1% for each year under 65 that they retire. MTRS does not have an early retirement option that allows teachers to avoid this formula deduction. Massachusetts caps the maximum benefit that can be achieved in retirement at 80% of an educator's final average salary. The average age a teacher reaches this maximum benefit is 58.

Massachusetts has a **defined benefit** plan that calculates pension wealth based on years of service and highest three consecutive years of salary. The weight of the calculations is on years of service – which means that pension wealth does not accumulate uniformly for each year a teacher works – a formula that has been criticized as “non-neutral”. (NCTQ, 2008)

The employer's contribution amount is based on an actuarial evaluation completed by the Public Employee Retirement Commission. In 2007 the employer contribution amount was 16%. Massachusetts has one of the highest contribution rates in the country, in part

because teachers are not covered by Social Security as they are in some other states.

The employee contribution varies by hire date.

Teachers who entered the retirement system after 2001 are automatically enrolled into the Retirement Plus plan; pre-2001 teachers could/can opt in if they desire. Retirement Plus participants contribute 11% of their salary to the pension fund, and those that do not participate in Retirement Plus contribute anywhere from 5-11%, depending on their hire date.

Given that the standard measure for “funded” in regard to pensions is 80% (see earlier discussion

Missouri: A Different Approach

In Missouri, a “critical shortage” full-time employment exception allows retirees to work full-time for up to two years at school districts that have declared a critical shortage of employees, without losing Public School Retirement System of Missouri benefits.

on this point), the Massachusetts fund is considered underfunded at 71%. The Boston teacher retirement plan is worse off, funded at 64%. (NEA, 2008) As with many financial agreements, the “devil is in the details” – Massachusetts has related

retirement obligations that are not factored in to the calculations about whether the pension plan is fully funded. Massachusetts also offers two types of disability plans and an option for the retiree to redirect pension contributions to a survivorship benefits plan.

Massachusetts has a 10-year **vesting period**, one of the longest in the country. Teachers who depart before this vesting period can get back what they contributed to the plan, but those who retire with less than 5 years of service receive no interest on their contributions; those

who retire with 5 to 10 years of service receive 50% of the accrued interest on their contributions.

Pension portability has been proposed as a means to even out the distribution of highly effective teachers and smooth out pension obligations. Massachusetts supports portability into the state by permitting teachers to purchase service credits for out-of-state teaching, non-public school teaching, military and Peace Corps service, leaves of absence, and maternity leave at the cost of the contributions the employees would have made to MTRS if they had been employed by the system during that time.

However, Massachusetts limits the amount of service credits available for purchase to the amount of years an employee is active in MTRS so that out-of-system service cannot be greater than in-state service. The purchase is also delayed – one year of service allows the purchase of one year of credit. This policy penalizes teachers who may have extended service elsewhere by limiting the amount of service credits they can use towards their retirement benefit calculation. Massachusetts also has intrastate agreements that promote pension portability, and reciprocal service credit agreements with the Boston Public Schools Retirement System and all Massachusetts state departments.

Massachusetts's Retirement Plus plan is an example of amending the pension system in a way that does not negatively impact already retired teachers who are collecting pension

payments. Retirement Plus entitles teachers to receive a 2% increase in benefits for each year of service more than 24 years. Although the 2% added benefit begins *accumulating* after year 24, teachers are not eligible to *access* the benefit until they have completed 30 years of service. While the Retirement Plus system offers a strong incentive for teachers to reach 30 years of service, the bonus system offers an equally strong incentive to retire as soon as the point where the peak of benefits is reached (capped at 80% of an educator's final average salary, average age 58). While this opportunity to reach retirement at a relative young age may be a hiring incentive for MTRS, it makes it difficult to retain teachers who have attained retirement age.⁹

Retirees may return to work after retirement in Massachusetts within certain limits. Retirees must wait 60 days and are limited to 960 hours of work, and the salary when added to retirement allowance cannot exceed the amount of the paid position. While Massachusetts does not have any official Deferred Retirement Option Plan policy, the commonwealth does allow teachers to teach and collect salary while collecting pension in critical shortage areas. In times deemed a critical shortage, time and earning limits are waived (retirement plus participants must wait two years to have earnings limit waived). Guidelines for retirees considering extending their careers (such as the Retired Educators Association of Massachusetts <http://www.ream1951.org/retirementplan.htm>) are helpful but quite involved. If post-retirement employment limitations are

⁹NCTAF analysis.

exceeded, the annuity is suspended and the teacher re-enters active MTRS membership. Upon re-retirement, benefits will resume.

