ALASKA TEACHER SUPPLY AND DEMAND 2005 UPDATE

April 2006

Prepared for

Alaska Teacher Placement

University of Alaska

Prepared by
Alexandra Hill
Diane Hirshberg

Institute of Social and Economic Research
University of Alaska Anchorage







Alaska Teacher Supply and Demand

2005 UPDATE

TABLE OF CONTENTS

INTRODUCTION	1
THE NATIONAL CONTEXT: IS THERE A TEACHER SHORTAGE? FACTORS CONTRIBUTING TO TEACHER TURNOVER. WHY DO WE CARE ABOUT TEACHER TURNOVER? OVERVIEW OF THIS REPORT	
ALASKA PUBLIC SCHOOL ENROLLMENT	4
STATEWIDE ENROLLMENT TRENDS	6
ALASKA'S TEACHING FORCE	11
CURRENT COMPOSITION TEACHER TURNOVER. What is Teacher Turnover? Where do all the Teachers Go? Turnover by Region Turnover by District	
SUPPLY UPDATE	24
ALASKA NATIVE TEACHERS	26
CURRENT COMPOSITION	
SUMMARY	31
NEYT STEPS	31

Introduction

Alaska Teacher Placement (ATP) has contracted with the Institute of Social and Economic Research (ISER) between 2005 and 2007 to identify and analyze trends in K-12 educator supply and demand in the State of Alaska, including teacher turnover rates. This report is an analysis of Alaskan teacher supply and turnover data from 1999-2004, and projects supply and demand data for the next five years.

The National Context: Is There a Teacher Shortage?

Concern has been expressed in recent years about a potential shortage of qualified teachers for the nation's schools. A number of factors are seen as contributing to shortfalls: Student enrollment is growing, the teaching corps is aging, and many teachers are nearing retirement age. Finding enough qualified teachers has been a problem for many schools and districts around the country, especially in Alaska. Often this difficulty has been seen as evidence of a national shortfall in qualified educators. However, the United States does not have an overall shortage of teachers. Indeed, nationally, more teachers are trained than are needed on an annual basis. Nonetheless, there is a lopsided distribution of educators, both in terms of the geographic location of available teachers and in the numbers of teachers trained in particular fields. For example, there are shortages of teachers in specific subject areas, including special education, mathematics, and science (Darling-Hammond & Sykes, 2003).

Still, retaining current teachers, rather than training new ones, is the larger problem nationally. Ingersoll (2003a, 2003b) found that increasing student enrollment and teacher retirements due to an aging workforce are *not* the primary causes of teacher shortages. Rather, the major factor driving teacher shortages is teacher turnover, both from educators migrating to new positions and from those leaving the teaching profession altogether, prior to retirement age. Studies have found that between 40 and 50 percent of new teachers leave the profession within the first five years of their teaching career (Ingersoll and Kralik, 2004).

Factors Contributing to Teacher Turnover

Numerous studies of teacher turnover have been conducted around the nation. They have found that working conditions (Hanushek, Kain et al., 2004), student characteristics (Hanushek, Kain et al., 2001), mentoring and professional development opportunities (Easley 2000; Holloway 2003) are important factors affecting teacher retention and turnover, along with salary levels. A national survey of teachers conducted in 1994-1995 found that while 40 percent of teachers cited personal or family reasons as the major factor in their decision to leave their teaching positions, dissatisfaction with the position (29%) and pursuit of other jobs (27%) were also significant reasons for changing jobs (Ingersoll, 2003). The primary reasons for educator dissatisfaction were poor salaries, poor administrative support, and student discipline problems.

While these studies offer important findings, they do not fully address the unique circumstances in Alaska that contribute to teacher turnover. For instance:

- Many schools in Alaska are in remote locations accessible only by plane or boat, so access can be both expensive and difficult.
- Housing availability and housing costs are often problematic (NANA Pacific, 2004), and in some rural Alaskan communities, teacher housing even lacks water and sewer hookups.
- Health care, shopping options, entertainment, and other "city" amenities can be quite limited.
- Teachers in rural schools are often required to teach multiple subjects across several grade levels.
- Cultural differences can create difficulties, especially for those who come to Alaska from the "lower 48" states. Alaska is home to many Alaska Native cultures; each having distinct languages, belief systems, traditions, and cultural practices, and it can be difficult for non-Native educators to learn how to work effectively within Native communities.

No comprehensive study of teachers who leave their jobs has been conducted in Alaska. However, McDiarmid, et. al., (2002) surveyed a sample of teachers in Alaska (n=135) who left their jobs at the end of the 2000-2001 school year, to try to understand why teachers either changed districts or left the career of teaching entirely.

When asked why they changed districts, the vast majority of teachers cited personal or family reasons (80%). Many also indicated they wanted to reside elsewhere (63%), were dissatisfied with district administrative support (61%), community support of the school (51%) or school board support (45%). Affordable housing and higher quality housing were also significant concerns (46% and 38%). Salary was only a concern for 22 percent overall, although teachers moving between urban districts were much more likely to change positions due to salary (50%) than rural educators (14%). Better medical care was of concern to rural educators (30%) and not at all (0%) for urban teachers changing districts.

When asked to explain why they left teaching completely, subjects cited family or personal reasons (59%), the choice to pursue another career (50%), dissatisfaction with job description or responsibilities (45%), and dissatisfaction with community support of the school (37%). Better salary or benefits were only cited by 21 percent of those leaving the teaching profession. Health issues were another significant reason for teachers' departure (18%).

While McDiarmid et. al.'s survey represented the first stab at determining why teachers left teaching or changed districts, conclusions are limited by the small size of the sample. In 2005, as part of a study of geographic cost differentials statewide, Tuck et al. estimated the level of salary that was needed in each district across Alaska to recruit and retain teachers with equivalent qualifications. The study used data on all teachers in the state from the Alaska Department of Education and Early Development certification databases. They found that if districts tried to retain teachers using only salary incentives, some rural districts would have to pay salaries up to two-thirds higher than those currently paid in the Anchorage School District to keep their teachers.

Why do we care about teacher turnover?

Teacher turnover is of concern both in Alaska and nationally for several reasons. First and foremost is the effect on student success in the classroom. Nationally, high rates of teacher turnover have been linked with lower student achievement, as measured by standardized test scores (Grissmer, Flanagan et al. 2002). Teacher quality and effectiveness are significant influences on student achievement in school, and teacher turnover often leaves already poorly-achieving schools with the least qualified, least experienced teachers. (Haycock, 2000).

However, there are other negative effects of teacher turnover on schools beyond student achievement. First, there are monetary costs associated with teacher turnover. In order to calculate the monetary cost of teacher turnover, the Alliance for Excellent Education (AEE) used a U.S. Department of Labor (US DOL) estimate that attrition costs an employer 30 percent of the departing employee's salary. Using salary estimates from the National Education Association, the AEE estimated that in Alaska the cost related to an estimated 568 teacher *leavers* (teachers leaving the profession) in 2000 was about \$7,920,331. The cost related to 761 teacher *movers* (teachers transferring to other schools) was about \$10,611,317. The total cost of teacher turnover, not including retirement, was estimated at \$18,531,647. This is only one way of estimating cost, and whether the US DOL's estimate of the cost of attrition holds true for education has to be explored further. However, there is no question that teacher turnover in Alaska is a costly proposition.

Ingersoll and Smith (2003) note that not all turnover is bad; too little turnover can lead to stagnancy in an organization. Effective organizations can benefit from limited turnover, as it can infuse new ideas into institutional operations, and also can result in elimination of low-caliber performers. However, they warn that high turnover can cause turmoil and problems in organizational function. Indeed, Guin (2004) found that teacher turnover can affect a school's ability to function. She found that high turnover negatively impacts the working relationships among teachers and interferes with a school's ability to establish a coherent instructional program.

Overview of this report

This report presents data on teacher supply, demand and turnover in Alaska from 2000 to 2004. This study does *not* explore the causes of teacher turnover in depth nor offer recommendations for increasing the number of teachers in the state. Rather, it simply offers data that we hope will improve policymakers' understanding of the current teaching force and guide them in determining what further questions need to be asked.

