

## DOCUMENT RESUME

ED 450 097

SP 039 771

TITLE Finding Teachers: How Hard Is It for Michigan Public School Districts. A 1999 Benchmark.

INSTITUTION Michigan State Univ., East Lansing. Collegiate Employment Research Inst.

PUB DATE 2000-09-00

NOTE 17p.

AVAILABLE FROM Collegiate Employment Research Institute, Michigan State University, 113 Student Services Building, East Lansing, MI 48824.

PUB TYPE Numerical/Quantitative Data (110) -- Reports - Research (143)

EDRS PRICE MF01/PC01 Plus Postage.

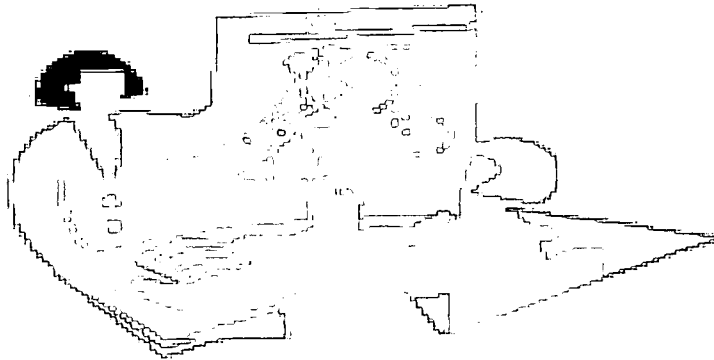
DESCRIPTORS Beginning Teachers; Elementary Secondary Education; \*Public Schools; Teacher Qualifications; \*Teacher Recruitment; Teacher Retirement; Teacher Salaries; \*Teacher Supply and Demand; Teaching Experience

IDENTIFIERS \*Michigan

## ABSTRACT

This report reviews the situation public school districts encountered in recruiting teachers for the 1999-2000 school year. Data come from staffing surveys completed by administrators within 216 public school districts. Level of difficulty in finding teachers depended on type of teacher being sought. Elementary, social sciences, and language arts teachers were the easiest to find, and high school science and technology related positions were the most difficult. The high school labor market was tighter than the middle and elementary school markets. Average starting salaries for new teachers were approximately \$29,000. Retirement was expected to make a significant impact on 63 percent of districts, with 25 percent of teachers poised to retire in the next 5 years. Districts tended to look for teachers with 2-5 years of experience before new teachers. Districts preferred a mix of about 50 percent new and 50 percent experienced teachers when filling yearly vacancies. New teachers were perceived to be well prepared in pedagogy and curriculum, comfortable using computers, and able to recognize differences in student learning styles. However, there was concern about their understanding of state standards and assessment, integrating computer resources into teaching strategies, and awareness of connections between education and careers. (SM)

***FINDING TEACHERS: HOW HARD IS IT  
FOR MICHIGAN PUBLIC SCHOOL  
DISTRICTS  
A 1999 BENCHMARK***



**Collegiate Employment Research Institute  
Michigan State University  
113 Student Services Bldg.  
East Lansing MI 48824**

PERMISSION TO REPRODUCE AND  
DISSEMINATE THIS MATERIAL HAS  
BEEN GRANTED BY

*P. Gardner*

**September 2000**

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

SP0 39771

## EXECUTIVE SUMMARY

This report reviews the situation public school districts encountered in recruiting teachers for the 1999-2000 school year. The reference point established by their difficulty in finding teachers will permit us to track the labor market over the next five years. Clearly, potential retirements will strongly influence hiring patterns for the next decade.