Recent proposals to change the retirement system for Massachusetts teachers include service credit purchases, cost-of-living adjustments and health, death, and survivor benefits. Some legislation has been introduced to address the benefit formula and post-retirement work restrictions; however there is no legislation to address the extraordinarily long vesting period or the incentive towards early retirement. Adding increased flexibility for teachers to purchase credit for their work outside the MTRS system would certainly increase pension portability for teachers in the state. While an extensive number of bills relating to service credit purchases have been introduced, only a few have passed, indicating that addressing pension portability is not a high priority for the General Court.

In 2009, the governor and the speaker of the house established committees to study the

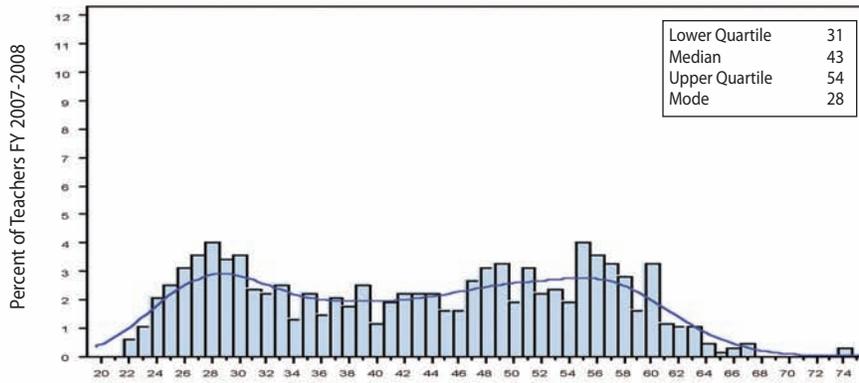
pension system and determine if reforms are needed. While these actions suggest some awareness of the pitfalls of the current pension system, they were ignited by the current economic situation rather than a consciousness of the effect of state policy on teacher retirement rates.

The structure of Massachusetts's pension plan plays an important part in how the aging of the workforce will impact schools and state finances in that new teachers might choose to teach in a state with a more evenly distributed compensation package or more generous benefits for early leavers, and veteran teachers might choose to retire at age 55 despite the fact that they are interested and eager to continue to contribute to education in Massachusetts.

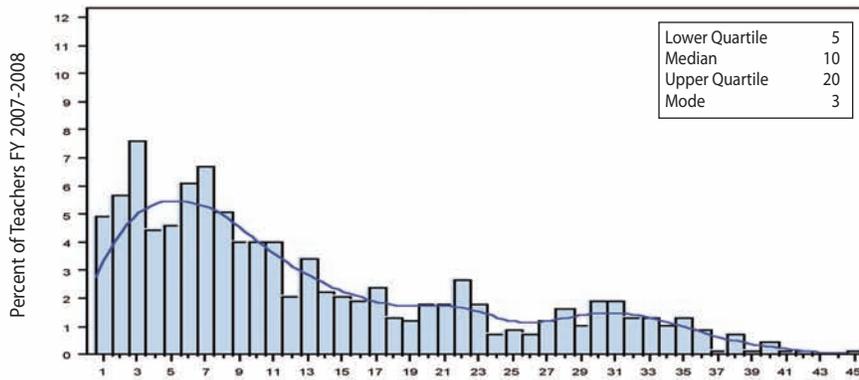
The average age a teacher reaches the maximum pension benefit allowed by the state is 58 – young when compared to the age of full social security benefits of 65 (67 for those born after 1960).

The 2007-08 teaching workforce picture in Massachusetts

Public School Teacher Age Distribution



Public School Teacher Experience Distribution



Source: original analyses of the Schools and Staffing Survey by Richard Ingersoll and Lisa Merrill, University of Pennsylvania.

