



Who's Teaching Washington's Children? A 2006 Update

A Report Prepared for the
Center for Strengthening the Teaching Profession

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Executive Summary

Teachers are a crucial part of Washington's efforts to provide a high quality education for the state's school children. In order to consider how Washington's educational system might be improved, it is important to understand the nature and characteristics of the teacher workforce and the student population it seeks to serve.

This report updates information we provided in an initial report on the Washington teacher workforce in 2003. The earlier report, *Who's Teaching Washington's Children? What We Know – and Need to Know – About Teachers and the Quality of Teaching in the State*, presented baseline information and other analyses about the workforce to help inform state and district policy. In this report, we offer new information on a variety of aspects of teaching quality, including trend data on the composition of the workforce, rates of teacher retention and mobility, and teachers' perspectives on policy-relevant issues. Also new in this report is a spotlight on two groups of teachers: novice teachers and National Board Certified Teachers (NBCTs).

There are two primary sources of data used in this report. The first comes from information routinely collected by the state, including the state's personnel database. We have linked this information to individual school and district demographic data from 1996 to 2005. Complementing what we can learn from database analyses, we developed a series of "Fast Response" surveys, administered to a representative sample of Washington teachers during the period from 2003 to 2005. We also surveyed a subgroup of NBCTs during the period from 2004 to 2006. High response rates and quick turnaround make this kind of a survey system especially useful for gathering information directly from teachers on issues they currently face. We use data from this survey series in combination with existing state databases to respond to a number of questions about the characteristics of teachers and the ways in which teachers are supported in their work.

As important as it is to understand who Washington's teachers are, it is equally vital to consider the students in teachers' classrooms. The nature of the student population has a direct bearing on the teacher workforce. Enrollment trends, changing demographics of students and families, regional differences, and student performance patterns all impact the number of teachers and the types of knowledge and skills teachers need to do their jobs well. In the last decade, the student population in Washington has slowly increased, typically at a rate of less than one percent a year, until 2004 when the state saw the first small drop in student enrollment. While the overall rate of student enrollment growth has leveled off recently, increasing proportions of English language learners and students in poverty have important implications for the teacher workforce. These changing student demographics are coupled with increasing demands to provide support for those students who are struggling to meet state standards.

Characteristics of the Washington Teacher Workforce

Washington's teacher workforce over the last ten years reveals a steady, experienced cadre of educators. While the overall number of teachers had gradually increased to nearly 56,000 in 2004, general characteristics such as age, experience and ethnicity show

remarkably little variation at the aggregate state level. There is a slight shift in the age distribution of teachers as older and more experienced teachers are staying in the workforce, and the average age of beginning teachers has increased. However, a woefully inadequate supply of teachers of color persists. Despite tiny increases in the number of teachers of color in recent years, particularly among Hispanic/Latino/a teachers, the proportion of students from non-white racial/ethnic groups has grown even more rapidly. In addition, there is evidence to suggest that an aging cadre of African American teachers is not being replaced by African American teachers entering the workforce in the same proportions.

Among important findings from the surveys of Washington's teachers is the issue of teachers' preparedness to meet the needs of diverse student learners. Teachers from across the state do not feel fully equipped to manage the diverse learning needs in their classrooms. These data point to a major issue regarding teachers' ability to help all students learn, and indicate that they may need additional support to do so. The challenge of diverse learning needs, coupled with the knowledge that over 40 percent of the state's teachers have 15 or more years of experience, highlights the importance of access to high quality, on-going professional learning to help teachers realize the full potential of Washington's education improvement efforts.

Questions of teacher retention and mobility have been at the forefront of national policy discussions. In Washington state, the overall patterns of teachers staying, moving or exiting the Washington education system present an image of relative stability in the aggregate. Considering all classroom teachers in Washington across three time periods, the majority are still working as teachers in the same school five years later, and nearly three-quarters are still working in the same district in some capacity. The actual "drain" on the teacher workforce is considerably less than is often believed. Only a fifth of all teachers leave the Washington education system in a five-year period. Generally speaking, districts are not losing many teachers to other districts. On average, eight percent of all teachers moved to another district after five years. Among the teachers who moved from their original building, more either left the Washington education system (20 percent) or moved to another assignment within their current district (13 percent) than left for employment in another district in the state. These statistics are somewhat more pronounced for novice and beginning teachers. Teachers of color are retained at the same school at similar rates to white teachers with the exception of African American and Native American teachers whose retention rates are somewhat lower.

Teacher retention does differ by district and school. Often greater differences in retention exist between schools within a district than between districts. In an examination of schools in a sample of 20 districts statewide, schools within a district can range from those that have very high turnover of teaching staff across five years (the lowest rate of retention in the sample districts was 11 percent) to those that retain 100 percent of their teaching staff in the same school. Teacher retention is related to the composition of the school's student population – in particular to the poverty level and racial/ethnic make-up of students. Schools serving a greater number of students in poverty retain fewer of their

teachers after five years. Schools with a greater percentage of white students tend to retain a greater percentage of their teachers in the same school after five years. School serving a larger percentage of African-American students retain fewer of their teachers across the same period. In a mutually reinforcing pattern, school poverty, retention and school performance are linked to one another, and the link is not largely or uniquely an urban phenomenon. We also found evidence of this relationship in large suburban districts. The study also took an initial look at the retention of school principals. Our analyses reveal that school principals are more likely to move than teachers, though they typically move within their own districts.

Teachers indicated through surveys that there are a variety of factors which influence their decisions to stay or leave a school. Issues such as teaching assignment, collegial community, and time for professional learning are important. For teachers working in high poverty schools, certain conditions are likely to make a big difference in teachers' desire to stay at a school, such as support at home for students' learning, the level of disciplinary issues in teaching students and the nature of support services available to meet students' needs. The data signal that school and district leaders can affect the school's working environment in ways that matter to teachers.

For the most part, the problem in Washington state is not solely about teacher supply (though there are specific shortages in mathematics, science, special education and bilingual education), nor is it solely about teacher retention (though there are particular districts and schools where this is a problem). Instead, a more widespread issue exists regarding the quality and type of support for teachers' work. Policymakers can productively focus attention on enhancing support mechanisms (as in professional development systems, mentoring, and on-site assistance) for classroom teachers. When addressing the issue of retention in specific districts and schools where difficulties are present, policy makers and leaders should consider that retention issues may depend on subtle interactions between forces and conditions within the district, as much as from elsewhere outside the district. In this context, leaders can profitably spend time analyzing where schools are succeeding at retaining teachers and where they are not, how retention patterns map on to the relative poverty level of student populations within the district, and how this impacts learning for students.

Addressing the Needs of New Teachers

Attrition rates for beginning teachers statewide are lower than are often believed. Analysis of statewide data for Washington indicates that about one-quarter (26.5 percent) of beginning teachers (less than one year of experience) leave the state's education system after five years, either temporarily or permanently. The pattern is similar for novice teachers (less than five years of experience), with 22 percent of novice teachers exiting the Washington system five years later. Nevertheless, the attrition and mobility rates for both beginning and novice teachers are higher than for the workforce overall. The percentage of beginning teachers who are still in the same school after five years is lower than the statewide average rate for all teachers (46 percent compared to 50

percent). Both beginning and novice teachers move to other districts at higher rates (13 and 12 percent, respectively) than the overall teacher workforce (7 percent).

Statewide data about beginning teachers also reveals a disproportionate relationship between beginning and novice teachers of color and the increasingly diverse student population. A slight increase (less than 3 percent change) in the diversity of the teacher workforce can be seen among both novice and beginning teachers, with most of the change explained by the increased proportion of Hispanic/Latino/a and Asian teachers. This suggests that the new entrants into the labor force do not represent a significant departure from the overall pattern of a predominantly white population of teachers.

There is evidence to suggest that small and rural districts may have more difficulty retaining their new teachers in schools and districts. Novice and beginning teachers in small and rural districts move out of the district at somewhat higher rates than their peers statewide. Twenty percent of novice teachers in small and rural districts moved out of district compared with only 12 percent of teachers statewide, based on a sample of half of all small and rural districts in Washington.