Key findings shared in this report:

- Finding teachers was not too difficult in 1999-2000; however, the level of difficulty depended on the type of teacher being sought. Elementary, social sciences (middle school and high school), and language arts teachers were the easiest to find. High school science, especially physics, and all technology related positions were very difficult to fill.
- The high school labor market appeared tighter than the middle school and elementary markets.
- Average starting salary for a new teacher (first year) was approximately \$29,000; ranged from \$23,800 to \$36,800.
- Retirement is expected to make a significant impact on 63% of the districts. About 25% of the teachers are poised to retire in the next five years. Some districts (about 22%) could see more than 50% of their teachers retire. A few high schools may have to replace as many as 80% of their staff.
- In terms of sheer numbers elementary, social studies, English, and high school mathematics will possibly have the largest number of openings.
- Districts tend to look for teachers with 2 to 5 years experience before new teachers. Districts prefer a mix of about 50% new and 50% experienced when filling yearly vacancies. Movement of teachers with 2 to 5 years of experience can be expected to increase as retirements increase.
- New teachers were perceived to be well prepared in pedagogy and curriculum; comfortable using computers; and recognizing differences in student learning styles. However, there was concern about their understanding of state standards and assessment; integrating computer resources into teaching strategies; and awareness of connections between education and careers.

## FINDING TEACHERS: HOW HARD IS IT FOR MICHIGAN PUBLIC SCHOOL DISTRICTS?

The national media has focused attention on an emerging national teacher shortage providing examples of extravagant or unique incentives by school districts to lure teachers. Countering this perspective are several educational researchers who acknowledge shortages in particular regions of the country (primarily along the coasts and entry points for immigrant families), but, on the whole, candidates are available for openings in most school districts. These researchers also recognize the pending wave of teacher retirements, as the large contingent of boomers who entered teaching 25 to 30 years ago are posed to retire. What is the current situation in Michigan? How are Michigan school districts faring in their efforts to hire new teachers? Are they utilizing incentives to attract teachers? What does the next few years hold in store for district hiring practices?

This project has attempted to answer these questions by establishing a benchmark of hiring practices for the 1999-2000 school year. This benchmark will be used to monitor Michigan's teacher labor market over the next decade. The survey employed in this study targeted public school districts. Resources limitations forced the decision to focus on public schools with the intention of including charter and private schools in the future.

A total of 582 public school districts were sent a staffing survey. Surveys were sent to the administrator that handles personnel or the superintendent if a personnel administrator could not be identified. Two weeks after mailing the survey a reminder letter was sent to the attention of the superintendent. After the return deadline, a random sample of non-respondents was called to encourage additional responses. Several districts (usually small, rural districts) used the same personnel administrator, which reduced the total sample. Complete surveys were received from 216 districts for a 37% response rate.

*SCHOOL DISTRICT PROFILE:* Districts were asked to describe themselves as predominantly rural, suburban, or urban or a combination. More than half the respondents (56%) considered themselves to be predominantly rural and 16% were classified as suburban. However, 20% were partially rural and suburban. The remaining 5% were heavily urban. Three percent felt they were a combination of all three.

Since the survey was sent prior to the 1999-2000 academic year, districts provided student and teacher profiles that reflected the 1998-99 school year. The average number of students enrolled was 3,338. However, district enrollments ranged from 23 to 33,000. Approximately one-quarter of the districts had fewer than 955 students; one-quarter had more than 3,500 students.

Staff averaged 190 teachers and other certified personnel (not administrators); the range was wide from 3 to 1,161.

During the 1998-99 academic year these responding districts hired an average of 15 teachers. Approximately 3% did not hire any new teachers for the academic year.

*FINDING TEACHERS - 1999-2000 School Year:* Overall, school districts who were seeking qualified teachers reported having little difficulty in finding the necessary personnel to fill vacancies. However, the situation varied widely depending on the type of certification being

sought. Generally, elementary positions were easy to fill while high school positions were harder. Mathematics and technology teachers were very difficult to find compared to English/language arts and social science teachers. A summary of this difficulty in finding teachers can be found in Table 1.