Massachusetts faces the very real prospect of its neighboring New England states “poaching” its teachers as their retirements increase. The Commonwealth’s teachers also could easily do what teachers do in other regions: retire in one

state and commute to another state to continue working. The way the retirement system and benefits are structured is of interest therefore not only to the teachers in Massachusetts, but in the other New England states as well.

New Mexico

The New Mexico Educational Retirement Board (ERB) administers the Educational Retirement Act to all public school teachers, higher education faculty and support staff employed more than 25% of full time in the state of New Mexico. The ERB provides a **defined benefit plan**, with a vesting period of five years.

Employees contribute 7.9% of annual salary while employers contribute 10.9% of salary; the employer contribution will increase by .75% each year, to 13.9% by July 1, 2011.

Eligibility for retirement in New Mexico falls under one of three criteria. Members may retire:

(1) with earned and allowed service credit totaling 25 or more years – which means members can retire at any age with 25 years of service; (2) when member's age and earned service credits add to the sum of 75 or more; and (3) when the member's age is 65 or more with at least five years of earned service credit.

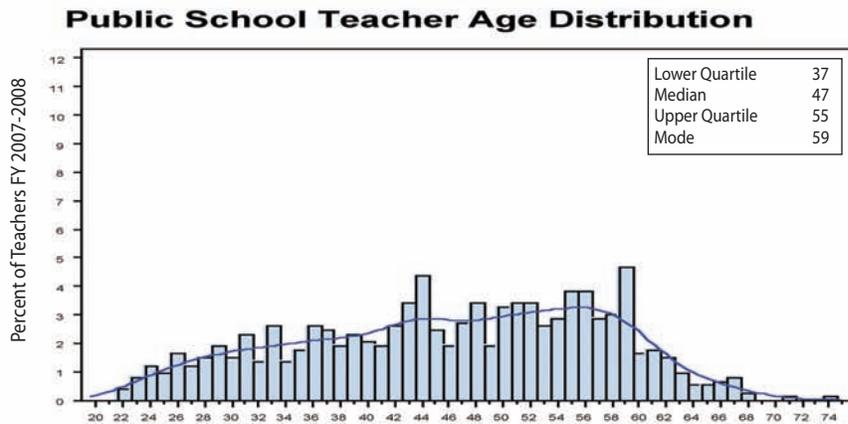
The penalty for leaving the system early is a reduction of 2.4% of annual benefits in the first five years under age 60, and 7.2% for each year under age 55. Members are eligible for disability retirement after 10 years of service credit; payment is approximately one-third of a member's final average salary. At age 60, disability benefit becomes retirement benefit.

Similar to other states, retirement benefits in New Mexico are calculated through a formula of three component parts: the member's Final Average Salary (FAS), the number of years of service credit earned and allowed, and the .0235 factor. Based on this formula annual

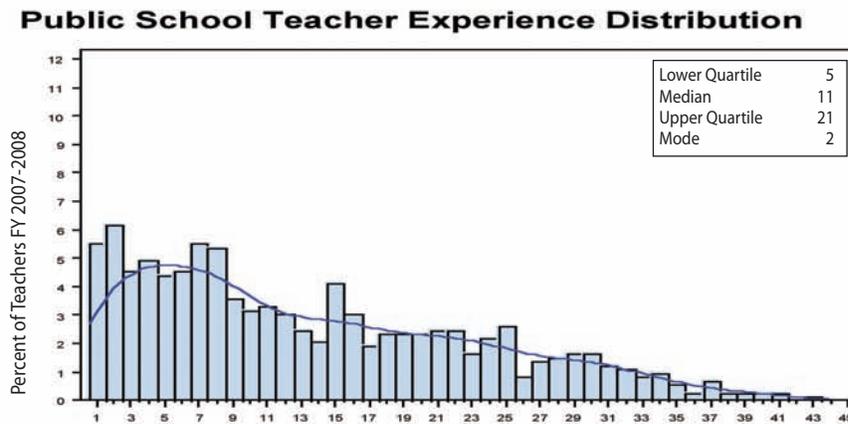
retirement benefits are 55%-75% of a teacher's final average salary. All members are covered by Social Security, and all members receive cost-of-living increases starting at age 65. Of note, the New Mexico Retirement Board has initiated a change that resulted in a new 30-year service requirement for new members joining after July 1, 2010.