Given these conditions, mentoring and induction policies have the potential for a greater impact than might occur in states with higher attrition rates for beginning teachers. Additionally, teachers in the early years of a teaching career present a profile of concerns and professional development needs that differ in noticeable ways from their more veteran colleagues. Targeting professional development toward the specific teaching and learning needs of beginning and novice teachers could be a productive means of additional support.

Fully Utilizing the Resource of National Board Certified Teachers

National Board Certified Teachers (NBCTs) are often the subject of discussion about teacher workforce policy. Because of the highly visible and rigorous process of professional assessments which NBCTs have completed and the investment by state and local leaders, these teachers may be well-positioned to engage in leadership activities that focus on improving teaching in their schools and districts. NBCTs represented less than 2 percent of the Washington teacher workforce in 2005. The vast majority of NBCTs continue to work as classroom teachers in Washington following certification, often in the same school where they worked prior to certification. As part of our ongoing survey series, we asked NBCTs in our state to respond to a special survey about the type and level of their involvement in leadership activities, the impact that NB certification had on their teaching, and their interest in considering a move to a higher needs school.

While many NBCTs participated in leadership activities prior to certification, a majority of respondents (56 percent) indicate that they are somewhat or a great deal more involved in leadership at the district level as a result of their NBCT status. NBCTs indicate general support for assuming leadership roles by colleagues and administrators, but other factors can be a major obstacle to participation. These include time, proximity,

availability and alignment of opportunities with their skills and interests, and lack of resources for release time or financial support from the school or district.

A majority of NBCTs report that their certification experience had a very positive impact on their work with students and a sizeable portion also report very positive impacts in school and district contexts. Approximately two-thirds of respondents reported a very positive impact on how they use student assessment to inform instruction (66 percent) and how they evaluate student needs (64 percent). NBCTs report feeling more prepared to teach the curriculum, ready students for state assessments and manage diverse learning needs than teachers in the state sample. Therefore, one might presume that NBCTs, along with other accomplished teachers, may be in an excellent position to mentor their less experienced colleagues. However, it is noteworthy that NBCTs were not more likely to observe colleague's classrooms than the state sample (52 percent versus 55 percent report that this does not happen at all at their school).

More than half of NBCTs indicated a willingness to move to a higher-needs school, and the proportion of those who would be very willing to move increased substantially when presented with the possibility of incentives. A \$10,000 bonus, the promise of a significant reduction in class size, and more compensated time for planning and preparation each prompted more than three times the number of teachers to state they would be very willing to make a move to a higher-poverty or struggling school as compared to those who stated they would be very willing to move without incentives. These and other findings about NBCTs prompt consideration of ways in which NBCTs can be more fully utilized and supported.

Given that NBCTs represent a valued, and perhaps underutilized resource for teacher leadership, there are a number of issues in policy and practice worthy of consideration. Some of these policy concerns can be addressed at the state level, while others may be more appropriately considered at district and school levels. Key policy issues include: increasing the supply and diversity of NBCTs; ensuring equal access to NBCTs across schools and classrooms; fully utilizing NBCTs' potential as accomplished teachers; and adequately supporting NBCTs in a variety of instructional leadership roles.

Improving the State's Data Capacity Regarding Teaching and Learning

A major portion of the data we were able to share in this report comes from existing databases at the state level. However, there are limits to what we can understand statewide, as the data systems used to conduct analyses for this report are designed for other purposes. Furthermore, existing databases are not easily queried, nor are they fully relational. Major gaps exist in the state's ability to provide information about key questions concerning the quality of the teacher workforce, the equity of the distribution of qualified teachers, and the match between teachers' knowledge and skills and the specific nature of their teaching assignment.

Efforts are underway to address the teacher data limitations and build a relational and timely system that can answer some bottom-line questions about teachers, teaching,

support for teachers' work, and student learning. A continuation of efforts to build a more robust, relational, and specific teacher data system is greatly needed in Washington state. In particular, school-level data about the assignment of teachers to specific grades, students, and courses would greatly enhance the ability to track the extent to which all students have access to well-qualified teachers.

Improving our understanding about our state's teacher workforce can help guide educators and policymakers at state, district, and school levels as they consider ways to improve the equity of access to a high quality education for all of Washington's school children.

I. Introduction

As the state of Washington continues to address the goal of providing every child with a world-class education, policy concerns have been raised about a number of issues, including improving math and science education, providing additional support for struggling students, meeting the needs of English language learners, and reducing inequities in educational opportunities and attainment. In addressing each of these and other pressing challenges, teachers matter. Strengthening the quality of teachers and teaching in Washington is one of the most critical and complex aspects of our state's commitment to education reform. Consequently, it is important to have an accurate understanding of who teaches the state's students, the conditions under which teachers work, and the ways in which teachers are supported to meet the expectations that our state has set forth.

The purpose of this report is to provide updated information and analyses about the nature of the teacher workforce in Washington state. Building on the baseline of data presented in our initial report, *Who's Teaching Washington's Children? What We Know—and Need to Know—About Teachers and the Quality of Teaching in the State* (Plecki et al., 2003), we provide new information about a variety of aspects of teaching quality, including the composition of the workforce, rates of teacher retention and mobility and teachers' perspectives on policy relevant issues. In this report, we have chosen to highlight two particular groups of teachers in our state: novice teachers and National Board Certified Teachers (NBCTs). Our aim is to present accurate information, conduct analyses that explain what the data means, and discuss how this information can help inform education policy.

There are two primary sources of data for this report. The first comes from existing state data sources (primarily the state's personnel database S-275), which provide trend data from the past nine years. This information has been linked to individual district and school demographic data. Complementing what we can learn from the database analyses, a "Fast Response" survey system was created by the research team at the University of Washington. Surveys provide a way of hearing directly from teachers regarding issues of teaching and learning. Based on a survey system designed by the National Center for Education Statistics, the Fast Response surveys are relatively short and administered to a sample of teachers who agree in advance to participate. High response rates (in most instances 90 percent or better) and quick turnaround of questionnaires make this kind of a system especially useful for gathering accurate information on current issues that teachers experience. During the 2003-04 and 2004-05 school years, a series of six surveys were administered to a representative sample of the state's classroom teachers and to National Board Certified Teachers.¹ An additional, separate survey of National Board Certified Teachers in Washington state was conducted in 2006.

¹ Additional information about the design and administration of the survey series can be found in a report entitled, "Teachers Count: Support for Teachers' Work in the Context of State Reform," (Knapp et al., 2005).

As important as it is to understand who Washington’s teachers are, it is equally vital to consider the students in teachers’ classrooms. The nature of the student population has a direct bearing on the teacher workforce. Enrollment trends, changing demographics of students and families, regional differences, and student performance patterns all impact the number of teachers and the types of knowledge and skills teachers need to do their jobs well. Thus, we begin this report with a brief look at how student enrollment and socio-demographic circumstances have changed in recent years.