*EARLY CHILDHOOD/ELEMENTARY TEACHERS:* Seventy-five (75) percent of the responding districts had no trouble at all finding qualified teachers in grades 1 to 5. For 20% of the districts, the search for elementary teachers was somewhat difficult; only 5% found the situation fairly to very difficult.

*MIDDLE SCHOOL TEACHERS (Grades 6 to 8):* The easiest middle school teachers to recruit were social science/studies certified – 60% reported no difficulty in finding these teachers. Some difficulty was encountered in finding language arts. About 25% of the districts reported it very difficult to find middle school mathematics and science teachers while 60% found it somewhat to fairly difficult to find these teachers. The hardest positions to fill included library science/media, computer technology, and music and art with more than 50% reporting it very to extremely difficult.

*HIGH SCHOOL TEACHERS:* Among high school teachers, social science candidates were easy to find. It was slightly difficult to find English/language arts, biology, general science, music, and art teachers. For mathematics, chemistry, physics, foreign languages, and any of the technology-based positions, finding qualified candidates was very difficult. The labor pool available for high school positions appeared tighter than at the other levels.

*OTHER POSITIONS:* These positions consist of the different special education specialties and counseling. Respondents reported that it was very to extremely difficult to find qualified candidates in these areas. On-the-other-hand, physical education, reading, and English as a second language proved to be easily available.

#### *HIRING INCENTIVES:*

Articles in local and national newspapers have reported on some of the unique strategies that some districts have used to attract new teachers. The majority of Michigan districts did not employ gimmicks. Nearly 98% of responding districts did not use bonuses or other types of payments to lure candidates. A preferred approach was adjusting step increases to remain competitive. However, only 27% of these districts had made step adjustments.

Salary becomes one of the key motivations to attract candidates. Districts were asked to provide the starting salaries offered new teachers right out of college. While the overall average (regardless of grade level) was approximately \$29,000, a wide variation in range of salaries was reported. A group of districts pay well below the mean while another group pay considerably higher salaries. Some districts pay higher rates for mathematics, science, and technology teachers. In comparison to other categories, the increase is not particularly noticeable.

**TABLE 1. Difficulty in Finding Certain Types of Teachers in 1998-99**

	No difficulty at all	Somewhat to fairly difficult	Very to extremely difficult
Elementary			
Pre k – k	X		
1 <sup>st</sup> grade	X		
Grades 2-5	X		
Middle School			
Social science/studies	X		
Language arts/English		X	
Mathematics		X	
Science		X	
Music/art			X
Computer technology			X
Library science/media			X
High School			
Social science/studies	X		
Language arts/English		X	
Mathematics			X
Science			
Biology		X	
Chemistry			X
Physics			X
Earth/physical			X
General Science		X	
Languages			
Spanish			X
German			X
French			X
Music		X	
Art		X	
Speech/drama			X
Computer/technology			X
Media technology			X
Library science/media			X
Business education			X
Agriculture			X
Other positions			
Special education (all types)			X
Counseling/psychologist			X
Physical education		X	

Additional information is provided in Table 2 that illustrates the 1999 starting salaries of selected majors who did not enter education.

**TABLE 2. Starting Salaries for New Teachers (no experience)  
by Grade and Subject (1999)**

	<b>Average Starting Salary (\$)</b>	<b>Salary Range (\$)</b>
Early childhood	28,779	15,000-36,834
Elementary	28,903	20,000-36,834
Middle school (all)	28,930	23,822-36,834
Middle school – math/science	28,926	23,822-36,834
Middle school – others	28,955	23,822-36,834
High school (all)	28,901	23,822-36,834
High school – math/science	28,954	23,822-38,000
High school – social studies	28,933	23,822-36,834
High school - language arts	28,922	23,822-36,834
High school - technology	29,146	23,822-48,500
High school - others	28,934	23,822-36,834
Special education (all)	28,899	22,500-38,000
Reported salaries (non-education) <sup>1</sup>		
Mathematics	37,253	25,500-47,700
Physics	40,025	30,000-49,400
Chemistry	34,111	23,000-45,600
Media technology	35,944	23,500-47,000
Social Sciences	28,000	20,000-40,000

<sup>1</sup>Source: Salary Report 1999. Career Services and Placement. Michigan State University. East Lansing MI 48824 and Salary Survey, September 1999. National Association of Colleges and Employers. Bethlehem, PA 18017.