The 2007-08 teaching workforce in New Mexico is more balanced than many states in terms of age, but it is worth noting that there is a high distribution of teachers aged 59, and the average age of retirement for teachers in New Mexico is, in fact, 60 years of age.

The 2007-08 teaching workforce picture in New Mexico



New Mexico's teaching workforce has a high percentage of teachers with eight or fewer years of experience.



Source: original analyses of the Schools and Staffing Survey by Richard Ingersoll and Lisa Merrill, University of Pennsylvania.

Retired employees may return to work only after taking a 12-month hiatus. Retirees returning to work will receive pension benefits but will not earn additional service credits or make contributions to their retirement fund. It is not in a member's best interest to defer retirement: a member who is on deferred status, and becomes eligible for benefits, forfeits all benefits from the date of eligibility to the date application is made for retirement. Typically, teachers who achieve retirement

eligibility but who wish to continue working after age 60 stop working for one year. A retired member may work with an ERB-covered employer and earn up to \$15,000 or an amount calculated under the .25 or less FTE provision, whichever is greater, without affecting retirement benefits. After they return to work from this hiatus, they can draw down their full benefits as well as take their salary. This is often referred to as "double-dipping."

New Mexico supports **portability** of benefits by permitting teachers to purchase up to five years of credit for transfer from outside the system. Teachers can purchase up to five years of service credit by making a lump sum payment or rolling over contributions from another plan. The cost of purchasing allowed service is based on actuarial cost, and ranges from 18% of current full-time earnings to as much as 68% of current full-time earnings for each year of service purchased. Members may also purchase service credits for military service, sabbaticals, or leaves of absence.

According to the National Education Association report on state pension plans, New Mexico's plan is 70.5% funded, which is below the optimum threshold of 80%. However, as of

July 2009, the current fund balance of the New Mexico retirement system is \$7.5 billion, and the Retirement Board asserts that, "contrary to other representations, the ERB will continue to be able to meet its obligations to retirees."

Approximately half of the teaching force in New Mexico is 50 years or older and, as noted above, the average age of retirement is 60. So over the next 10 years the state will likely experience a steady number of retirements, while at the same time, experiencing a projected percentage increase in public elementary and secondary school enrollment through 2015 of 11.1%.

View from a Superintendent:

A district superintendent in New Mexico noted that while everyone is grateful for the teacher retirement system, there have been rumors of difficulty in financing the system. Communications from New Mexico Educational Retirement Board are all "doom and gloom" and "there are lots of worries about solvency," she said. This year, due to budget concerns, the legislature has required a higher contribution rate from employees and a smaller share to be paid by the state. In this superintendent's view, "teachers are really upset about that—they feel the state made a commitment to them and they are going back on that commitment."

When asked if there is a trend toward early retirement (before age 60), the superintendent said, "No, no, no, if anything I'm seeing people stay on the job longer. The biggest incentive in employment right now is health insurance—not retirement accounts."

This superintendent also noted that there is an incentive to retire and then come back to work, due to the ability to "double-dip" in the state. She is blunt about the realities: "I know many teachers and superintendents that took their year off and are now drawing two salaries. This really makes legislators mad—but they can't change it because there are such shortages for superintendents and teachers in high need areas that we have to continue to offer this incentive."

Ohio

The State Teachers Retirement System of Ohio (STRS Ohio), one of the largest pension funds in the country, serves 458,500 active, inactive and retired Ohio public educators covering all school districts in the state. In 2007–2008, STRS Ohio paid more than \$4.3 billion in service retirement, disability and survivor benefits plus \$540 million for optional health care coverage.