The report starts with an overview of student enrollment trends at the state and district level, and projections of future teaching positions. It then looks at the current teaching force, including age, experience, distribution and eligibility for retirement. It also provides an explanation of different ways of measuring turnover and presents applicable data on turnover for the past five years. The report also looks at the supply of teachers within the state, including estimates of how many educators will be trained by Alaska's colleges and universities. The last section is a look at data for Alaska Native teachers.

Alaska Public School Enrollment

Statewide Enrollment Trends

Primarily, the number of school-aged children (ages 5 to 17) determines the total number of teachers working in Alaska. The Alaska Department of Labor (DoL) projects the school age population to decline slightly over the next four years and then increase steadily for the following two decades through 2024 (Figure 1). The department emphasizes that these projections are not precise, and that changes in fertility patterns and migration make the school age population one of the most difficult groups to project. DoL provided more details about each school age group in the February 2005 issue of *Alaska Economic Trends*:

"Four age groups approximate the school age population. Ages 5-11 kindergarten and elementary school, ages 12-13 junior high, ages 14-17 high school, and ages 18-22 college and post-secondary education. The historical uncertainty of fertility trends, compounded by migration, makes the future number of school-age children the most uncertain to project.

"In 2000, there were about 76,000 children ages 5-11. Since 2000, this number has declined and in the mid level projection should bottom out in 2004 at 72,500. This age group should rise to 2000 levels again by 2009. The number should stabilize at 86,000 for the following decade.

"Children ages 12-13 numbered about 22,100 in 2000 and peaked at 23,600 in 2003. This age group is expected to decline until 2009 when it should bottom out at about 21,000, according to the mid level projection. It should return to 2003 levels by about 2019.

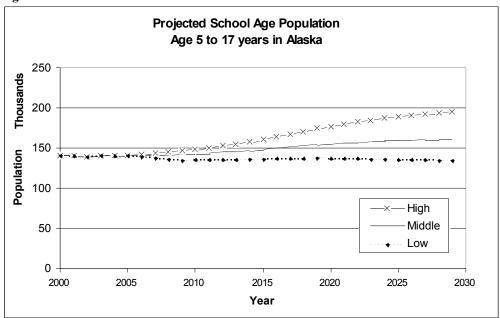
"Young adults of high school age numbered some 43,400 in 2000 and this number has continued to rise. The high school ages should peak at about 46,300 in 2006 and then steadily decline to 42,300 by 2012. It is not expected that this age group will exceed the 2006 high again until about 2018. Committing to new secondary school construction except in areas with strong in-migration such as Mat-Su or Anchorage will probably be too late for the demand that suggested their need."

Figure 2 shows DoL's mid-case projections for elementary, middle and high school aged cohorts; a detailed table of the three projections by age cohort is in the appendix.

Alaska Teacher Supply and Demand 2005 Update

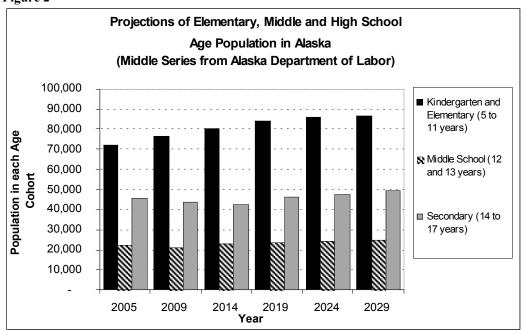
¹ Williams, Greg, "Population Projections 2005 – 2029," *Alaska Economic Trends*, Research and Analysis Section, Alaska Department of Labor, February, 2005.

Figure 1



Source: Alaska Department of Labor, Alaska Economic Trends, Feb 2005. ISER worksheet: Projected Population

Figure 2



Source: Alaska Department of Labor, Alaska Economic Trends, Feb 2005. ISER worksheet: Projected Population

Regional Enrollment Trends

The Alaska Department of Education and Early Development (EED) uses population projections, along with information about the number of students that choose home or private schooling, how many repeat a grade, how many drop out, and other factors to project Average Daily Membership (ADM) statewide and for districts. Figure 3 and Table 1 show those projections.

Historical and Projected Average Daily Membership in Alaska
Public Schools

150,000
100,000
100,000
25,000
FY 99 FY 00 FY 01 FY 02 FY 03 FY 04 FY 05 FY 06
Fiscal Year

Figure 3

Source: Alaska Department of Education and Early Development Urban=Anchorage, Mat-Su, Kenai, Fairbanks and Juneau districts

Figure 3 shows there has been little growth in the total Alaska school population from 1998/99 to this year. However, enrollment growth, like population growth, is not uniform across the state. While the five "urban" districts (Anchorage, Fairbanks, Matanuska-Susitna, Kenai and Juneau) show a slight decline (about 0.5 percent per year), enrollment in the remainder of the state's districts has been growing at about 0.3 percent per year. In particular, EED projects substantial increases in FY 2006 ADM in for the Mat-Su and Yukon/Koyukuk Districts, as well as more moderate increases in ADM for many of the growing regional rural hubs. The largest urban districts, including Anchorage, Fairbanks, Juneau, and Kenai, expect stable or declining ADM in FY 2006.² Table 1 shows the projections for each district, and Figure 4 shows the average annual growth in ADM for each district since FY 2000 (school year 1999/2000).

Alaska Teacher Supply and Demand 2005 Update

6

² Alaska Education Foundation Formula Projections, Finance Division, Alaska Department of Education and Early Development, personal communication with Eddy Jeans, April 6, 2005.

Table 1

		Historical	Historical			
School District	FY 00	FY 02	FY 04	FY 06	Annual Growth FY00-FY06	
Alaska Gateway	485	495	493	431	-2.0%	
Aleutian Region	75	55	42	46	-7.9%	
Aleutians East Borough	300	293	278	276	-1.4%	
Anchorage	48,157	49,247	49,265	49,104	0.3%	
Annette Island	368	311	288	312	-2.7%	
Bering Strait	1,775	1,728	1,704	1,761	-0.1%	
Bristol Bay Borough	279	237	195	175	-7.5%	
Chatham	257	227	215	163	-7.3%	
Chugach	157	207	191	215	5.3%	
Copper River	727	714	658	639	-2.1%	
Cordova	485	461	471	455	-1.1%	
Craig	421	694	955	661	7.8%	
Delta/Greely	899	835	1,031	1,350	7.0%	
Denali Borough	327	288	571	702	13.6%	
Dillingham	562	541	513	548	-0.4%	
Fairbanks N. Star Borough	15,804	15,255	14,594	14,593	-1.3%	
Galena	3,660	3,669	3,890	3,712	0.2%	
Haines Borough	413	377	319	268	-7.0%	
Hoonah	237	211	179	179	-4.6%	
Hydaburg	108	100	87	80	-4.9%	
Iditarod Area	568	561	376	354	-7.6%	
Juneau Borough	5,647	5,508	5,442	5,283	-1.1%	
Kake	167	172	155	141	-2.8%	
Kashunamiut	298	322	362	354	2.9%	
Kenai Peninsula Borough	9,982	9,799	9,562	9,591	-0.7%	
Ketchikan Gateway Borough	2,599	2,401	2,370	2,333	-1.8%	
Klawock	206	174	148	161	-4.0%	
Kodiak Island Borough	2,810	2,821	2,677	2,711	-0.6%	
Kuspuk	494	433	424	410	-3.1%	
Lake & Peninsula Borough	481	428	418	383	-3.7%	
Lower Kuskokwim	3,614	3,647	3,785	3,906	1.3%	
Lower Yukon	1,936	1,938	2,032	2,018	0.7%	
Mat-Su Borough	12,513	13,156	14,304	15,332	3.4%	
Nenana	1,005	1,754	931	698	-5.9%	
Nome	769	738	715	809	0.8%	
North Slope Borough	2,009	2,021	1,810	1,629	-3.4%	
Northwest Arctic Borough	2,003	2,164	2,029	2,072	-0.6%	
Pelican	34	19	15	11	-16.8%	
Petersburg	699	653	657	607	-2.3%	
Pribilof	158	137	124	133	-2.9%	
Saint Mary's	144	153	148	167	2.5%	
Sitka Borough	1,722	1,609	1,467	1,460	-2.7%	
Skagway	131	1,009	1,407	1,400	-2.7 % -4.0%	
Southeast Island	295	244	220	224	-4.0% -4.5%	
Southwest Region	295 758	759	677	713	-4.5% -1.0%	