*WHERE TO FIND NEW TEACHERS?* In finding new teachers, districts have options to contact any of the 29 state public and private institutions that graduate certified teachers. Graduates of private, faith-based institutions tend to seek employment in private, faith-based schools. Public school districts did hire graduates from each of the 29 institutions for 1999. Several programs dominated: 72% of the districts reported hiring at least one teacher from Central Michigan University, 57% from Michigan State University, and 55% from Western Michigan University. Clustered together in the 30% to 35% range were University of Michigan (Ann Arbor), Eastern Michigan University, and Grand Valley State University.

*HOW MUCH EXPERIENCE DO DISTRICTS SEEK WHEN FILLING POSITIONS?* Districts usually prefer to attract a mix of experienced and new teachers when filling openings. Less than one percent sought only teachers with five years or more of experience. Sixteen percent preferred hiring only new teachers while 23% actually desired to find teachers with 2 to 5 years of experience. The mix of hiring experience that 50% of respondents tried to attain was slightly more than 50% of opening filled with new teachers and the remaining being filled with teachers with two years or more of experience. Another 10% flipped this mix, preferring more experienced than new teachers.

*WHAT FACTORS WILL BE INFLUENCING HIRING OVER THE NEXT FIVE YEARS?* Of the factors mentioned, two stand out: retirements and financial considerations. Teacher attrition is expected to remain normal with teachers resigning to relocate with spouse, to handle

family responsibilities, or to pursue new careers. Some school districts expect to see growth in students but a similar number expect a decline (15% in both cases). The growth in alternatives to local public education, such as charters and schools-of-choice do not seem to be affecting hiring – at least at this time. However, 63% expect retirements to strongly influence their hiring!

**TABLE 3. Factors Likely to Affect Hiring Over the Next Five Years**

	No impact on hiring %	Some impact on hiring %	Moderate impact on hiring %	Very to extreme impact on hiring %
Teacher retirement	1	14	21	63
Teacher attrition (not retirement)	31	35	22	13
Increase in students	32	31	18	20
Decrease in students	56	17	11	16
Schools-of-choice	31	38	18	13
Financial considerations	16	24	21	39

*IMPACT ON POTENTIAL RETIREMENTS:* To determine the size of the pending retirement wave, districts provided the percentage of teachers with 25 years or more of experience by grade level. Overall, approximately one-fifth or 20% of teachers statewide will be in a position to retire over the next 5 years. Particular attention should be focused at the high school, as nearly one-quarter (25%) are faced with replacing 50% or more of their teaching staff. In fact, several high schools may well have to find new teachers for 80% of their staff. The youngest staff was reported among special education and early childhood teachers.

**TABLE 4. Percentage of Teachers With 25 or More Years of Experience**

	% Average	% None	% 50% or More
Early Childhood	14	49	15
Elementary	26	3	18
Middle School			
All	27	11	22
Math-Science	19	25	22
All Other	22	11	16
High School			
All	25	11	24
Math-Science	22	18	23
Social Science	22	24	20
English/Language Arts	23	15	24
All Other	19	12	15
Special Education	14	38	11



**FIVE YEAR STAFFING PROJECTIONS:** Based on their best estimates, respondents were asked to anticipate their hiring needs over the next five years. Nearly 94% of the districts expected changes at the elementary level (10% with fewer positions and 84% having openings). This would be expected as there are a large number of teachers at this level. How about positions where there are very few staff positions, such as library/media, physics, music, and foreign languages? Between 45% and 50% of districts expect no openings in these areas. The following table illustrates the possible needs over the next 5 years.