STRS Ohio offers one of the most flexible pension systems for public school teachers, allowing members to choose one of three plans: defined benefits, defined contributions or a combined plan. Eligibility requirements for the defined benefit and combined plans are based on age and years of service credit: defined benefit members may retire at any age with 30 years of service credit; at age 55 with 25 years of service credit; and at age 60 with five years of service credit. If a member retires with less than 30 years of service credit and before age 65, benefits are reduced. Full benefits are paid when a member has 30 years of service credit or is age 65. Combined plan members may begin benefits from the **defined benefit portion of the combined plan** at age 60 with five years of service. Defined contributions members may annuitize the account balance for lifetime benefits at age 50.

STRS Ohio reports that about 5% of new members choose the combined plan, 10% opt for the defined contributions plan, and 85% select the defined benefits plan, which is the default option. This enrollment pattern has remained steady for the past eight years, since all three plans have been offered.

In addition, there are two types of benefit calculations for defined benefit service retirement: salary-related and money-purchase. At retirement, benefits are calculated using both calculations; members are paid the higher of the two amounts. The salary-related calculation is similar to most other state pension plans, using a calculation of age, total years of service and final average salary. The money-purchase calculation is often more beneficial to members who have fewer years of service. Under this option, lifetime contributions, plus interest, are matched by employer funds to provide an annuity reserve. The annuity reserve is divided by an annuity value, which is a factor that considers the payments over the member's life expectancy and the interest earned on the remaining reserve. The interest rate, which is subject to change, is different for different years (i.e., 6.5% prior to 1982; 7.75% from 1983 to 1994, etc.).

The contribution level is 10% for employees and 14% for employers. The vesting period, calculation of benefits, survivorship options and return-to-work provisions are different for each plan.

- **STRS Ohio Defined Benefit Plan:** The vesting period is five years, with retirement income calculated using age, years of service and average of three highest salary years. The plan includes survivor and disability protection and access to optional health care coverage with at least 15 years of service credit.

■ **STRS Ohio Defined Contribution Plan:** With a vesting period of only one year, retirement income in this plan is based on the performance of investment choices selected by the employee for both employee and employer contributions, allocated among various investment options managed by STRS Ohio. Retirement, survivor and disability benefits are limited to the value of the account, and access to STRS Ohio optional health care coverage upon retirement is not provided.

■ **STRS Ohio Combined Plan:** Employees can create a portion of retirement income through the performance of investment choices they select for their contributions, while contributions from the employer pay for a combination of service retirement, disability and survivor benefits. Access to optional health care coverage is provided to retirees who meet the necessary qualifications — currently, 15 years of service credit.

Like most other state retirement plans, STRS Ohio members may purchase service credit for certain types of past employment and leaves of absence, including military service; teaching and public service, including previously exempted or waived service; maternity leave and current and past leaves of absence; restoration or transfer of service credit between STRS Ohio and other Ohio retirement systems and restoration of withdrawn service credit; college or university nonpaid professional leave of absence; Ohio non-contributing public

teaching service; and service as an Ohio public school board member. Service credit can be purchased no later than three months after retirement.

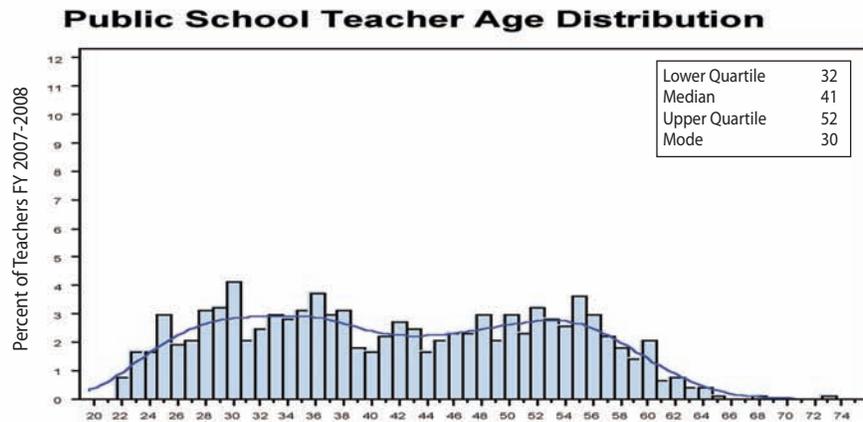
The STRS Ohio began offering an enhanced benefit to members who achieve 35 years of service for any retirement starting July 1, 1999 or later. With 35 years of service, the member gets 2.5% of final average salary for the first 31 years, then 2.6% for year 32, 2.7% for year 33, 2.8% for year 34 and 2.9% for year 35 (88.5% total). If a member has less than 35 years of service, he/she gets 2.2% for the first 30 years of service. This factor did create an incentive to teach longer. Before the enhancement, about 6% of teachers worked to the 35-year point; now about 40% continue service to 35 years.