Historical and Projected Average Daily Membership for Alaska School Districts

		Historical		Projected	Projected Avg
School District	FY 00	FY 02	FY 04	FY 06	Annual Growth, FY00-FY06
Tanana	93	64	92	112	3.2%
Unalaska	352	369	399	419	2.9%
Valdez	865	888	865	816	-1.0%
Wrangell	505	466	392	375	-4.8%
Yakutat	160	172	125	116	-5.2%
Yukon Flats	352	300	292	304	-2.4%
Yukon/Koyukuk	536	497	1,381	2,169	26.2%*
Yupiit	398	446	434	441	1.7%
Mt. Edgecumbe High School	329	330	335	400	3.3%
Urban Total	92,104	92,964	93,167	93,903	0.3%
Rural Total	39,593	39,705	38,455	38,523	-0.5%
State Total	131,696	132,670	131,623	132,426	0.1%

^{*} Yukon/Koyukuk took over operation of the Alyeska Central School (the state's correspondence program), accounting for much of its enrollment growth

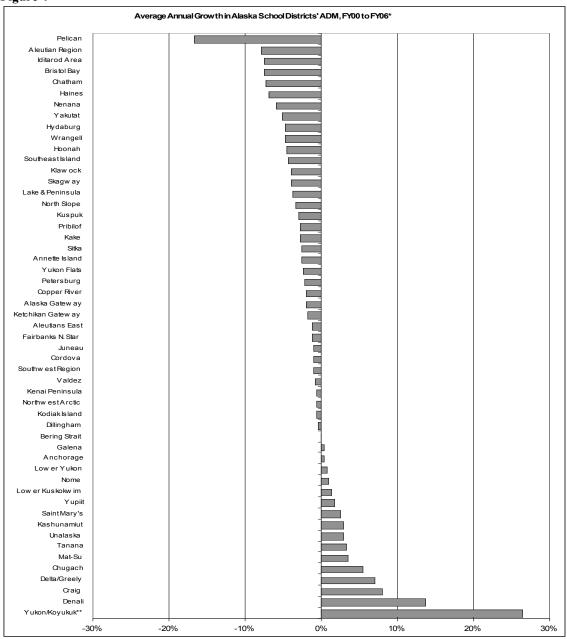
Urban = Anchorage, Mat-Su, Kenai, Fairbanks and Juneau districts

Rural = All other districts

Source: Alaska Department of Education and Early Development, Finance Department

ISER spreadsheet: Table 5

Figure 4



Source: Alaska Department of Education and Early Development, Finance Department ISER spreadsheet: Charts 5

^{*} FY 2006 ADM was projected by EED in 2005

^{**} Yukon/Koyukuk took over operation of the Alyeska Central School (the state's correspondence program), accounting for much of its enrollment growth

Projected Public School Teaching Positions

The number of teachers needed for Alaska's public schools depends not only on the number of students and their ages, but also on how they are distributed—very small schools typically have lower teacher/student ratios than larger schools; populations with many special education students need more teachers; schools providing correspondence and guided home-school curricula may have higher student/teacher ratios.

So, projections of the total number of teachers needed by the districts to teach the growing school-age population must take into account variations in the ratio of average daily membership (ADM) to the total school age population, as well as the average student-to-teacher ratio. Currently, the ratio of ADM to the total school age population is about 93 percent. The statewide ADM to teacher ratio is currently about 16 students per teacher. If these ratios remain stable over time, declines in the school age population could lead to a slight *decrease* in the total number of teachers working in the state over the next four years. The state could expect to need a total of about 8,050 teachers in 2009. After 2009, the Alaska Department of Labor projects the school age population to grow; and the state could expect to create about 30 new teaching positions every year between 2009 and 2012 and as many as 90 new teaching positions each year after 2018.

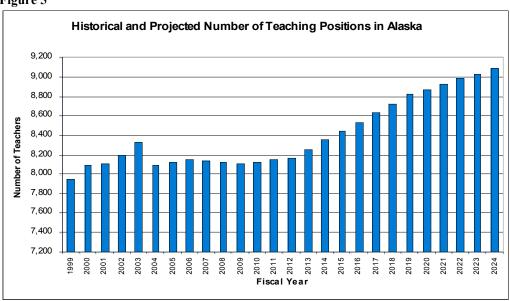


Figure 5

Source: ISER Tabulations of Alaska Department of Labor Population Projections, DEED ADM estimates for each district, and ISER tabulations of the DEED Certified Staff accounts. These projections assume that the ratio of ADM to school age population and the student teacher ratio are constant over time. ISER Source: Charts 5 spreadsheet, Data is on "Teacher Demand Projections" spreadsheet.

These teaching positions will be filled by (1) current teachers who continue teaching; (2) qualified teachers who return to the profession; (3) new teachers trained in Alaska; and (4) new and experienced teachers from outside the state who move here. The next two sections describe teachers currently working in Alaska, and discuss how many of those teachers we expect will leave.

Alaska's Teaching Force

Current Composition

Every year, EED surveys school districts and assembles a database that includes all Alaska public school teachers. These data include information on age, ethnicity, education, experience, job assignments and pay. Using the EED database, we tabulated descriptions of Alaska's public school teacher workforce.

About 35 percent of Alaska teachers work in the Anchorage School District, which employed about 2,800 to 2,900 teachers each year from FY99 through FY04. That is more than three times as many as the second largest district, Fairbanks North Star Borough School District (about 900). Pelican, with 4 teachers, is the smallest district, but there are 13 districts with 20 or fewer teachers, and 28 more with between 20 and 100 teachers. Table 2 shows the number of districts in each size category, and the share of Alaska's teacher workforce working for districts in each category.

In this report, we refer to Alaska's five largest districts—Anchorage School District, Fairbanks North Star Borough School District, Matanuska-Susitna Borough School District, Kenai Peninsula Borough School District, and Juneau School District—as urban, and the remainder of school districts as rural. As Table 3 shows, two thirds of Alaska's teachers teach in urban districts. Three of them—Anchorage, Kenai and Mat-Su—are in southcentral Alaska, and together employ more than half the state's teachers.

Table 2

Alaska Teachers and Districts by Size of District					
	Number of	Percent of all			
District Size (Number of teachers)	Districts	Alaska Teachers			
1000 or more	1	35%			
100-999	12	49%			
21 - 99	28	13%			
4 to 20	13	2%			
Total	54	100%			

Source: ISER tabulations of DEED Certified Staff Accounts.

Table 3

Average Number of Teachers, FY00 to FY04 by District Location				
Region	Number of Teachers			
Southcentral	4,383			
Southeast	897			
Southwest	973			
Northwest	564			
Interior	1,271			
Total	8,107			
Urban/Rural				
Urban*	5,509			
Rural	2,599			
Total	8,107			

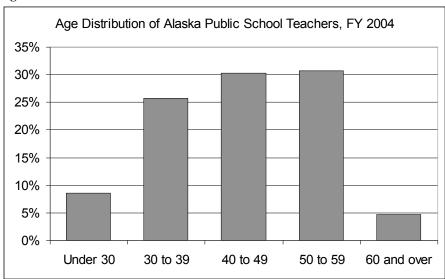
Source: ISER tabulations of DEED Certified Staff Accounts.

^{*}Urban=Anchorage, Fairbanks, Juneau, Kenai, and Mat-Su schools

Figure 6 shows the age distribution of Alaska's teachers. Relatively few—only about 9 percent—are under 30; almost two-thirds of teachers are 40 years old or older. This reflects a number of factors. The baby boom generation makes up a larger share of adults in general, and teachers from that generation are in their forties and fifties. Not all teachers begin their careers right after college—career changers may just be beginning to teach in those decades.