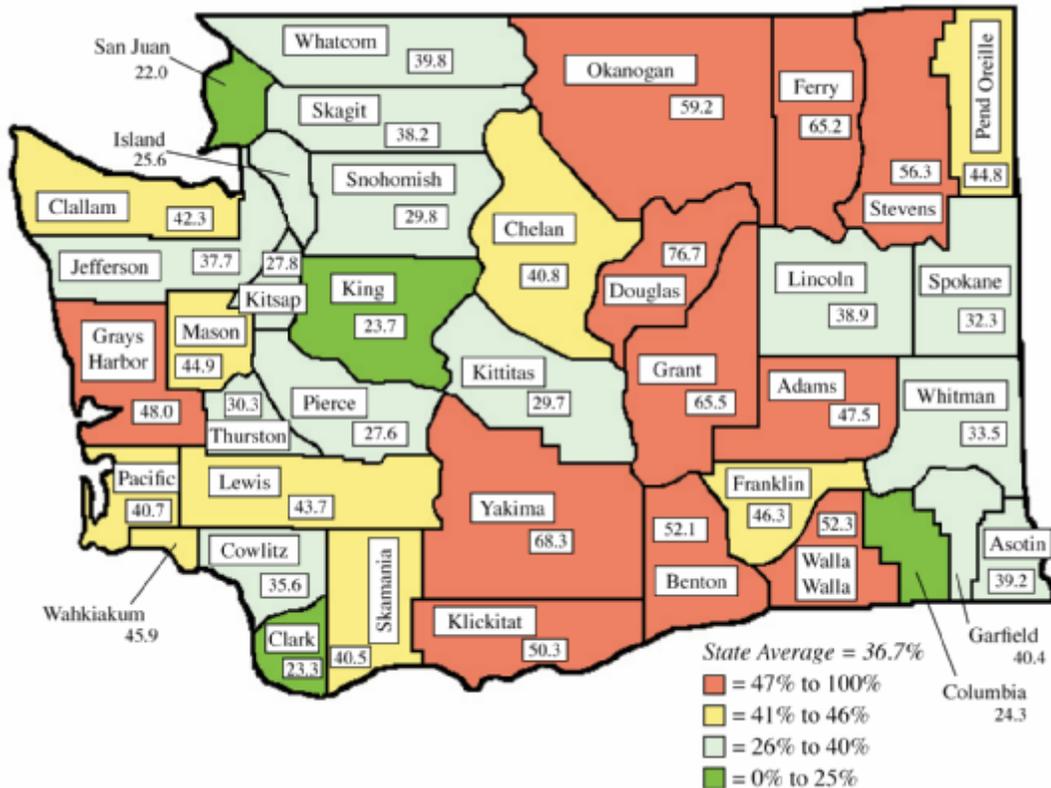
During the past ten years, the student population in Washington state has slowly increased, typically at a rate of less than one percent per year. In October 1999, the student population reached just above one million. In October 2004, the state saw the first drop in student enrollment during the past decade. It was a very small decrease of 350 students from the prior year. During the period from 1996 to 2004, the student population increased by 4.8 percent. Additionally, the percent of the student population enrolled in the transitional bilingual education program increased from 5 percent to 7 percent (see Table 1.1).

Table 1.1: Selected Characteristics of Washington Students: 1996-97 through 2005-06					
Year	Student Enrollment (Headcount)	Enrollment Change from Prior Year	Annual % Enrollment Change	Percent Student Poverty*	Percent Transitional Bilingual
1996	974,504	-----	-----	31.2	4.7
1997	991,235	16,731	1.717%	30.1	4.7
1998	999,616	8,381	0.846%	31.1	5.1
1999	1,003,701	4,085	0.409%	31.1	5.5
2000	1,004,843	1,142	0.114%	31.2	5.9
2001	1,010,424	5,581	0.555%	33.1	6.1
2002	1,015,968	5,544	0.549%	35.6	6.5
2003	1,021,309	5,341	0.526%	36	6.9
2004	1,020,959	-350	-0.034%	35.9	7.1
2005	1,013,189	-7770	-0.761%	36.7	7.4

*Poverty represented by Free or Reduced Price Lunch count

Another important factor concerns the increasing percentage of students in poverty in Washington state. Using the percentage of students participating in the Free or Reduced Price Lunch program as the metric, student poverty rose from 31.2 percent in 1996 to 36.7 percent in 2005. Figure 1.1 portrays the student poverty rates by county in 2005-06.

Figure 1.1: Poverty Rates by County in 2005



From the data in Figure 1.1, we see that poverty rates in 26 of the 39 counties exceed the state average of 36.7 percent, with nine counties having poverty rates in excess of 50 percent. These counties with higher poverty rates tend to be located primarily in Eastern Washington, with a number of these higher poverty counties in the central, southern and northernmost areas of Eastern Washington.

While the overall rate of student enrollment growth has leveled off recently, the increased proportions of students in poverty and those who are English language learners have important implications for the teacher workforce. These changing student demographics are coupled with ever-increasing demands to provide support for those students who are struggling to meet state standards.

A look at student performance statewide indicates that while progress is being made over the years, significant disparities exist by subject matter and by student subgroup. Generally speaking, progress in reading and writing has been more rapid than in mathematics. The performance on the Washington Assessment of Student Learning (WASL) for students who are African American, Hispanic, and Native American is consistently lower than that of white students. For example, in the 2005-06 school year, 57 percent of white 10th graders passed the math WASL, compared to 23 percent of African Americans, 25 percent of Hispanics, and 30 percent of Native Americans. Poverty also has an influence on achievement gaps. In 2005-06, only 30 percent of low

income 10th graders passed the math WASL while 59 percent of non-low income students met the state standard.² The lower performance levels of students from these racial/ethnic groups, as well as students in poverty, has significant bearing on issues related to the quality of teachers and teaching in the state.

The following sections of this report discuss a number of issues related to the teacher workforce. We begin with an examination of teacher characteristics, and discuss trend data that has become available and changes we observe since the original 2003 report. Next, we discuss the findings of our studies of teacher retention and mobility at state, district and school levels and discuss factors that influence teachers' decisions to stay or leave a school. In the sections that follow, we provide more detailed information about novice teachers and teachers in Washington state who have earned National Board certification. We end with a brief review and discussion of policy implications.

II. Composition of Washington's Teacher Workforce

Washington's teacher workforce over the last ten years reveals a steady, experienced cadre of educators within the state's schools. While the overall number of teachers has gradually increased to nearly 56,000 in 2004, general characteristics such as age, experience and ethnicity show remarkably little variation at the aggregate state level. Differences do exist however, particularly at district and school levels, and we will examine some of these differences in the sections that follow.

The main points in this section include the following:

- Stability continues to describe the state's overall workforce.
- There is a slight shift in the age distribution of teachers; older and more experienced teachers are staying in the workforce, and the average age of beginning teachers has increased.
- A woefully inadequate supply of teachers of color persists.
- Teachers feel ill prepared to address the needs of an increasingly diverse student population.

Characteristics of the Washington Teacher Workforce

As a starting point for understanding the nature and distribution of the state's teaching force, we have chosen to focus on indicators for which the state has uniformly available data. These include teacher characteristics such as age, teaching experience and race/ethnicity, which can be linked to district and school demographic information such as student enrollment, poverty measures, student performance on the WASL and student race/ethnicity. In order to display this information over time, we have selected three years as anchor points: 1996, 2000 and 2004.

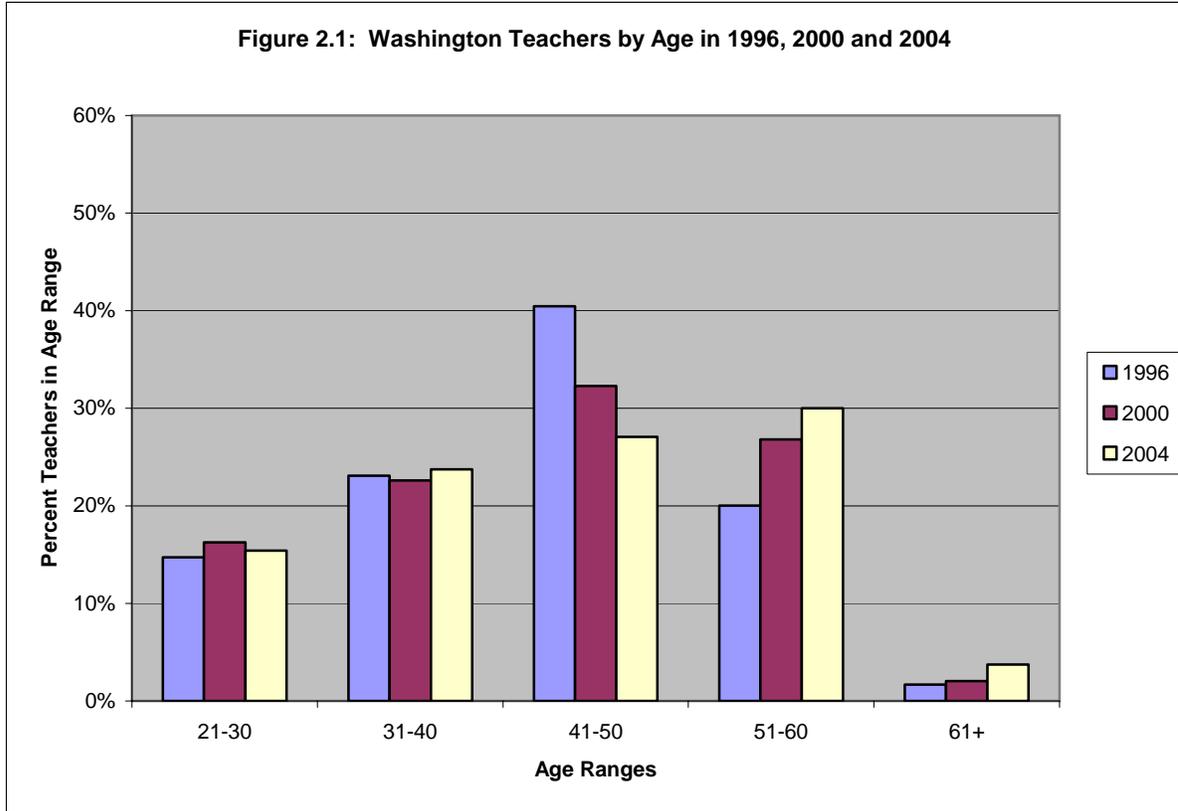
² Additional trend data regarding student performance on the WASL can be found on the School Report Card at the website of the office of the Superintendent of Public Instruction: <http://reportcard.ospi.k12.wa.us/>