Re-employment in a public position in Ohio after retirement is restricted during the first two months following retirement. Members who are employed by only one public employer at the time of retirement must wait two months after the date of retirement to return to public employment. Violating the two-month waiting period will result in the loss of one or two months of retirement benefits. STRS Ohio members who return to teaching do so at a lower salary than when they retired, but they are still eligible to receive their full retirement benefits. This practice known as “double dipping” is the subject of concern among legislators throughout the country. However, the pension plan representative in Ohio noted it is not, in fact, “double” dipping and there is no harm to the taxpayer. A retiree who returns to

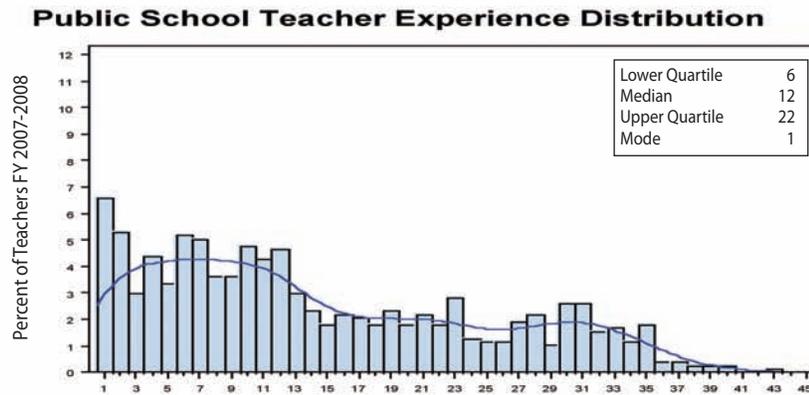
teaching receives benefits that have been contributed to and accrued from the pension plan, and receives a salary from the school district. The school district would be paying a teacher to fill the position, and whether it's a retired teacher or someone else is immaterial. And a retired teacher brings considerable experience to the classroom.

The percentage of teachers in Ohio who are of age 50 or older is 46.28%. The average age of retirement for teachers in Ohio is 59 years. The table below presents the age distribution of public school teachers in Ohio for 2007-08.

The 2007-08 teaching workforce picture in Ohio



In addition, SASS data indicate that younger teachers are coming into the profession in Ohio – which is leveling the age distribution – but teachers are less experienced over all age groups, which may be partially attributed to mid-career changers becoming teachers. The table below shows the teacher experience distribution for one year, 2007-08.



Source: original analyses of the Schools and Staffing Survey by Richard Ingersoll and Lisa Merrill, University of Pennsylvania.

The State Retirement System of Ohio faces serious challenges as a result of the nationwide recession. The market value of STRS Ohio's investment assets has decreased to \$52.7 billion as of June 30, 2009, reducing the funded ratio of the plan to approximately 57.9%. The increasing cost of health care and insurance premiums is a significant driver of the problems with fund solvency. According to the STRS Ohio August 2009 member newsletter, (Ohio State Teachers Retirement System website) for several months the State Teachers Retirement Board and staff have been engaged in a long-term contingency planning discussion designed to strengthen the solvency of both the pension fund and health care fund.

Even before the economic downturn, STRS Ohio was already being affected by other economic and demographic factors. For example, the life expectancy of STRS Ohio members has increased over time, but age and service requirements have not changed since 1976, resulting in pension benefits being paid for longer periods of time. Additionally, there has been steady growth in the benefit formula (including the enhanced 35-year benefit) and cost-of-living adjustments over the years. Finally, improvements to already granted retiree benefits, such as ad hoc increases to various groups of retirees in 1984, 1988, 1990, 1997 and 1999, as well as supplemental payments (often called 13th checks) from 1980 through 2000, have increased the system's liabilities over time.