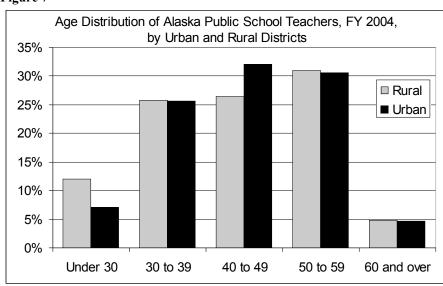
Figure 7 shows teachers by age for urban and rural districts. The regional difference in age distribution is not great. However, rural districts have proportionately almost twice as many teachers in their twenties than urban districts, and urban districts have relatively more teachers in their forties.

Figure 6



Source: ISER tabulations of DEED Certified Staff Accounts. ISER Spreadsheet: Age and Experience

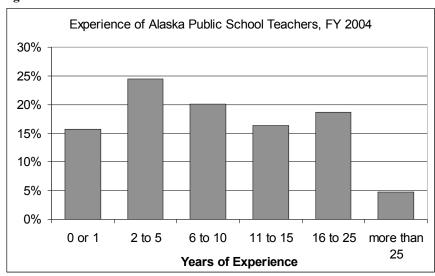
Figure 7



Source: ISER tabulations of DEED Certified Staff Accounts.

The next two figures show teacher experience. These data may understate the total teaching experience of Alaska's teachers, as districts sometimes enter the number of years of experience the teachers are paid for, or their years with the district, rather than their total years of teaching experience. Figure 8 shows the proportion of teachers statewide with different levels of experience. About 15 percent are in their first or second year of teaching; another 25 percent have two to five years of experience.

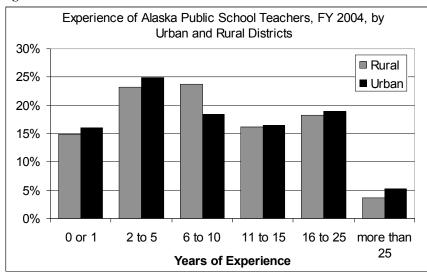
Figure 8



Source: ISER tabulations of DEED Certified Staff Accounts.

Figure 9 shows the experience distribution for urban and rural districts. As with age, the differences are modest. Interestingly, although rural districts have proportionately more young teachers, they do not have proportionately more new teachers than the five large urban districts. However, teachers with the least experience (0 or 1 year reported) averaged 37 years old in urban districts but 2 years younger (35) in rural districts.

Figure 9



Source: ISER tabulations of DEED Certified Staff Accounts.

Table 4 shows ethnicity in rural and urban districts. In both regions, the great majority of teachers are white. Natives are the second largest ethnicity—just 9 percent of rural teachers and 3 percent of urban teachers. This is a much smaller proportion of the teaching force than Native students are of student enrollment.³

Table 4

Ethnicity of Alaska's Teachers by Region, FY 2004							
Rural Urban Total							
White	86%	91%	89%				
Black	0.6%	1.7%	1.4%				
Hispanic	0.5%	1.5%	1.2%				
Asian/Pacific	1.1%	1.7%	1.5%				
Alaska Native	12%	3%	6%				

Source: ISER tabulations of DEED Certified Staff Accounts.

Note: Districts did not report ethnicity for 17 percent of rural teachers and 9 percent of urban teachers Alaska Native includes American Indian

Table 5 shows teachers' education levels. The majority of teachers in both urban and rural areas have bachelor's degrees. A few teachers with special qualifications (for example, Alaska Native languages, vocational skills or military science) have limited certifications that do not require a bachelor's degree. About one-third of teachers have a master's degree, and a few have degrees beyond the master's. Rural teachers are less likely than urban teachers to have a master's or higher degree, probably reflecting the difficulty of completing graduate programs while living in rural areas.

Table 5

Level of Education of Alaska's Teachers by Region, FY 2004							
Urban Rural Total							
Less than Bachelors	0.0%	0.7%	0.2%				
Bachelors	62%	71%	65%				
Masters	37%	27%	34%				
Degree beyond Masters	0.3%	0.6%	0.4%				
Total	100%	100%	100%				

Source: ISER tabulations of DEED Certified Staff Accounts.

ISER Spreadsheet: Age and Experience

³ Statewide, Native students are about one-quarter of total enrollment. Some rural districts have more than 95 percent Native enrollment; Anchorage school district has about 12 percent. All ethnicities other than white are under-represented in Alaska's teaching force.

Table 6 shows an estimate of how many of Alaska's teachers and administrators could retire in the next five years. These figures are based on queries of the state's retirement database, and cannot distinguish between teachers, administrators, and other staff who are enrolled in the Teachers' Retirement System. About one in six teachers or administrators are already eligible to retire, but have chosen to continue teaching. Over the next five years, another one in six will become eligible to retire. Potentially, one-third of today's teachers and administrators could retire by 2010.

Table 6

Eligibility to Retire: Alaska Public School Teachers and Administrators					
	Number				
		Percent			
Active TRS members, Alaska Public Schools, Oct 2004	9,790				
Additional personnel who will be eligible to retire:					
As of 7/1/2005	1,600	16%			
Between 7/1/2005 and 9/2/2006	253	19%			
Between 9/2/2006 and 9/2/2008	644	26%			
Between 9/2/2008 and 9/2/2010	802	34%			

Source: Alaska Department of Administration, Division of Retirement and Benefits,

Teacher Turnover

What is Teacher Turnover?

Teacher turnover can be measured at different levels. State-level turnover only looks at teachers who leave the profession or leave the state. From the state's perspective, teachers may change schools or districts, but that doesn't lead to a need for additional teachers in Alaska. State-level turnover is the correct number to answer the question, "How many new teachers does Alaska need to either train or attract from other states?" However, this will underestimate the number of teachers districts have to hire. A teacher moving from one district to another generates two hiring actions – the moving teacher is hired by the gaining district, and the losing district must hire a replacement. Most of the turnover figures we report are district-level turnover rates, and that is the correct figure to address questions about the challenges districts face in attracting and retaining teachers, and the costs they incur in doing so. Finally, there is school-level turnover, which counts all teachers who leave to teach in another school, as well as those who change districts or leave the state or profession. As mentioned in the introduction, turnover-meaning schoollevel turnover-is associated with lower student achievement. In rural Alaska, where there is often only one school in a community, teachers new to a school are also new to the community, and may take longer to reach their teaching potential in their new positions.

Turnover can also be calculated based on the percent of teachers who leave, or the percent that are new, at each of the levels described above. It's important to be consistent about which calculation is used, and also to realize that these rates can vary substantially over time if the number of teaching positions increases or decreases. When the number of positions increases, as in Alaska in the early 1980s, the percent of new teachers also increases. Likewise, if the number of positions decreases, as it did during Alaska's economic decline from 1986 to 1988, the percent of teachers who leave will increase. In small districts or schools, departure of just a few teachers can produce a very high turnover rate for one year (often followed by a very low rate the next year). Therefore, it is important to look at long-term averages, especially for small districts. In this report, unless we specify otherwise, turnover is the percent of each year's teachers who are new to their district, and we report 5-year averages along with annual numbers.

Where do all the teachers go?

Each year, every teacher working in the state chooses either to remain teaching in the same position or to leave their job. They may change professions, communities or schools, and may leave for many different reasons. Our data only captures a small part of this complexity, and we are able to place teachers in six main groups:

Stayers: Fortunately for the state, most of the teachers working in the Alaska stay at their current jobs. Just over three quarters (77%) of the teachers in Alaska – an average of about 6,400 each year-- stay working as teachers in the same school at the end of each school year.⁴

Movers within districts: Besides the teachers who stay in the same school, about 8 percent of all teachers (about 600 every year) move to different schools within the same district. From the district's perspective, these moves don't lead to any new hires. So the district may not need to hire new teachers to fill the vacancy if another teacher moves from within the district to fill it. However, from the perspective of schools and communities, this component of turnover may be just as disruptive as when teachers change districts.