**Table 2.1: Characteristics of Washington Teacher* Workforce:
Trend Data**

	Statewide		
	1996	2000	2004
Student Enrollment	974,504	1,004,843	1,020,959
# Teachers (Headcount)	50,387	53,216	55,914
FTE Teachers	48,151	50,744	53,117
<i>Age (in given year)</i>			
21-30	14.7%	16.3%	15.4%
31-40	23.1%	22.6%	23.8%
41-50	40.5%	32.3%	27.1%
51-60	20.0%	26.8%	30.0%
61+	1.7%	2.1%	3.8%
<i>Ethnicity</i>			
Asian/Pacific Islander	2.1%	2.3%	2.5%
African American	1.6%	1.6%	1.5%
Hispanic	1.7%	2.0%	2.3%
Native American	0.8%	0.8%	0.8%
White	93.7%	93.4%	93.0%
<i>Experience</i>			
Less than one year	4.7%	5.8%	4.7%
0-4 years	20.4%	23.4%	21.9%
5-14 years	35.8%	35.2%	37.0%
15-24 years	29.3%	25.7%	24.4%
25 yrs or more	14.6%	15.7%	16.7%

**Duty root 31, 32 or 33 with FTE designation greater than 0 in given year. Teacher headcount statistics rather than FTE are used for this analysis.*

The overall Washington teacher workforce reflects an experienced cadre. Roughly a quarter of the teachers have less than five years of teaching experience, while approximately 40 percent have been in the workforce for 15 or more years. As can be seen from Table 2.1, there has been a slight shift in the age distribution of teachers. The shift is most pronounced for teachers over the age of 50. Teachers in this age bracket represented only 22 percent of the workforce in 1996 but 34 percent in 2004. An increasing number of new teachers over the age of 40 may also contribute to the trend of older teachers (see page 34 for additional detail about the age distribution of Washington's beginning teachers).



Another way to understand the distribution of the state’s teachers is to examine where they are located based on district size. The trend data from 1996 to 2004 shows that the number of districts with a student enrollment of at least 20,000 has increased. By 2004, the Evergreen, Northshore and Puyallup school districts had joined Seattle, Tacoma, Spokane, Lake Washington, Kent, Edmonds, Federal Way and Vancouver with a student enrollment greater than 20,000. During this period, the total number of teachers in districts of all size categories increased, with the exception of the 10,000 to 19,999 category, which lost the three districts mentioned above to the larger 20,000+ enrollment category. Districts with a student enrollment of less than 10,000 show some fluctuation between these size categories.

District Size by Student Enrollment	1996		2000		2004	
	# Districts	Total # Teachers	# Districts	Total # Teachers	# Districts	Total # Teachers
20,000+	8	11,624	10	14,391	11	16,131
10,000-19,999	22	15,504	20	14,255	19	14,194
5,000-9,999	23	7,877	28	9,788	26	9,804
1,000-4,999	100	12,097	95	11,541	94	12,406
999 and under	143	3,285	143	3,241	146	3,379

*Duty root 31, 32 or 33 with FTE designation greater than 0 in 2000. Headcount statistics rather than FTE are used for this analysis.

The trend data by region of the state reveals similar patterns in teacher characteristics with a few exceptions. Across the 1996 to 2004 time period, the number of teachers increased in roughly equal proportions by region (see Table 2.3).

	Central Puget Sound			Western WA outside Central Puget Sound			Eastern WA		
# Districts	35			125			136		
	1996	2000	2004	1996	2000	2004	1996	2000	2004
Student Enrollment	368,406	383,641	387,603	362,342	376,655	383,146	243,756	244,474	247,050
# Teachers (Headcount)*	18,863	20,068	21,144	18,608	19,715	20,804	12,916	13,433	13,966
<i>Age (jn given year)</i>									
21-30	15.5%	19.0%	17.8%	14.4%	15.0%	13.8%	14.0%	14.0%	14.3%
31-40	22.2%	22.1%	23.9%	23.4%	22.9%	23.6%	24.0%	22.9%	23.7%
41-50	38.2%	29.6%	24.9%	42.0%	33.5%	28.0%	41.6%	34.4%	29.0%
51-60	22.0%	27.0%	29.3%	19.0%	26.9%	31.2%	18.6%	26.5%	29.3%
61+	2.1%	2.3%	4.1%	1.2%	1.7%	3.5%	1.7%	2.2%	3.7%
<i>Experience</i>									
Less than one year	4.9%	6.9%	5.4%	4.8%	5.6%	4.3%	4.1%	4.5%	4.2%
0-4 years	21.4%	26.7%	24.7%	20.1%	22.5%	20.3%	19.4%	20.0%	20.0%
5-14 years	34.9%	34.9%	37.6%	36.5%	35.4%	36.7%	35.9%	35.3%	36.7%
15-24 years	27.5%	23.3%	22.5%	29.8%	26.5%	25.9%	31.1%	27.9%	25.1%
25 yrs or more	16.2%	15.1%	15.3%	13.6%	15.6%	17.0%	13.6%	16.8%	18.2%

*Region as represented by Educational Service Districts. Central Puget Sound is represented by ESD 121. Western WA (not including ESD 121) is represented by ESDs 112, 113, 114 and 189. Eastern WA is represented by ESDs 101, 105, 123 and 171.

**Duty root 31, 32 or 33 with FTE designation greater than 0 in given year. Teacher headcount statistics rather than FTE are used for this analysis.

In each region, the percentage of teachers over the age of 50 has grown from less than a quarter of the workforce in 1996 to a third of the workforce by 2004. The percentage of the most experienced teachers (25 or more years of experience) has increased from 13.6 percent to 17 percent in Western Washington outside the Central Puget Sound and to 18.2 percent in Eastern Washington, but remained fairly constant in the Central Puget Sound.

Characteristics and Distribution of Teachers of Color

Significant differences exist between the demographic profiles of students and Washington's teacher workforce. In this section, we document both state-level racial/ethnic characteristics of public school teachers and students using three points in time: 1996, 2000 and 2004. Trends in teacher and student ethnicity based on district size are also presented.

Over the time period between 1996 and 2004, the number of teachers of color increased slightly from 3,157 to 3,921. Table 2.4 demonstrates that while the teacher workforce is

overwhelmingly white (93.7 percent in 1996), the number of teachers of color has increased slightly for all racial and ethnic groups except for African American teachers over this time period. While the actual number of teachers of color is very small, the number of Asian/Pacific Islander teachers has increased from 1,070 to 1,387 (23 percent increase) from 1996 to 2004, and the number of Native American teachers increased from 398 to 426 over this same time period. The greatest increase has come from Hispanic/Latino/a teachers whose numbers have increased 34 percent since 1996 (from 860 to 1,296). During the same time period, the number of African American teachers declined slightly from 829 in 1996 to 812 in 2004.