In light of this situation, changes under consideration, that would affect both current and future teachers, include the following:

- Increasing contributions from the current 10% from active teachers and/or 14% from employers
- Instituting a minimum retirement age of 60
- Increasing the number of years used to calculate final average salary to five from three
- Changing the formula for calculating pensions
- Changing the annual cost-of-living adjustment (COLA)

STRS Ohio administrators have determined that unless changes are made, STRS Ohio will eventually be unable to pay members' projected benefits. In short, STRS Ohio cannot "invest" its way out of the funding challenge it faces. Plan administrators concede there are no easy solutions to the funding challenges.

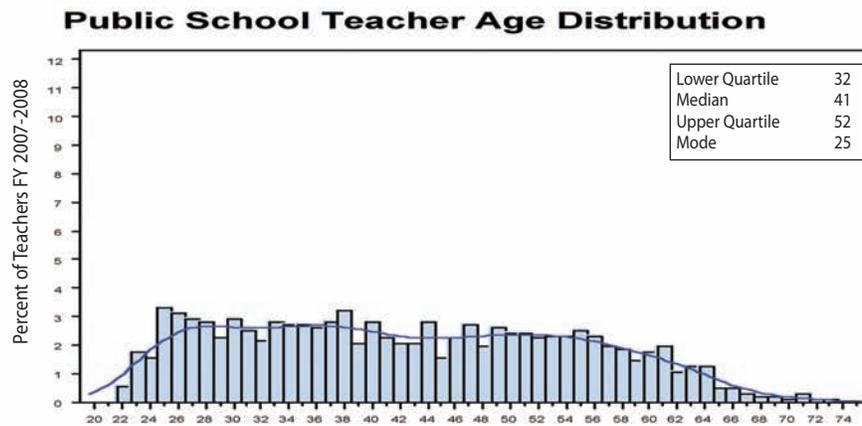
Texas

The Teacher Retirement System (TRS) of Texas provides retirement benefits to educators and other employees of the state's 1,032 independent school districts, as well as public universities, community colleges, junior colleges, and medical and dental schools. TRS, which serves more than 1.2 million active and retired members, is the nation's seventh-largest public pension fund, with assets of \$83 billion as of June 2009.

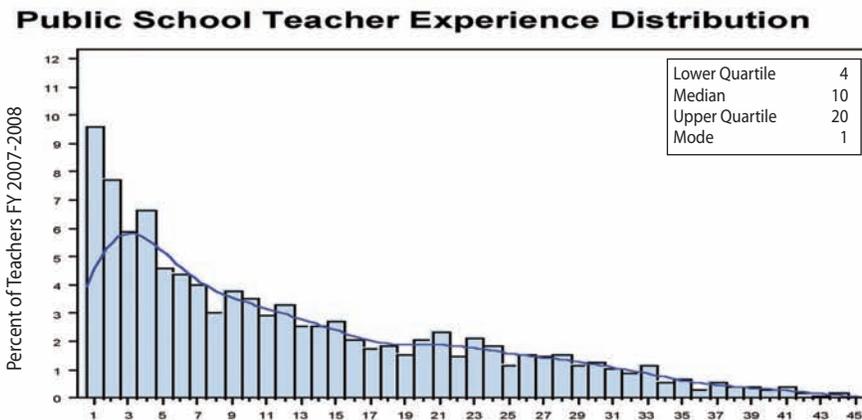
TRS offers a **defined benefit plan**, with a vesting period of five years. The types of benefits payable are: service retirement benefits, including partial lump sum option (PLSO) and Deferred Retirement Option Plan (DROP)¹⁰ distributions; optional annuity payments continuing to a beneficiary; disability retirement benefits; in-service and retiree death and survivor benefits; and a return of accumulated contributions.

Texas's teaching workforce has a somewhat balanced age distribution – see below.

The 2007-08 teaching workforce picture in Texas



However, the teaching workforce in Texas is one example of a state in which age does not tell the story of experience. Many of Texas's teachers have fewer than five years of teaching experience, as illustrated below, and many have fewer than three years of teaching experience.