Movers within the state: Another 2 percent of all teachers (about 200 each year) move to a different district within the state. Of these teachers that change districts, about half (55%) move between rural districts and another 28 percent move from rural to urban districts. While these in-state movements do not change the total number of teachers working in the state, these in-state movers create vacancies that districts need to fill.

Leave of absence: Every year, about 2 percent of all teachers (about 190 to 250 each year) go on leave of absence. Our data can't distinguish these teachers from those who leave the system until they return, typically one or two years later (about 60% take leave for one year and another 22% for two years). After a leave of absence, about one-third of these teachers return to the same school. Another one-third returns to different schools within the same district. While these teachers are on leave, the districts incur the costs of recruiting, training, and hiring new teachers to fill their vacant positions.

Change to a non-classroom job in Alaska public schools: Another 2 percent of all teachers (a total of 100 to 160) change their job within the education system. Many of these job-changers become administrators or other types of educators in the same school or district.

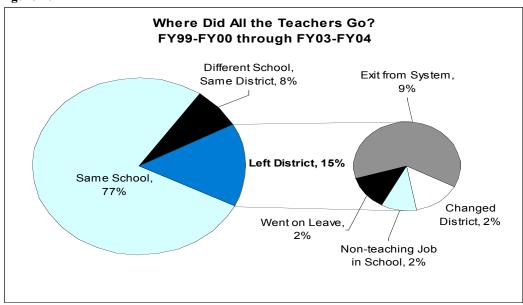
Exits: The remaining 9 percent of all teachers (about 660 annually) leave the state education payroll. They may stay in Alaska but work at a different profession, continue to teach but leave Alaska, or they may retire.

Figure 10 shows these six groups for Alaska, averaged over a five-year period. State-level turnover (the number of new teachers brought into the state system) averaged 13 percent annually, district-level turnover (the number of new teachers districts had to hire) averaged 15 percent, and school level (the number of new teachers returning students encountered in their schools), 23 percent.

⁴ The district turnover rates are five-year averages for rates from FY 1999–Fy2000 through FY2003–FY2004. They were derived from tabulations of the Alaska Department of Education and Early Development Certified Staff Accounts.

Figure 11 shows how the state-level turnover has varied over time. It reached a high of 20 percent in 1981, when rapid growth in student enrollment created many new positions, and a low of 5 percent in 1986, when declining enrollments meant fewer new teachers were needed.

Figure 10



Source: ISER tabulations of DEED Certified Staff Accounts. ISER spreadsheet: Charts 4

Figure 11



Source: Alaska Teacher placement Teacher Supply and Demand Reports for 1976 through 1998. ISER Tabulations of DEED Certified Staff Accounts for 1999 to 2004, ISER Source: Charts 1 Spreadsheet.

Turnover by Region

Teacher turnover rates are substantially higher in rural areas of the state. As Table 7 shows, the turnover rate for urban districts is about 10 percent, and for rural districts about twice as high, or around 20 percent.

Table 7

Statewide Turnover Rates								
			Fiscal Year			Five Year Average		
Group	FY2000	FY2000 FY2001 FY2002 FY2003 FY2004					Average Number of Teachers	
All Teachers								
Average across all Districts	13%	13%	13%	15%	11%	13%	8107	
Rural	21%	21%	19%	21%	17%	20%	2698	
Urban	9%	9%	10%	12%	9%	10%	5409	

Source: ISER tabulations of DEED Certified Staff Accounts.

Notes: Turnover rate = (Number of teachers employed at start of each fiscal year -- Number of teachers retained from previous fiscal year) / (Number of teachers employed at start of each fiscal year)

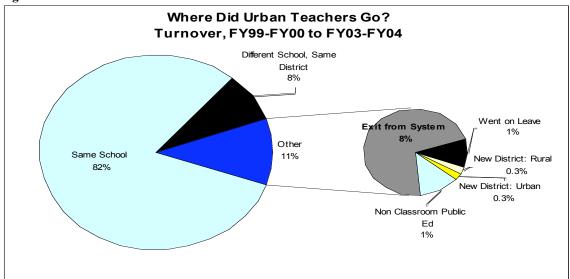
"Urban" includes Anchorage, Mat-Su, Fairbanks, Kenai, and Juneau. Rural is all others.

There is no data available in FY 2000 for these five districts: Klawock City Schools, Southeast Island Schools, Unalaska City Schools, Yukon/Koyukuk Schools, Yupiit Schools. The calculations for FY 2000 and FY 2001 exclude the data from these districts.

Figure 12 and Figure 13 show more detail about the movements of urban and rural teachers. Rural teachers are slightly less likely to change schools within their district, but more likely to change districts, take a leave of absence, take a non-classroom job in public schools, or leave the system entirely. On average from FY99-00 through FY03-04, 13 percent of rural teachers exit the system annually, compared to 8 percent of urban teachers. Rural teachers were three times more likely than urban teachers (3% compared to 1%) to take a leave of absence, twice as likely to take a non-classroom job, and were ten times more likely to change district (6% compared to 0.6%). For those teachers who changed districts, we looked at whether their new district was urban or rural, and found, overall, that teachers already in Alaska are moving toward the urban districts (even after accounting for those districts' larger size).

Table 8 shows the flows between urban and rural districts for teachers who made interdistrict moves between FY99 and FY04. There were a total of 908 moves (and somewhat fewer teachers, since some teachers changed districts more than once in this period). Over half of all inter-district moves were from one rural district to another, while fewer than one in ten moves was between urban districts. These moves show a net flow of teachers from rural to urban Alaska. While 263 teachers moved from rural to urban districts, only 83 moved the other way, from urban to rural districts.

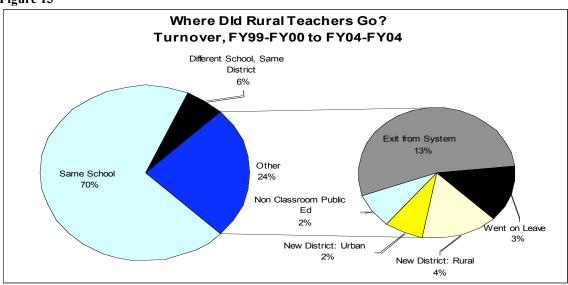
Figure 12



Source: ISER Tabulations of DEED Certified Staff Accounts

ISER source: Where DO Teachers Go.xls

Figure 13



Source: ISER Tabulations of DEED Certified Staff Accounts

ISER source: Where Do Teachers Go.xls

Table 8

1 able 6							
Movements of Teachers who Changed Districts, FY99-FY00 to FY03-FY04							
Former District		New District					
Former District	Urban	Rural	Total				
Urban	73	83	156				
Rural	263	489	752				
Total	336	572	908				
Share of Tot	al Teachers who	Changed District	s				
Former District		New District					
Former District	Urban	Rural	Total				
Urban	8%	9%	17%				
Rural	29%	54%	83%				
Total	37%	63%	100%				

Source: ISER Tabulations of DEED Certified Staff Accounts

We can also divide the state into regions based on geography. Alaska Teacher Placement categorizes each job on their site by its location; we have revised those categories somewhat, so that each district is entirely within a region.⁵ Across rural Alaska, turnover rates vary widely, with the highest rates in interior, western and southwestern Alaska.