Table 2.4: Teacher* and Student Ethnicity: Trend Data for 1996, 2000, and 2004

Teacher Ethnicity	1996			2000			2004		
	# Teachers	% Teachers	% Students	# Teachers	% Teachers	% Students	# Teachers	% Teachers	% Students
Asian/Pacific Islander	1,070	2.1%	6.7%	1,206	2.3%	7.3%	1,387	2.5%	7.9%
African American	829	1.6%	4.8%	830	1.6%	5.3%	812	1.5%	5.7%
Hispanic	860	1.7%	8.3%	1,062	2.0%	10.2%	1,296	2.3%	12.8%
Native American	398	0.8%	2.7%	431	0.8%	2.7%	426	0.8%	2.8%
White	47,230	93.7%	77.5%	49,687	93.4%	74.4%	51,993	93.0%	70.3%

*Duty root 31, 32 or 33 with FTE designation greater than 0 in 2000. Headcount statistics rather than FTE are used for this analysis.

Despite these modest increases in the number of teachers of color, the proportion of students from each corresponding ethnic group has grown even more rapidly. Over the same time period, the percentage of Asian/Pacific Islander students grew from 6.7 to 7.9 percent, African American students grew from 4.8 to 5.7 percent, Hispanic students increased from 8.3 to 12.8 percent, and Native American students increased from 2.7 to 2.8 percent (see Table 2.4).³

When examining the trend data for teachers of color by region of the state, we see that while the total percentage of teachers of color in the Central Puget Sound remains unchanged, both Eastern Washington and Western Washington outside of the Central Puget Sound show minor increases in the percentage of teachers of color (see Table 2.5). The percentage of Asian and Hispanic teachers has increased across all three regions but the most dramatic increase can be seen in the percentage of Hispanic teachers in Eastern Washington. The percentage of African American teachers has declined in the Central Puget Sound and remained nearly unchanged in other parts of the state. Since the largest percentage of African American students is located in the Central Puget Sound, this decline is of concern. The percentage of Native American teachers remains roughly unchanged across this time period for all three regions.

³ It is important to note that each of these racial/ethnic subgroups is composed of individuals from varying socio-economic status.

Table 2.5: Teacher Race/Ethnicity by Region:* Trend data

	Central Puget Sound			Western WA outside Central Puget Sound			Eastern WA		
# Districts	35			125			136		
	1996	2000	2004	1996	2000	2004	1996	2000	2004
Student Enrollment	368,406	383,641	387,603	362,342	376,655	383,146	243,756	244,474	247,050
# Teachers (Headcount)**	18,863	20,068	21,144	18,608	19,715	20,804	12,916	13,433	13,966
<i>Teacher Ethnicity</i>									
Asian/Pacific Islander	3.8%	4.0%	4.3%	1.3%	1.4%	1.5%	0.9%	1.0%	1.1%
African American	3.5%	3.2%	3.0%	0.6%	0.6%	0.6%	0.5%	0.5%	0.4%
Hispanic	1.7%	1.8%	1.9%	0.8%	1.0%	1.1%	3.0%	3.7%	4.7%
Native American	0.9%	0.8%	0.7%	0.6%	0.7%	0.7%	0.8%	0.9%	0.9%
White	90.1%	90.1%	90.1%	96.7%	96.3%	96.0%	94.8%	94.0%	92.9%

*Region as represented by Educational Service Districts. Central Puget Sound is represented by ESD 121. Western WA (not including ESD 121) is represented by ESDs 112, 113, 114 and 189. Eastern WA is represented by ESDs 101, 105, 123 and 171.

**Duty root 31, 32 or 33 with FTE designation greater than 0 in given year. Teacher headcount statistics rather than FTE are used for this analysis.

When looking at teacher ethnicity by district size, the general trend is that the state’s larger school districts tend to have greater proportions of Asian and African American teachers (see Appendix A). The proportion of African American and Asian teachers exceeds the state average for each of these groups in districts that are larger than 20,000 students (averaged across the time periods, 3.9 and 4.2 percent of teachers, respectively). In districts between 10,000 and 20,000 students, Asian American and Latino teachers can be found in proportions higher than the state average (averaged across the time periods, 2.6 percent and 2.4 percent of teachers, respectively). The largest concentrations of Latino/a teachers work in districts serving between 5,000 and 19,000 students, however they are found in districts of all sizes across the state. Only Native American teachers work in a greater proportion of the state’s smallest districts.

People of color tend to be concentrated in specific regions of Washington state. Further, our regional analysis of teacher placement in 2004 indicates that teachers of color in Washington state have a tendency to work in districts which have the largest proportions of students from corresponding groups (see Appendix B).

Finally, we examine selected teacher characteristics based on the percentage of students in a district served by the Free and Reduced Priced Lunch (FRPL) program. While this rough estimate of student poverty within a district tends to mask more specific school-level issues, it does reveal some trends based on teacher ethnicity as seen in Table 2.6. The greatest percentage of Hispanic and Native American teachers are working within the highest poverty districts. The largest percentage of African American teachers are working in districts where 51-75 percent of students are receiving Free or Reduced Priced Lunch. The largest proportions of white teachers are located in lower-poverty districts.

Table 2.6: Selected Teacher Characteristics by District Free and Reduced Priced Lunch Percentages in 2004					
	Statewide	0-25% FRPL	26-50 % FRPL	51-75 % FRPL	76-100 % FRPL
# Districts	296	71	137	72	16
Student headcount	1,017,799	302,813	534,141	156,715	24,130
Teacher headcount	55,914	16,123	29,466	8,967	1,358
<i>Age (in given year)</i>					
21-30	15.4%	16.2%	14.9%	14.8%	20.3%
31-40	23.8%	23.3%	24.2%	23.1%	23.9%
41-50	27.1%	27.5%	27.1%	26.8%	23.6%
51-60	30.0%	29.6%	30.1%	31.0%	26.6%
61+	3.8%	3.4%	3.7%	4.3%	5.6%
<i>Ethnicity</i>					
Asian/Pacific Islander	2.5%	2.3%	2.6%	2.4%	1.0%
African American	1.5%	0.5%	1.6%	2.7%	0.0%
Hispanic	2.3%	1.2%	1.7%	4.4%	15.0%
Native American	0.8%	0.6%	0.8%	0.8%	1.8%
White	93.0%	95.3%	93.2%	89.7%	82.1%
<i>Experience</i>					
Less than one year	4.7%	4.9%	4.5%	4.7%	6.7%
0-4 years	21.9%	21.8%	21.4%	22.5%	29.3%
5-14 years	37.0%	37.2%	37.3%	36.2%	35.5%
15-24 years	24.4%	24.2%	24.7%	24.6%	19.3%
25 yrs or more	16.7%	16.8%	16.6%	16.6%	15.9%

We will return to the issue of teacher distribution, retention and mobility based on student poverty later in this report.

Do Teachers Feel Prepared to Meet the Needs of a Diverse Student Population?

Among important findings from the surveys of Washington's teachers was the issue of teachers' preparedness to meet the needs of diverse student learners. Teachers from across the state indicated they do not feel fully equipped to manage the diverse learning needs in their classrooms. One way to put this issue in context is to consider teachers' responses contrasted with their sense of their preparedness for teaching the official or intended curriculum (as summarized in Table 2.7). Teachers are noticeably less confident in their capacity to address diverse learning needs in the classroom, including (but not limited to) working with students who have identified disabilities or teaching a linguistically or racially diverse student population.

Table 2.7: How Prepared Teachers Feel to Manage Diverse Learning Needs and Teach the Official Curriculum

Teachers' self-reported preparedness for...	Percent Feeling Somewhat or Very Unprepared	Percent Feeling Somewhat Prepared	Percent Feeling Very Prepared
...Managing the diverse learning needs in their classrooms	17%	49%	34%
...Teaching the official or intended curriculum	7%	32%	61%

Sample (Year 1): N=379

While this pattern of preparedness is fairly pervasive across the state, varying little by region or level of poverty in the school, several segments of the teacher workforce feel the matter more keenly than the figures above suggest:

- *High school teachers.* A higher percentage (28 percent) report feeling *unprepared* to manage the diverse learning needs in their classrooms.
- *Less experienced teachers.* Only a quarter of the novice teachers say they feel “very prepared” to manage diverse learning needs, as compared with 43 percent of teachers who have taught for 15 or more years.