Source: original analyses of the Schools and Staffing Survey by Richard Ingersoll and Lisa Merrill, University of Pennsylvania.

¹⁰DROP was closed to new enrollments effective December 31, 2005.

Normal retirement age is 65 with five or more years of membership service credit, or any combination of age and service totaling 80 years with at least five years of service credit. Members who joined TRS after September 1, 2007, and retire before age 60 but meet the Rule of 80, will have a 5% annuity reduction for each year under age 60. Benefits for members with at least 30 years of service credit who do not meet the Rule of 80 are reduced by 5% per year for each year under age 60.

Members can purchase service credit for out-of-state public education experience, work experience required as a career or technology teacher and active-duty military service, among other things. Generally, one year of out-of-state service credit can be purchased for each year of TRS membership, up to a maximum of 15 years.

The standard annuity benefit formula is 2.3% of the average of the five best annual salaries multiplied by the number of years of service. Benefit calculations do not include compensation converted from non-creditable compensation during the last three years before retirement. Salary increases in the last three years are counted only to the extent that they are within the range established by the rules of the TRS board of trustees.

For most of the past decade, employees contributed 6.4% and the state contributed 6% to the TRS pension fund, for a combined 12.4% of payroll. That formula was altered as a result of legislation requiring that the state contribution rate not be lower than the member contribution rate. Effective September 2007, the

state contribution increased to 6.58%, while the member rate remained 6.4% -- making the combined employee and state contribution 12.98% of payroll. Effective September 2009, the state contribution rate is 6.4%.

Retired TRS members may return to the workforce without revocation or reduction of benefits provided they (1) wait to negotiate a return to employment as permitted under law and (2) do not work for a TRS-covered employer during the required break-in-service period (either one or two months) following the effective date of retirement. The break-in-service requirement applies to both normal-age and early-age retirees and to both service and disability retirees. During employment after retirement, retirees do not earn additional TRS service credit and pension contributions are not withheld from their paychecks.

The TRS 2009-2013 Strategic Plan notes that average pension-plan member profile statistics "remain fairly stable." There are 3.5 contributing active members per annuitant. Active members average 43.8 years old with 9.4 years of service, and have an average highest-five-year salary of \$35,124. On average, members retire at age 59.6 with 24.7 years of service credit. The average age for all retirees is 69.6.

The strategic plan also mentions a number of significant trends, including:

- **Membership growth.** The number of public school employees in Texas is expected to continue to rise over time with the population growth among school-age children.

- **An aging workforce.** The current active member age distribution is heavily weighted in the 35-54 year age group, but the average age is increasing over time. The highest percentage increases in the past few years have continued to occur within the 55-65+ age groups.
- **Retirement rates.** While the number of retirees is expected to continue to rise over the next five years, the rate of retirements is expected to remain relatively flat during the period.
- **Member/annuitant ratio.** Although active members continue to outnumber annuitants, the ratio of active members to annuitants has dropped from 4.3-to-1 to 3.5-to-1 since 2001. Over the past five years, the rate of growth in total current members has been around 2% per year, while the rate of growth in annuitants has approached 6% per year. The growth in the number of annuitants has subsided somewhat over the last three years to a rate of approximately 3.3% annually.

The strategic plan lists as the top challenge for TRS over the next several years “sustaining investment returns in excess of the 8% actuarial assumed rate of return for the pension plan while maintaining an appropriate level of risk exposure.” Should projected long-term revenues prove insufficient to cover long-term pension obligations, the Texas Legislature “will need to consider adjustments to contribution rates, retirement eligibility criteria and/or the structure of pension benefits.”

The strategic plan notes that new investment legislation authorizes the use of instruments to manage risk, enhance returns and promote efficient portfolio management. TRS is authorized to buy or sell futures, swaps, forwards, options and options on futures. Delegation to external investment managers, limited to 30% of the portfolio, is also permitted. The legislation limits investments in hedge funds to 5% of the portfolio. In addition, the legislature recently established a divestment procedure for investments by TRS and the Employees Retirement System of Texas in certain entities doing business in Iran and Sudan.

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