Table 9

Average Teacher Turnover by Adjusted ATP Region, FY99-FY00 to FY03-FY04				
Region	Districts in Region	Turnover		
All Districts		14%		
Anchorage	Anchorage	10%		
Fairbanks	Fairbanks North Star Borough	10%		
Juneau	Juneau	13%		
Kenai	Kenai Peninsula Borough	12%		
Mat-Su	Matanuska Susitna Borough	10%		
Interior	Galena, Iditarod, Kuspuk, Yukon Flats, Yukon/Koyukuk, Tanana	26%		
Other Road System	Denali Borough, Alaska Gateway, Copper River, Delta/Greely, Nenana, Valdez	18%		
South Central Ferry	Chugach, Cordova, Kodiak	15%		
South East Ferry	Annette Island, Chatham, Craig, Haines, Hoonah, Hydaburg, Kake, Ketchikan, Klawock, Pelican, Petersburg, Sitka, Skagway, Southeast Island, Wrangell, Yakutat, Mt. Edgecumbe	21%		
Southwest	Aleutian Region, Bristol Bay, Dillingham, Lake and Peninsula, Lower Kuskokwim, Pribilof, Southwest Region, Unalaska, Aleutians East Borough	28%		
Western	Bering Strait, Lower Yukon, Nome, Saint Mary's, Yupiit, Kashunamiut,	26%		
Far North	North Slope, Northwest Arctic	19%		

Source: ATP for geographic definitions, ISER Tabulations of DEED Certified Staff Accounts,

⁵ ATP distinguished between schools in villages and in regional hubs, so Bethel is in a different region than Toksook Bay, even though both schools are in Lower Kuskokwim School District. We have combined hubs and villages in the same geographic regions.

Turnover by District

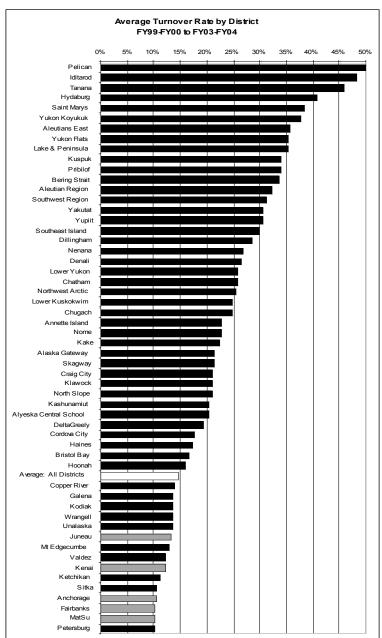
Table 10 and Figure 14 show turnover rates by district, averaged over five years. In Figure 14, the bar showing the average of all districts is black, and those for the 5 urban districts are lighter. Turnover tends to be lower in larger districts and in those more accessible to Alaska's cities. However, there are small districts in southeast Alaska with quite low turnover rates, and others with high rates.

Table 10

Average Number of Teachers and Turnover Rate by District FY99-FY00 to FY03-FY04						
District	Turnover Rate	Avg # of Teachers	District	Turnover Rate	Avg # of Teachers	
Alaska Gateway	21%	37	Kodiak	14%	190	
Aleutian Region	32%	6	Kuspuk	34%	46	
Aleutians East	35%	34	Lake & Peninsula	35%	52	
Anchorage	10%	2,855	Lower Kuskokwim	25%	271	
Annette Island	23%	30	Lower Yukon	26%	142	
Bering Strait	33%	165	Matanuska Susitna	10%	759	
Bristol Bay	17%	23	Mt. Edgecumbe	13%	14	
Chatham	26%	22	Nenana	27%	26	
Chugach	25%	14	Nome	23%	52	
Copper River	14%	42	North Slope	21%	186	
Cordova City	18%	35	Northwest Arctic	26%	158	
Craig City	21%	31	Pelican	50%	4	
DeltaGreely	19%	52	Petersburg	10%	47	
Denali	27%	29	Pribilof	34%	12	
Dillingham	29%	40	Saint Marys	38%	13	
Fairbanks	10%	917	Sitka	11%	110	
Galena	14%	57	Skagway	21%	13	
Haines	17%	31	Southeast Island	30%	13	
Hoonah	16%	21	Southwest Region	31%	66	
Hydaburg	41%	10	Tanana	46%	7	
Iditarod	48%	36	Unalaska	13%	18	
Juneau	13%	343	Valdez	12%	60	
Kake	22%	15	Wrangell	13%	33	
Kashunamiut	20%	23	Yakutat	31%	17	
Kenai	12%	633	Yukon Flats	35%	37	
Ketchikan	11%	145	Yukon Koyukuk	38%	30	
Klawock	21%	10	Yupiit	30%	21	
Alaska Average	14%	8,076				

Source: ISER Tabulations of DEED Certified Staff Accounts

Figure 14



Note: Gray bars are the five urban districts; white bar is statewide average

Source: ISER tabulations of DEED Certified Staff Accounts.

ISER Source: Turnover by District

Supply Update

Each year, new positions and teacher turnover create about 1,100 vacant teaching positions. Projections of future vacancies are always uncertain, as fertility rates, migration, parent choices about where to school their children and teacher turnover all affect the number of vacant positions. However, if student enrollment grows as described earlier, and if turnover and other factors remain the same, then by 2014, the need will grow to about 1,200 new teachers each year. In the near term, Alaska teacher education programs can't fill all of these positions. Figure 15 and Table 11 (next page) show the actual (through 2005) and projected number of new teachers graduating from the five Alaska colleges and universities that offer teacher training programs. These five institutions—University of Alaska Anchorage, University of Alaska Fairbanks, University of Alaska Southeast, Alaska Pacific University and Sheldon Jackson College—graduated about 220 teachers each year from 2000 to 2005, and expect to graduate between 250 and 300 new teachers annually from 2006 to 2009. Not all of these newly trained teachers choose to teach, and not all stay in Alaska. Even if every graduate took a job in Alaska public schools, three-quarters of the vacant positions must be filled from other sources.

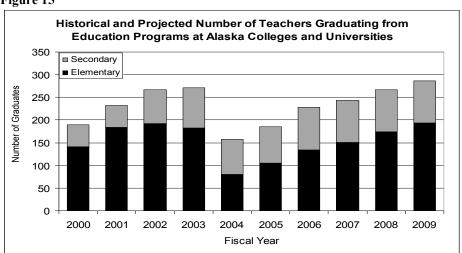


Figure 15

Source: ISER Tabulations of UAF, UAS, UAA, Sheldon Jackson, and APU data ISER Source: Historical and Projected AK Ed Teacher Graduates workbook.

To fill this gap, districts hire experienced teachers who took leaves of absence, left the profession, or retired. They fill some positions with teachers who have moved to the state, for example, to accompany a spouse. Finally, they recruit both new and experienced teachers to move to Alaska from elsewhere. Of these categories, our data only lets us estimate those teachers in the first group. From FY00 through FY04, between 190 and 250 teachers who had left Alaska public schools returned—a number roughly comparable to the number of new teacher graduates. This means that districts must recruit 600 to 700 teachers from elsewhere in order to staff their classrooms.

Table 11

	Number of Graduates of Teacher Education Programs in Alaska										
Area	School	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Elementary	UAF	65	55	52	44	24	27	45	47	51	54
	UAS	45	32	20	33	19	13	27	27	27	27
	UAA	NA	67	95	78	14	32	39	51	65	80
	SJ	9	4	4	0	0	5	1	2	3	4
	APU	22	26	21	28	23	28	22	24	28	29
	Total	141	184	192	183	80	105	134	151	174	194
Secondary	UAF	22	17	35	36	28	30	30	30	30	30
	UAS	21	10	26	24	35	23	27	27	27	27
	UAA	N/A	17	13	27	15	28	34	35	35	35
	SJ	5	5	1	1	0	NA	3	NA	1	NA
	APU	0	0	0	0	0	0	0	0	0	0
	Total	48	49	75	88	78	81	94	92	93	92
Total		189	233	267	271	158	186	228	243	267	286

Source: ISER Tabulations of UAF, UAS, UAA, Sheldon Jackson, and APU data ISER Source: Historical and Projected AK Ed Teacher Graduates workbook.

Districts use their own recruiting efforts and work with Alaska Teacher Placement to recruit for these positions, and they are largely—but not totally—successful. In a survey of all districts in December, 2004, district staff familiar with personnel issues (typically the Superintendent or Director of Personnel) were asked how many positions were vacant "for an extended period", on average each year. In aggregate their answers indicated about 130 positions statewide, for which recruitment efforts were not successful. Districts reported covering vacant positions with long term substitutes (all districts), by combining classes (30 districts), and by assigning teachers out of field, using teacher aides, or using teachers with emergency certifications (10 to 12 districts each).