**TABLE 5. Hiring Expectations for 2000-2005**

	Fewer Positions (3 or more)	Fewer Positions (1-2)	No Change (--)	Few Openings (1-2)	Some Openings (3-5)	More openings (>6)
Pre K – K	4	--	32	34	15	8
1 <sup>st</sup> Grade	6	5	21	36	20	10
Elementary	7	3	6	21	26	33
MS Mathematics	4	4	19	36	21	15
MS Science	4	3	19	39	20	15
MS Language Arts	5	4	19	37	23	13
MS Social Studies	5	3	15	44	20	13
MS Music Art	4	3	38	39	13	6
Library Science (MS)	4	1	43	39	8	4
Computer Tech (MS)	4	3	31	41	14	6
HS Mathematics	4	4	16	37	23	16
HS Biology	3	3	30	39	15	9
HS Chemistry	3	2	38	36	16	6
HS Physics	4	3	41	30	15	7
HS Earth/Physical	4	3	41	27	16	9
HS Social Science	4	4	18	39	23	11
HS Language Arts	3	3	15	43	22	13
HS Computer Tech	3	5	32	38	16	9
HS Media Tech	3	5	43	32	11	5
HS Music	3	4	46	32	11	4
HS Art	2	5	45	35	10	3
HS Library Science	3	6	42	41	6	3
HS Speech Drama	4	2	56	29	8	1
HS Business Education	4	5	35	38	15	3
HS Spanish	2	--	52	31	10	5
HS French	2	2	56	31	10	--
Physical Education	2	6	30	44	12	7
Special Education						
Hearing Impaired	1	2	65	19	5	8
Physically Impaired	2	2	61	19	7	9
Learning Disability	4	4	15	35	23	20
Behavioral Disorders	6	2	24	36	14	19

Areas with highest expected number of openings:

- Elementary
- Middle school social studies
- High school mathematics
- High school language arts/English
- High school social studies
- Special education: learning disability
- Middle school mathematics, sciences, and language arts

Areas with fewest expected openings:

- High school speech drama
- High school foreign language
- High school music and art
- High school media technology and library science
- Middle school library science

The answer to the question of “how difficult will it be to find new teachers?” depends on the number of new teachers and relocating experienced teachers available to the market and the total number of positions posted. Except for special education and middle school mathematics in the first cluster of specialties listed above, the available supply of teachers looking for a position has exceeded the demand or available positions. The squeeze in these areas will come after the excess capacity has been absorbed. Then the production of new teachers will have to keep pace with demand. The “window” for a tight labor market can be expected to be short (5 to 10 years); once the initial wave of retirements passes, the labor market will more likely return to an oversupplied condition.

In the second group, the lack of available positions may be misleading. First, several of these positions, such as technology and library science, have been redefined as a result of rapid changes in technology. Individuals filling these positions tend to be younger; as a result, positions may not come open in high numbers. Second, districts usually have only a few positions designated for these curricula; hence fewer openings. However, these positions may actually be very difficult to fill when they do come open.

Skills and competencies developed in the classroom have value in other occupations. Historically, some teachers have parlayed their traits into new positions outside education. No single skill cluster has had the impact of drawing potential teachers away than technological aptitude. For new teachers, who are more savvy with computers, multimedia, and information retrieval, rewarding alternatives to the classroom are available. Selecting alternatives over teaching will tighten the labor market further.

*NEW TEACHER PREPARATION:* The last set of questions focused on the preparation of teachers in areas of curriculum, technology, careers, and school environment. Respondents were asked to agree or disagree with 19 statements. For some statements respondents (as many as 35%) selected the neutral option of “neither agree or disagree”.