A flip side of the pattern is also apparent: as one would hope for those considered “accomplished” teachers, National Board Certified Teachers are substantially more confident in their ability to ready students for state assessments—59 percent indicate they feel very prepared to do so (compared with 29 percent of the state sample). And more of the NBCTs feel very prepared to work with diverse student learning needs (50 versus 34 percent).

These data about teachers’ sense of preparedness point to a major issue regarding their ability to help all students learn and indicate that they may need additional support to do so. The challenge of teaching a diverse student population is complex and multifaceted, and we discuss this matter further in a later section.

Brief Summary and Policy Implications

This statewide portrait of the characteristics of the Washington teacher workforce have some important policy implications. The trend data over time reinforces the relative stability of the state’s overall teacher workforce. More than 40 percent of Washington teachers have 15 or more years of experience and received their initial professional preparation prior to the start of Washington’s education reform initiatives. Consequently, access to high quality, on-going professional learning is one strategy to help teachers realize the full potential of Washington’s education reform.

The data regarding teachers of color in Washington state show that while there have been some small increases in the numbers of teachers of color (particularly with respect to Hispanic/Latino/a teachers), there is a significantly inadequate supply of teachers of color. Little progress has been made in the past ten years regarding the number of teachers of color, and there are indications that the number of African American teachers is actually declining.

This challenge of increasing the diversity of the teacher workforce comes at a time when the diversity of the student population is continually increasing, the poverty levels of the student population are rising, and the number of students who are English language learners is expanding. Teachers express specific concerns about their capacity to meet the needs of diverse learners, especially English language learners. Consequently, state and district policies aimed at providing supports for teachers to tailor their instruction to meet individual needs are worth considering.

III. Teacher Retention and Mobility

As workforce conditions in the United States have changed in recent years, educators have worried about the impact on classroom teachers, particularly with regard to teacher retention. Teaching is a demanding profession with a steep learning curve, especially in the early years. Student populations have grown increasing diverse and teachers report substantial instructional challenges in serving all students well. The day-to-day implementation of ambitious reform agendas rests squarely on the shoulders of classroom teachers as they endeavor to help students reach learning standards.

These changes have fueled considerable debate regarding the quality and stability of the teacher workforce. Robust and valid measures of teaching quality are difficult to develop, and the issues surrounding teacher mobility and career decisions are no less difficult to disentangle. In order to address questions of teacher retention and mobility, we conducted an analysis of five-year mobility trends by tracking the assignment of teachers at two points in time for each of three five-year periods (1998-99 to 2002-03, 1999-00 to 2003-04, and 2000-01 to 2004-05). Using the Washington state personnel database (S-275), all classroom teachers in the state were located in an initial school year and also five years later to see if they were still in the Washington system of public education. The retention and mobility data indicate whether teaching staff had stayed in their same school after five years, moved to another school or assignment within the same district, moved to a different district, or exited the Washington education system all together.⁴

Additionally, twenty districts were selected for in-depth analysis. These twenty districts represent variation by district size, poverty level and region of the state, and include many of the state's largest districts. The twenty-district sample represents nearly 30

⁴ A two-point in time analysis cannot take into account the more fluid nature of teacher movement within the five-year time span (leaves from teaching/re-entrants). In this regard, the study likely overestimates turnover.

percent of the state's teaching force and over a quarter of the state's students. For the twenty districts, a school-by-school analysis was conducted for the 1998 to 2002 time frame to compare retention and mobility patterns among and within the districts. The trend data for the two more recent time periods is presented for the first time in this report and reinforces prior work.⁵

Teacher retention and mobility patterns also were examined in relation to student demographics, measures of student learning in reading and mathematics, and other school and district characteristics. These analyses pay special attention to issues such as the retention of novice teachers and teachers of color. For more information on the terms and methodology used in these analyses, see Appendix C.

Washington's existing state database does not provide information on specific reasons why teachers decide to remain at a particular school, move within a district, move to another district, or exit the Washington education system. Statewide, there is currently no way to know if movement within a district is due to the elimination of positions at a school, an increase in vacancies at other schools, or a result of specific teacher assignment and transfer policies unique to individual districts. To understand teachers' work and how to support it in greater depth, one must get information directly from teachers and from the sites of their daily practice. As a means of hearing directly from teachers, we used the Fast Response survey system⁶ to ask teachers some specific questions about their views of staying or leaving their school or the profession. Because of the stratified random design of the surveys, it is not possible to link teachers in the twenty-district sample to those who participated in the survey series. Nevertheless, characteristics of the survey participants closely approximate statewide statistics and response rates were extremely high (approximately 90 percent). Both of these factors offer evidence that the sample is a reasonably accurate representation of the state's teachers. The findings from the surveys are discussed at the end of this section.

The main points in this section include the following:

- Nearly 60 percent of teachers can be found in the same school five years later.
- Teacher mobility within a district is often greater than movement outside a district. This is especially true for the larger districts.
- Greater differences in retention exist between schools within a district than between districts.
- Teachers of color are retained at the same school at similar rates to white teachers with the exception of African American and Native American teachers whose retention rates are somewhat lower.
- School poverty, retention and school performance are linked to one another.
- School principals are more likely to move than teachers.

⁵ Detailed analyses of the twenty districts and their schools can be found in the report, "Teacher Retention and Mobility: A Look Inside and Across Districts and Schools in Washington State," (Plecki et al., 2005).

⁶ Additional information about the design and administration of the survey series can be found in the report, "Teachers Count: Support for Teachers' Work in the Context of State Reform," (Knapp et al., 2005).

- The nature and stability of a teaching assignment influences teachers’ decisions to stay or leave a school. Differences also exist in high- and low-poverty schools with regard to the reasons why teachers stay or move.

Statewide Retention and Mobility Patterns

The overall patterns of teachers staying, moving or exiting the Washington education system present an image of relative stability in the aggregate. Considering all classroom teachers in Washington across the three time periods, five years later, the majority are still working as teachers in the same school, and nearly three-quarters are still working in the same district in some capacity. The actual figures are summarized in Table 3.1 below.

Table 3.1: Teacher Retention and Mobility (after 5 yrs): Trend Data Across Three Time Periods			
	Statewide		
	1998/99 - 2002/03	1999/00 - 2003/04	2000/01 - 2004/05
Remained as classroom teachers in the same school	58%	59%	60%
Moved to another school in the same district	14%	13%	13%
Moved to work in another school district in Washington	9%	8%	7%
Left the Washington education system	20%	20%	19%