Table 12

Over the course of a typical school year, how many teaching positions in your district become vacant for an extended period?						
Number of Vacant Positions During Year Number of Districts						
Less than 1	20					
1-4	24					
5-8	5					
More than 8	3					
Estimated Total	130					

Source: ISER Survey of District Superintendents, December 2004

Alaska Native Teachers

In this part of the report, we look specifically at Alaska Native teachers. This population is of particular interest in Alaska for several reasons. First, while Alaska Natives make up about 24 percent of the student enrollment in K-12 public schools statewide, Native teachers are only about 5 percent of the teaching force. The teaching force in Alaska is overwhelmingly white, and while the student population is becoming increasingly diverse, the educators working with these students are not. This trend is not unique to Alaska; nationally, the proportion of minority teachers does not mirror that of minority students, and that disparity is increasing (National Collaborative, 2004). Alaska Natives are the largest minority population in Alaska, and their numbers are growing. However, Alaska Native students in general perform below their non-Native peers. While there is no research that directly links Alaska Native teachers with improved Native student achievement, there is research nationally that indicates that at least for some students, achievement is higher when the teacher is from the same ethnic or cultural background (Dee, 2001; National Collaborative, 2004). Moreover, studies have demonstrated that culturally responsive approaches to education are successful for Native students (Starnes, 2006). While it is not safe to assume that all Native teachers will use such an approach in the classroom just because they are indigenous—they are, after all, trained in the same institutions as non-Native educators—they do at least come from similar cultural and linguistic backgrounds as Native students, and may be able to employ traditional ways of learning and knowing to reach these students.

Aside from that, in much of rural Alaska there is concern about the retention and maintenance of indigenous cultures and languages. Indeed, eighteen of Alaska's twenty aboriginal languages are considered endangered (Alton, 2005). Alaska Native educators are a key piece of the effort to retain and strengthen indigenous languages and cultures, especially for those districts with language immersion programs or curricula built on local culture and knowledge. Native teachers also enrich the learning experiences for non-Native students by exposing young learners to diverse cultures, beliefs and ways of knowing.

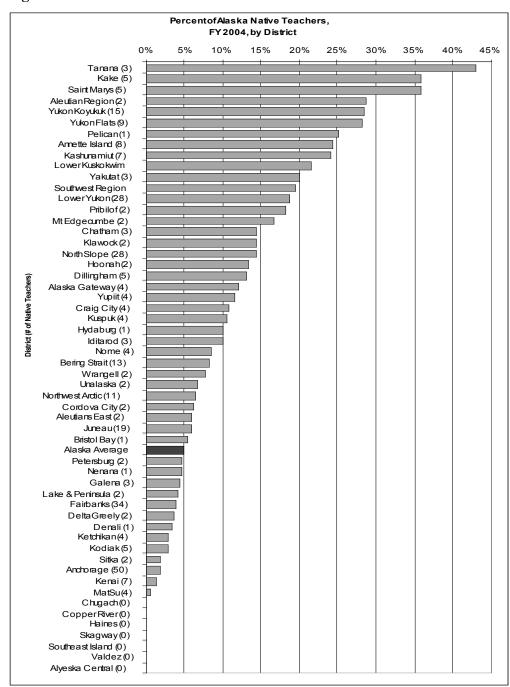
Finally, if lowering turnover is a goal in rural Alaska, one clear strategy is the development of a cadre of educators who are from, and thus more likely to stay in, the communities that typically have had high turnover rates. As was noted in the introduction to this report, the most common reasons teachers give for leaving schools are personal or family reasons. By training and hiring local educators, communities can address a significant factor in teacher turnover. Another challenge discussed earlier is that of cultural differences for non-Native teachers in predominantly Native villages. Again, local Native teachers would not face this particular difficulty if they were teaching in their home communities.

Below, we present data on the current composition of Alaska Native teachers and look at turnover for this population. We do not discuss supply issues for Natives specifically as we do not have data on the number of Alaska Natives in teacher education programs.

Current Composition

In the fall of 2004 (FY 2005) districts reported employing 396 Alaska Native teachers; 234 in rural districts and 104 in urban districts. Figure 16 shows the number and percent of teachers in each district who are Alaska Native.

Figure 16



Source: ISER tabulations of DEED Certified Staff Accounts

Tables 13 and 14 show Alaska Native teachers' years of teaching experience and educational attainment. Rural Alaska Native teachers are more likely than those in urban districts to be in the middle of their careers (6 to 15 years of experience), and less likely to be beginning teachers (0 or 1 year of experience). There is little difference in the distribution among Alaska Native teachers' experience level and that of all Alaska teachers (Figure 8).

Differences are more pronounced for education levels. As with teachers overall, rural teachers are less likely to have attained a master's degree than urban teachers, possibly due to the greater difficulty of earning an advanced degree while living in rural Alaska. Both rural and urban Alaska Native teachers are less likely than their non-Native counterparts to have earned an advanced degree.

Table 13

Years of Experience of Alaska Native Teachers								
Number of Alaska Native Teachers								
	Rural Urban Total							
	Number	Percent	Number Percent Number Per					
0 or 1	29	10%	25	22%	54	14%		
2 to 5	66	23%	30	26%	96	24%		
6 to 10	75	27%	17	15%	92	23%		
11 to 15	55	20%	21	18%	76	19%		
16 to 20	34	12%	13	11%	47	12%		
Over 20	23	8%	8	7%	31	8%		
Total	282	100%	114	100%	396	100%		

Source: ISER tabulations of DEED Certified Staff Accounts

Table 14

Level of Education of Alaska Native Teachers									
	Urban		Rural		Total				
Degree Level Reported	Number	Number Percent Number Percent		Number	Percent				
Associate's	0	0%	10	4%	10	3%			
Bachelor's	88	77%	249	90%	337	86%			
Masters	26	23%	17	6%	43	11%			
Education Specialist	0	0.4%	1	0%	1	0.3%			
Total	114	100%	277	100%	391	100%			

Note: Education level was not reported for 5 teachers Source: ISER tabulations of DEED Certified Staff Accounts Tables 15 and 16 provide information about teacher assignments for Alaska Native teachers. Table 15 shows that these assignments cover the range of teaching opportunities. The high number of multi-grade assignments reflects the relative high proportion of teachers in small rural schools, where all classrooms may be multi-grade. Table 16 shows the growth in the number of Alaska Native teachers in harder-to-fill assignments over the last six years.

Table 15

Alaska Native Teacher's Assignments						
Assignment Description	Number of					
Assignment Description	Teachers					
Multi-grade elementary	83					
Single grade elementary	16 to 28					
Secondary Language Arts	39					
Secondary Science	19					
Secondary Math	27					
Secondary Social Studies	40					
Native Alaskan Languages	24					
Bilingual/Bicultural	10					
Special Education	10					
PE	19					
Vocational/Work experience	18					
Other	29					

Source: ISER tabulations of DEED Certified Staff Accounts Note: Teachers may have more than one assignment

Table 16

Selected Assignment Areas, Alaska Native Teachers, FY1999 to FY2004							
1999 2000 2001 2002 2003 2004							
Head Teacher	3	4	4	1	3	6	
Special Education	8	9	6	8	13	12	
Math and Science	15	15	18	22	34	35	
Total	397	378	407	406	392	396	

Source: ISER tabulations of DEED Certified Staff Accounts

The data in Table 6 about Alaska teachers' eligibility to retire can't be broken out by ethnicity. In table 17, we've tried to use age and experience to get a general sense of how many Alaska Native teachers may soon be eligible for retirement. We considered a five-year time horizon. Five years from now, all the teachers with 16 or more years of experience would have over 20 years experience, and thus be eligible for retirement. However, those who will not yet be 50 in 2010 would need to wait to draw a pension (typically, but not always, at 50). Those teachers might well not retire until they are old enough to draw benefits. We considered those teachers with 16+ years of experience and 45+ years of age more likely to retire. Also, teachers aged 55 and over, with at least 6 years of experience, will be vested by 2010; they, too, may choose to retire. The shaded blocks in table 17 show the groups we judged "more likely to retire within five years." Those groups total about 21 percent of the 396 teachers working in fall, 2004.