Areas that stood out as strengths in teacher preparation:

- Receptive to collaborative learning situations
- Comfortable using computers
- Utilize appropriate pedagogical methods in the classroom
- Receive adequate practical training during their student teaching experience
- Understand the importance of writing across the curriculum
- Recognize differences in student learning styles

Areas that are viewed as potential weaknesses:

- Not adequately trained in methods to keep schools safe
- Lack of understanding the MEAP and the assessment's implications for the district
- Low awareness of the connections between education and careers (aligning ambitions)
- Inability to apply critical thinking techniques to web resources
- Do not always account for differences in how boys and girls learn
- Not aware of the school improvement process

New teachers appear to be well prepared in curriculum and pedagogical methods, familiarity with technology, and recognizing the diversity and differences among their potential students. They have little appreciation for the implications of State standards as they affect districts (and the way they may have to deliver curriculum); have little experience integrating technology-based information/resources into curriculum; have gaps in their knowledge on building a safe and responsive school environment; and are unaware of how to align their students' ambitions with their education they receive.

**Table 6. Preparation of New Teachers in Curriculum, Technology, Careers and School Environment**

<b>Statements</b>	<b>% Disagree</b>	<b>% Neither</b>	<b>% Agree</b>
Receive adequate practical training during their student teaching experience	22	15	63
Understand the importance of writing across the curriculum	17	23	60
Are able to utilize appropriate pedagogical methods in the classrooms	9	21	70
Have a good grasp of the curriculum they are expected to teach	23	27	50
Are receptive to collaborative learning situations	2	12	86
<b>Standards</b>			
Understand the MEAP and the assessment's implications for the district.	44	32	24
Are aware of the school improvement process	40	30	30

<b>Environment</b>			
Appreciate the cultural/ethnic diversity among their students and society in general.	8	37	55
Recognize the differences in student learning styles among their students.	13	27	60
Can discern the expectations of parents for their children's education.	24	42	34
Have been trained in methods to keep schools safe.	48	40	12
Can take into account the differences in how boys and girls learn.	28	45	27
<b>Technology</b>			
Are comfortable using computers.	5	14	81
Can integrate computers/multi-media as a learning tool in their classroom	16	35	49
Are able to teach how to evaluate the informational content of web resources.	20	45	35
Can apply critical thinking techniques to web resources.	19	55	26
<b>Careers</b>			
Understand the educational needs and skills required by employers.	20	35	45
Are aware of the connections between education and careers in order to assist students in aligning their ambitions.	30	44	26
Understand the practical application of what they teach.	20	33	47

*COMPARISONS BY SIZE OF DISTRICT AND LOCATION:* Comparisons by size of district and local (rural, suburban, urban) for difficulty in finding teachers found very few differences. The smallest districts had a harder time finding first grade and elementary teachers. The largest districts (>3,500) and the smallest districts (<955) had greater difficulty in finding high school math teachers.

Urban districts reported less difficulty in finding middle school computer teachers. However, both urban and suburban districts encountered more difficulty in hiring high school music teachers.

Another comparison examined starting salaries for new teachers (see Appendix A). In all categories of teacher certification for which salaries were requested, statistically significant differences were found by size and place. The largest districts paid the highest salaries; similarly suburban districts consistently paid higher salaries. Suburban districts were also more likely to differentiate salaries across different types of teachers. In measuring the impact of size and location on salaries, location tended to have the strongest impact.

### SPECULATION

*HIRING GAP:* Assume that the teachers with 25 plus years of service will elect to retire over the next five years. Using figures provided by the Michigan Department of Education in the 1998-1999 State Staff Counts and the average percentage of teachers at appropriate grade levels (Table 4), the total number of new teachers needed to replace retirees would be approximately 20,150: 8,677 elementary, 4,622 middle school, 5,364 high school, and 1,487 special education. Further, assuming the retirements occur in equal proportions over the five years, 4,030 new teachers

would be needed each year. This figure could be pushed higher when normal attrition, district demographics, and finances are considered.