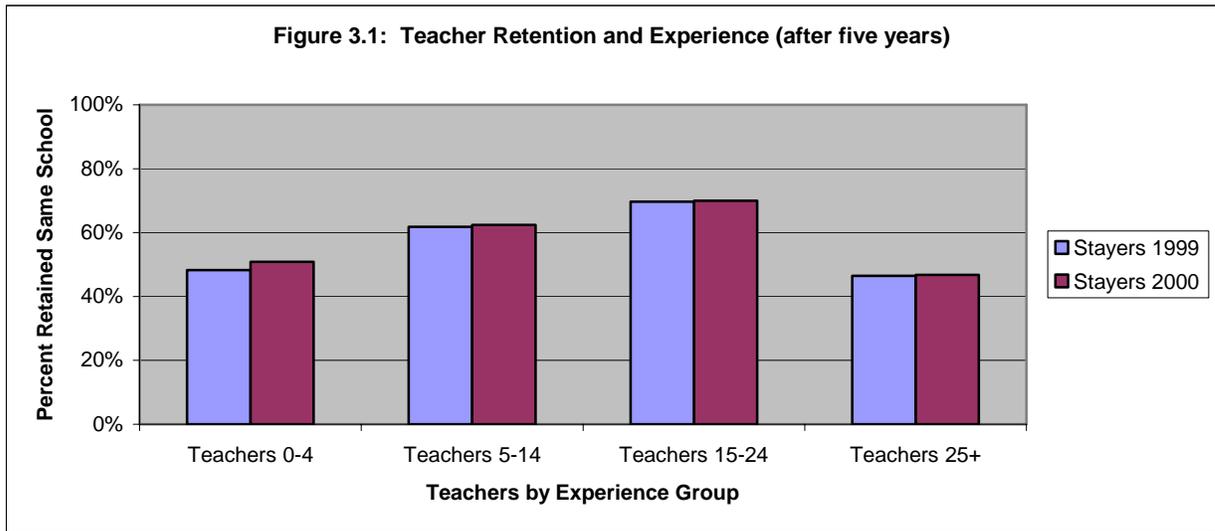
Several details about the mobility of the state’s entire teacher workforce become clear from examining Table 3.1. The actual “drain” on the teacher workforce is considerably less than is often believed. Only a fifth of all teachers leave the Washington education system after a five-year period. Generally speaking, districts are not losing many teachers to other districts. On average, eight percent of all teachers moved to another district after five years based on the two-point in time analyses. Among the teachers who moved from their original building, more either left the Washington system (20 percent) or moved to another assignment within their current district (13 percent) than left for employment in another school district in the state. These statistics are somewhat more pronounced for novice and beginning teachers, and will be explored in greater depth in a subsequent section of this report.

Given current data limitations, it is not possible to track those who leave the Washington education system to their next occupational destination. However, one can reasonably assume that the likely reasons for leaving include employment in education outside of

Washington state, employment outside of education, retirement, and departure from the workforce (often temporarily, due to child-rearing or other personal reasons).

Retention and Mobility and Years of Teaching Experience

Whether or not teachers stay in their school of origin or move elsewhere is partially related to their experience levels. In broad strokes, the experience and retention patterns for Washington’s teachers often mirror those found by researchers in other parts of the United States (e.g., Murnane, Singer & Willett, 1988). Teacher mobility and attrition is most pronounced for those in their early years of teaching (less than five years experience) and those in the later years of their career (25 or more years experience). Approximately sixty percent of Washington’s teachers fall into the mid-experience range, and districts generally retain two-thirds of those teachers. Figure 3.1 shows the retention of teachers in the same school by experience after five years for the two most recent time periods: 1999 to 2003 and 2000 to 2004.



Teachers’ Age in Relation to Staying and Leaving

Closely related to years of teaching experience, teachers’ age also impacts retention. By examining teachers within age-range categories it is possible to determine the distribution of the workforce by age and estimate the proportion of teachers who may be reaching retirement.

In order to fully understand the age dynamic, three aspects are important to keep in mind: 1) the distribution of the state workforce by age, 2) the percent of teachers who exit within each age range, and 3) the percent of the total number of exiters that these teachers represent. For the statewide analyses, we use unduplicated teacher headcounts and teachers’ age in 2002, 2003 and 2004 (age at the end of each five year period). We represent teachers in five age ranges. Table 3.2 provides a distribution of the workforce

by age, and exiters from the Washington education system by age across three time periods.

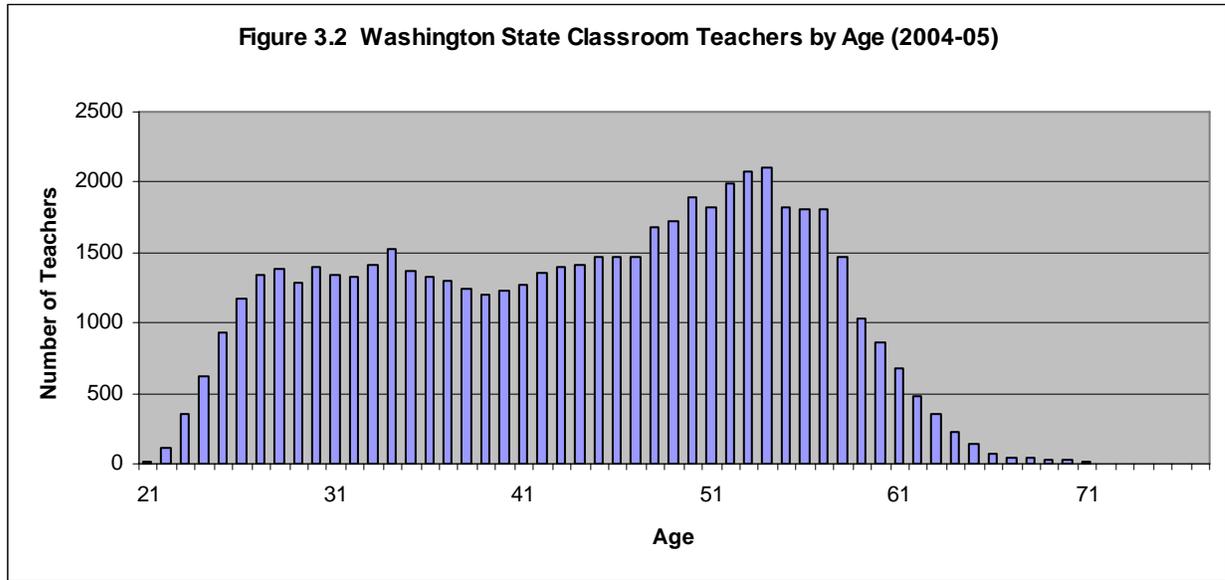
Table 3.2: Exiters By Age* Statewide						
Two-Point in Time Analysis: Across Three Time Periods						
	1998/99 - 2002/03		1999/00 - 2003/04		2000/01 - 2004/05	
	Number	Percent	Number	Percent	Number	Percent
Total Teachers	51,996		52,652		53,216	
Total Exiters (out of WA ed System)	10,721	21%	10,628	20%	10,601	20%
<i>21-30 Age Range</i>						
Workforce in Age Range	2,888	6%	3,103	6%	3,349	6%
Exiters in the Age Range	810	28%	828	27%	851	25%
Exiters of Total Exiters		8%		8%		8%
<i>31-40 Age Range</i>						
Workforce in Age Range	12,008	23%	12,401	24%	12,502	23%
Exiters in the Age Range	2,505	21%	2,539	20%	2,439	20%
Exiters of Total Exiters		23%		24%		23%
<i>41-50 Age Range</i>						
Workforce in Age Range	14,695	28%	14,160	27%	13,810	26%
Exiters in the Age Range	1,329	9%	1,246	9%	1,200	9%
Exiters of Total Exiters		12%		9%		11%
<i>51-55 Age Range</i>						
Workforce in Age Range	11,473	22%	10,877	21%	10,435	20%
Exiters in the Age Range	1,649	14%	1,459	13%	1,369	13%
Exiters of Total Exiters		15%		14%		13%
<i>56+ Age Range</i>						
Workforce in Age Range	10,932	21%	12,113	23%	13,120	25%
Exiters in the Age Range	4,427	40%	4,556	38%	4,742	36%
Exiters of Total Exiters		41%		43%		45%

*Based on age at the end of each five year period.

On average, approximately one-fifth of all teachers in the state were no longer in the Washington education system five years later. By considering teachers in the oldest age bracket (56 years and older) who are leaving the Washington system of education altogether (assuming that few individuals leaving the Washington education system at this age do so to take a new job or raise a family), we can estimate that more than 40 percent are leaving due to retirement. This pattern is consistent across the three time periods that were examined.

Based on this and earlier work (Plecki et al., 2003), the number of teachers eligible to retire will increase as the wave of baby boomers retire. For example, from 2002 to 2004, there was an increase of four percent (from 21 to 25 percent) in the proportion of teachers who were 56 and older. Additionally, there was a four percent increase (from 41 to 45 percent) in the proportion of exiters from the workforce who were 56 and older (see

Table 3.2). As shown in Figure 3.2, a sizeable group of teachers nearing retirement can be seen moving through the Washington education system.



This also can be observed in the trend data for teachers age 55 or older with 25 or 30 years of experience, as shown in Table 3.3. The percentage of the workforce in each of these age and experience categories has increased across the three time periods.