Table 17

Age and Experience Levels of Alaska Native Teachers									
	Shaded cells are those teachers potentially near retirement								
Count of		2 to 5	6 to 10	11 to 15	16 to 20	Over 20			
Teachers	0, 1 year	years	years	years	years	years	Total		
Under 25	9	2	0	0	0	0	11		
25 to 34	17	49	25	0	0	0	91		
35 to 44	18	24	39	32	10	2	125		
45 to 54	9	12	23	33	25	20	122		
55 to 64	0	9	3	11	12	8	43		
65 and over	1	0	2	0	0	1	4		
All Ages	54	96	92	76	47	31	396		
Percent of		2 to 5	6 to 10	11 to 15	16 to 20	Over 20			
Teachers	0, 1 year	years	years	years	years	years	Total		
Under 25	2.3%	0.5%	0.0%	0.0%	0.0%	0.0%	3%		
25 to 34	4.3%	12.4%	6.3%	0.0%	0.0%	0.0%	23%		
35 to 44	4.5%	6.1%	9.8%	8.1%	2.5%	0.5%	32%		
45 to 54	2.3%	3.0%	5.8%	8.3%	6.3%	5.1%	31%		
55 to 64	0.0%	2.3%	0.8%	2.8%	3.0%	2.0%	11%		
65 and over	0.3%	0.0%	0.5%	0.0%	0.0%	0.3%	1%		
All Ages	14%	24%	23%	19%	12%	8%	100%		

Source: ISER tabulations of DEED Certified Staff Accounts

Turnover

As discussed in the introduction to this section, one reason for recruiting Alaska Natives to become teachers is that most have ties to Alaska. We hope that by preparing teachers who have personal, family and cultural ties to Alaska in general and rural Alaska in particular, some of the forces that now contribute to high turnover (distance from family, friends and home) will work to reduce turnover. Table 18 shows turnover levels for Alaska Native teachers over the 6 years of our data. Urban Alaska Native teachers change districts, leave the data set, and take non-teaching education positions at the same rates as teachers overall (compare urban teachers to figure 12). However, rural Alaska Native teachers show lower turnover rates: 87 percent of Alaska Native teachers stayed in the same district from one year to the next, compared to 76 percent of teachers overall; 11 percent of Alaska Native teachers left the data set, compared to 16 percent of teachers overall. And only one percent changed districts, compared to six percent overall.

Table 18

Average Turnover for Alaska Native Teachers, FY99-FY00 to FY03-FY04								
Teacher movement:	Rural	Urban	Total					
Same School or Same District	86%	89%	87%					
New District	3%	1%	2%					
Exit from System or Went on Leave	11%	9%	10%					
Non Classroom Public Education	1%	1%	1%					
Total	100%	100%	100%					
District Level Turnover	14%	11%	13%					

Source: ISER tabulations of DEED Certified Staff Accounts

Summary

The data presented provide an overview of the current teaching force in Alaska, and trends in supply, demand and turnover. In general, the near-term demand for teachers is not expected to increase greatly, based on population projections. Teacher turnover also is relatively stable statewide, though it is arguable whether the rate is too high or is acceptable. In addition, turnover varies greatly across the state, and certain districts and regions face potentially far greater impacts from high turnover. Finally, the supply of educators trained within the state is increasing. Still, despite the growth in teacher training reported above, it is very clear that in-state institutions cannot meet the state's current need for educators. Moreover, increasing teacher education capacity alone will not resolve this problem. The number of Alaskans seeking careers as educators, either as first-time college students or as career changers, also needs to increase significantly.

Next Steps

This project will continue to examine teacher supply and demand in Alaska, and expand to include additional sources of data. The first is data from the Department of Labor, which will allow us to look at certificated educators who are not currently working in education, and see whether they have left the state, taken jobs in non-education-related fields, or taken a leave from the workforce. The second new data will be on graduates of the teacher training programs in Alaska, including those at the three University of Alaska campuses as well as Sheldon Jackson College and Alaska Pacific University. We will look at the employment status of graduates of these institutions from the past five years, to see if locally-trained educators stay longer in the teaching profession in Alaska, and where they end up working. This information should be useful both to policymakers and to teacher educators in the state.

Finally, we are working with the evaluation of the state's new teacher mentoring program. Over time, this collaboration will allow the evaluators to determine whether new teachers that participate in the mentoring program stay teaching in Alaska longer than those who do not have a mentor.

References

- Alliance for Excellent Education. (2005). "Teacher Attrition: A Costly Loss to the Nation and to the States." Issue Brief. Washington, DC: Author. Downloaded from www.All4ed. org
- Alton, T. L. (2005). Politics, economics, and the schools: Roots of Alaska Native Language Loss Since 1867. Alaska History, 20, (2), pp. 18-41.
- Darling-Hammond, L. and Sykes, G. (2003). "Wanted: A national teacher supply policy for education: The right way to meet the "Highly Qualified Teacher" challenge." *Education Policy Analysis Archives 11* (33). Retried 11/30/2005 from http:epaa.asu.edu/epaa/v11n33/.
- Dee, T. S. (2001). *Teachers, Race and Student Achievement in a Randomized Experiment*. NBER Working Paper Series. Cambridge, MA: National Bureau of Economic Research.
- Grissmer, D., A. Flanagan, et al. (2002). Improving Student Achievement: What State NAEP Test Scores Tell Us. Santa Monica, CA, RAND.
- Guin, K. (2004). Chronic teacher turnover in urban elementary schools. *Education Policy Analysis Archives*, *12*(42). Retrieved December 11, 2005, from http://epaa.asu.edu/epaa/v12n42/v12n42.pdf.
- Hanushek, E. A., J. F. Kain, et al. (2001). Why Public Schools Lose Teachers. Access ERIC: FullText. California: 43.
- Hanushek, E. A., J. F. Kain, et al. (2004). "The Revolving Door." Education Next 4(1): 76-82.
- Harmon, H. L. (2001). Attracting and Retaining Teachers in Rural Areas. Access ERIC: FullText. Virginia: 17.
- Harmon, H. L. (2003). "Teacher Recruitment and Retention in Rural Schools." <u>State</u> Education Standard 4(1): 13-17.
- Haycock, K. (2000). *Honor in the box car: Equalizing teacher quality*. Washington, DC: The Education Trust.
- Holloway, J. H. (2003). "Sustaining Experienced Teachers." <u>Educational Leadership</u> **60**(8): 87-89.
- Ingersoll, R.M. (2003a). "The Teacher shortage: Myth or reality?" <u>Educational HORIZONS</u>, **81** (3), 146-152.
- Ingersoll, R.M. (2003b) *Is There really a teacher shortage?* Philadelphia, PA: Consortium for Policy Research in Education.
- Ingersoll, R., M. and Kralik, J.M. (2004). "The Impact of mentoring on teacher retention: What the research says." *ECS Research Review: Teaching Quality, February 2004.*
- Ingersoll, R.M. and Smith, T.M. (2003). "The wrong solution to the teacher shortage." *Educational Leadership*, 60 (8), 30-33.
- McDiarmid, G. W., E. Larson, et al. (2002). Retaining Quality Teachers for Alaska. Anchorage, AK, Institute of Social and Economic Research, University of Alaska Anchorage.
- Miller, J. & Sidebottom, D. (1985). *Teachers: Finding and keeping the best in small and rural districts*. AASA Small School Series #2. Alexandria, VA: American Association of School Administrators (ERIC Document Reproduction Service No. ED 254 377)
- National Collaborative on Diversity in the Teaching Force. (2004) Assessment of Diversity in America's Teaching Force: A Call to Action. Washington, DC: Author.

- NANA Pacific (2004). Evaluate, Quantify, and Prioritize the Need for Teacher Housing in Rural Alaska. Anchorage, Denali Commission: 56.
- Starnes, B.A. (2006). "What we don't know *can* hurt them: White teachers, Indian children. *Phi Delta Kappan*, 87, (5), pp. 384-392.
- Tuck, B., M. Berman, et al. (2005). Alaska School District Cost Study Update. Anchorage, AK, Institute of Social and Economic Research, UAA.