According to the Michigan Department of Education's teacher certification approvers, approximately 5,500 new certified teachers are being approved annually. If the normal turnover rate were to exceed 3%, the supply of new teachers would not be sufficient to cover the demand. In other words, during much of this decade the Michigan colleges and universities have produced a surplus of teachers. However, the dramatic (expected) increase in retirements will overwhelm the surplus.

The unanswerable question at this point is whether the composition of teachers retiring, according to grade level, will be similar to the composition of certificates approved. If for every teaching slot open there is a corresponding certificate approved, the market will be able to clear (assuming no differences in location and size of district). Yet, this equilibrium rarely occurs. Instead more of one type of teacher, for example elementary, may be certified than is needed while fewer high school teachers are prepared. The market may show desperate signs: one of over supply, another of shortages.

*SALARIES:* In a tight labor market, job seekers have the advantage and can demand higher salaries and additional benefits or perks. Employers who can pay higher salaries will attract the candidates. The challenge facing public education is adjusting pay scales to reflect market conditions. School districts are wedded to a long held precept that all teachers at the same level receive the same salary. Thus the salary for a new teacher whether filling a fifth grade position or a high school math position will be the same. The information in Table 2 illustrates this point: only a very few districts pay higher salaries to math and science teachers. Those districts that tend to tier salaries already are paying at the top of the range.

Adopting a tiered pay structure needs to be considered. College students trained in the sciences, technology and mathematics have an increasing array of options where salaries are increasing to levels school districts can not afford to pay. Colleges and universities have faced this situation in their business and engineering programs. Tiered systems come with problems. As college administrators comment: "One business faculty cost the equivalent of three English faculty." As long as the labor market is willing to pay higher wages for critical skills, public schools will either (1) have to leave positions vacant (reducing class offerings) or (2) have to hire (shift) teachers that may not possess the required skills in hopes to get by.

Even if the current salary structures remain in place, another problem is evident. Only about one-fourth of the public school districts are in a position to offer competitive salaries. Most districts remain below the average of non-educational salaries. As those districts with the money remain competitive, tap into the available labor pool, the disparity between districts will continue to grow. The bottom line is that all districts by financial barriers or choice cannot compete for new teachers, as supply becomes restricted. The shortages will emerge in these districts first.

*RETAINING POTENTIAL RETIREES:* Age does not define a good teacher. Some teachers in their thirty's are burned out, boring, or just not interested in teaching; other teachers in their sixty's still are excited about educating young people and continually strive to excel in the classroom. Retaining key teachers who could retire can be a challenge for any district; but a task necessary to bridge the shortage gap. What financial incentives are available when retirement

accounts are maxed out? What environmental enhancements (classroom, technology, for example) could be made?

Districts have a potential array of options including variable contracts, bonuses, and alternative retirement funding, as examples. Teachers can be offered contracts for a specific number of classes or teaching days. Bonuses or a special pay scale for “pre-emeritus” teachers could be instituted. An attractive option in some states has been to contribute to alternative retirement funds. Whatever options are devised, creativity will be needed to retain a core cadre of teachers.

*DEMOGRAPHICS:* Beyond the short-term disruption in teacher labor markets caused by retirements, the demand for teachers is best reflected in (1) public school enrollment and (2) birth rates. Baseline demographics can provide a useful reference point to anticipate future staffing.

Michigan’s public school enrollment at the beginning of the 1990’s was 1,549,864 students (1991). Near the end (1998) enrollments had increased to 1,659,840 (figures obtained from Estimates of School Statistics 1994-95 and 1997-98, National Education Association). This represents an increase of 7.1% or 1% per year. Actually in the years prior to 1995, school enrollments were increasing slightly faster at 1.2%, than since 1995 where the rate was .75%. While non-public school options have siphoned some students, Michigan’s growth rate places the state in the bottom one-third in enrollment growth.

Annual births declined through the first half of the 1990’s from 153,080 (1990) to 134,243 (1996) or 12%. The 1996 figure represents a plateau in this decline. Even though schools have recently experienced a surge in population due to the “boomer echo,” the rate of growth in school population between 2000 and 2005 is expected to be well below one percent. After 2010 the population figures will drop sharply. (U.S. Bureau of Census, Preliminary Impact of 2000 Census).

The one positive demographic figure has been the turn around in migration patterns. During much of the 1980’s and early 1990’s more people left Michigan than moved in. Thanks to a strong economy, more individuals have moved into the state since 1995 (by several thousand per year). These individuals will be attracted to areas with expanding job opportunities.

Bottom line for most districts is that natural growth in population cannot be counted on to sustain enrollments. Nor can immigration contribute a sufficient number of children to bolster enrollments. Districts experiencing growth will be doing so at the expense of other districts. For the teacher labor market, the dynamics will tilt toward a constriction of opportunities.

*FINANCING:* With financing tied to student enrollments (yearly increases to the state’s economic performance), the pool of money available for hiring teachers may not increase. As the school age population declines, districts may face releasing teachers. Finances will further compound balancing supply and demand within Michigan’s teacher’s labor market.

## SUMMARY

Teacher shortages are coming! Many other districts will soon join those districts, already finding difficulty in finding teachers. Over the next decade, retirements will drive the labor market – with some schools replacing as many as three-quarters of their staff. Pressure will be placed on

the State's colleges and universities to produce enough teachers to fill the void. The next survey in this series will seek to see how strong the shortage has developed.

The window for this disequilibria is actually very short – five to ten years. The State's demographics simply do not portray an expanding school age population. Michigan is more likely to become an exporter of teachers to other parts of the country.

**APPENDIX A**  
**STARTING SALARY BY LOCATION AND SIZE**



**AVERAGE STARTING SALARIES**  
**By Location**  
**(\$)**

	<b>Early Childhood</b>	<b>Elementary</b>	<b>Middle School</b>	<b>MS Math/Sci</b>	<b>MS all other</b>	<b>High School</b>	<b>HS Math/Sci</b>	<b>HS Soc Sci</b>	<b>HS English</b>
Rural	27,905	27,876	27,956	27,949	27,958	27,902	27,926	27,930	27,922
Suburban	29,899	30,342	30,332	30,332	30,261	30,332	30,435	30,359	30,369
Urban	28,555	29,096	28,807	28,807	28,807	28,807	28,807	28,807	28,807
	<b>HS Tech</b>	<b>Special Education</b>							
Rural	28,097	27,846							
Suburban	30,682	30,418							
Urban	28,807	28,807							

**By Size**  
**(\$)**

	<b>Early Childhood</b>	<b>Elemen.</b>	<b>Middle School</b>	<b>MS Math/Sci</b>	<b>MS all other</b>	<b>High School</b>	<b>HS Math/Sci</b>	<b>HS Soc Sci</b>
<960	27,403	27,320	27,502	27,482	27,495	27,406	27,408	27,406
961-1837	23,594	28,622	28,614	28,614	28,614	28,629	28,614	28,614
1840-3670	29,028	29,041	29,041	29,041	29,041	29,041	29,041	29,041
>3700	29,686	30,523	30,473	30,474	30,521	30,344	30,647	30,517
	<b>HS English</b>	<b>HS Tech</b>	<b>HS all other</b>	<b>Special Education</b>				
<960	27,400	27,406	27,406	27,335				
961-1837	28,614	28,980	28,614	28,614				
1840-3670	29,041	29,041	29,041	29,104				
>3700	30,535	31,070	30,523	30,626				



**U.S. Department of Education**  
Office of Educational Research and Improvement (OERI)  
National Library of Education (NLE)  
Educational Resources Information Center (ERIC)



## NOTICE

### REPRODUCTION BASIS



This document is covered by a signed "Reproduction Release (Blanket) form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.



This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").