Table 3.3: Teachers Nearing Retirement by Age and Years of Experience: Trend Data Across Three Time Periods						
	1996		2000		2004	
	Number of Teachers	Percent of Workforce	Number of Teachers	Percent of Workforce	Number of Teachers	Percent of Workforce
Total Number of Teachers	50,387		53,216		55,914	
Age 55+ and 30 years experience	1,320	2.6%	1,786	3.4%	3,057	5.5%
Age 65+ and 25 years experience	158	0.3%	213	0.4%	397	0.7%

Several issues should be taken into consideration when considering whether the state is preparing enough teachers to replace this group of aging educators. For instance, while this older group of teachers may be nearing retirement, one cannot assume that all of those who are eligible to retire will do so at the same time. Additional issues include the number of individuals who are being prepared in Washington’s teacher preparation institutions, and teachers who come to work in Washington from out of state.

While there is some variation in the number of individuals receiving initial credentials in any given year, over the last six years the state produced on average 3,432 new certified teachers each year. Understandably, not all of these individuals will choose to pursue a teaching career or choose to teach in Washington state. It is also important to recognize

that Washington does gain teachers moving to Washington from other states. In recent years, Washington has tended to gain more teachers than it loses to other states.

As one might expect, the majority of teachers entering the profession in Washington are between the ages of 21 and 40 (80.9 percent in 2004). However, our findings also indicate that nearly a fifth (19.1 percent) of the beginning teachers who entered the profession in 2004 were over 40, potentially impacting the workforce dynamic if the trend in entering the teaching profession at a later age continues (see Table 4.2, on page 34).

It is also important to understand whether those new entrants into the workforce are prepared in the subject matter and grade levels where shortage areas occur. Currently the state does not possess the data capacity to explore this issue of teacher assignment. This discussion of teacher supply and demand does not take into account the potential impact of any policy or economic changes that might occur in the state. Significant policy changes such as class-size reduction measures or a downturn in the economy can directly impact the dynamics of teacher supply and demand.

Retention and Teachers of Color

As we consider the dynamics of teacher retention in districts and schools, one further characteristic of the state's teacher workforce deserves close attention. As the state seeks to cultivate a more diverse educator workforce, state and local policymakers need good data on how teachers of color are distributed, and whether they are staying, moving or leaving.

As was mentioned previously, while the percentage of teachers of color has remained steady or grown slightly during this time period, these numbers represent only a small fraction of the total teacher workforce. Overall, Asian/Pacific Islander teachers and Hispanic/Latino/a teachers were retained in the same school at approximately the same rates as white teachers (see Table 3.4). Fifty-nine percent of white teachers were retained in the same school five years later, while on average 58 percent of Asian and 56 percent of Hispanic/Latino/a teachers stayed. However, African American and Native American teachers were retained at somewhat lower rates (on average 49 percent and 51 percent, respectively, remained in their original schools over the last two time periods).

Table 3.4: Teacher Ethnicity and Retention				
Two-Point in Time Analysis: Across Two Time Periods				
Retention and Mobility after 5 Years	1999/00 - 2003/04		2000/01 - 2004/05	
	Number	Percent	Number	Percent
All Teachers*	52,652		53,216	
Stayers (same school)	30,786	58.5%	31,489	59.2%
Movers (in district)	7,036	13.4%	7,226	13.6%
Movers (out of district)	4,202	7.9%	3,900	7.3%
Exiters (not in WA ed system)	10,628	20.2%	10,601	19.9%
Asian/Pacific Islander Teachers	1,172	2.2%	1,206	2.3%
Stayers (same school)	673	57.4%	709	58.8%
Movers (in district)	186	15.9%	194	16.1%
Movers (out of district)	80	6.8%	79	6.6%
Exiters (not in WA ed system)	233	19.9%	224	18.6%
African American Teachers	823	1.6%	830	1.6%
Stayers (same school)	392	47.6%	420	50.6%
Movers (in district)	156	19.0%	139	16.7%
Movers (out of district)	60	7.3%	56	6.7%
Exiters (not in WA ed system)	215	26.1%	215	25.9%
Hispanic/Latino Teachers	1,001	1.9%	1,062	2.0%
Stayers (same school)	547	54.6%	606	57.1%
Movers (in district)	188	18.8%	208	19.6%
Movers (out of district)	99	9.9%	91	8.6%
Exiters (not in WA ed system)	167	16.7%	157	14.8%
Native American Teachers	418	0.8%	431	0.8%
Stayers (same school)	217	51.9%	219	50.8%
Movers (in district)	66	15.8%	75	17.4%
Movers (out of district)	42	10.0%	44	10.2%
Exiters (not in WA ed system)	93	22.2%	93	21.6%
White Teachers	49,238	93.5%	49,687	93.4%
Stayers (same school)	28,957	58.8%	29,535	59.4%
Movers (in district)	6,440	13.1%	6,610	13.3%
Movers (out of district)	3,921	8.0%	3,630	7.3%
Exiters (not in WA ed system)	9,920	20.1%	9,912	19.9%

*Number and percent of teachers provided in the initial year of analysis (either 1999 or 2000)

Some variation also exists across the different racial/ethnic groups with regards to the percentage of teachers who exit the Washington education system after a five-year period. White, Asian/Pacific Islander and Native American teachers leave at similar rates to the statewide statistic (approximately 20 percent after five years). However, the pattern for Hispanic/Latino/a and African American is somewhat different. Hispanic/Latino/a teachers exit at somewhat lower rates (on average, 16 percent), while African American teachers exit at considerably higher rates (on average, 26 percent).

Since the rate of attrition from the workforce is linked to the age and experience levels of teachers, we gathered additional trend data for African American teachers, in an effort to understand the higher rates of exiters among this population (see Appendix D). This information reveals that the population of African American teachers is somewhat older with fewer younger teachers entering the workforce in subsequent years. The aging of African American teachers may partially explain higher rates of leaving from the Washington education system (probably due to retirement), but it also raises a concern that there may be fewer African Americans entering the Washington teacher workforce.

Regional Differences in Teacher Retention and Mobility

Teachers' decisions to stay at or leave a particular school may also be influenced by regional location within the state. To examine regional differences, we grouped teachers within counties and examined teacher FTE as represented within those counties and also by county within regions of the state. Washington's thirty-nine counties are included in this analysis across two time periods (1999-2003 and 2000-2004). Appendices E.1 and E.2 provide specific information on retention by county and regional groups of counties. For the regional analysis, we chose to present King County separately.

When examining regional groups by county (see Appendix E.2), King County reveals the lowest rates of retention with regard to teachers staying in the same school after five years (on average 53 percent, compared with 59 percent statewide), as well as slightly higher rates of leavers from the Washington education system (24 percent on average, compared with 20 percent statewide). Regardless of region, the statewide pattern of stayers, movers and leavers shows little variation by region of the state. While few differences are noted by these regions, some small differences can be seen in individual counties. When examining individual counties, one should keep in mind the considerable variability in the number of teachers in the county. Small numbers of teachers in a given county can impact the reported retention and mobility rates (see Appendix E.1).

Because small and rural schools face a distinct set of challenges with regard to locale, regional socio-economic conditions, and attracting, retaining and supporting teachers, we conducted a separate but related study of teacher retention and mobility. Using a sample of one-half of all small and rural districts in the state (those with an enrollment of less than 1,000 student FTE), we found that the general patterns for teachers in small and rural districts were similar to all teachers statewide for "stayers" and "leavers." Differences do exist in small and rural districts with respect to the rates at which teachers move to other districts, particularly novice teachers (less than 5 years of experience) and beginning teachers (less than 1 year of experience). Twenty percent of novice teachers in the small and rural districts move out of district compared with only 12 percent of novice teachers statewide. Beginning teachers in small and rural districts are also less likely to stay at the same school after five years. Some regional differences were noted when small and rural districts were grouped by county. For example, teacher retention in small and rural districts in the central Washington region (Chelan, Douglas, Kittitas, Yakima and Klickitat counties) is considerably lower (53 percent) compared with the southwest

region of the state (69 percent retained) (Clark, Cowlitz, Lewis, Pacific, Skamania, and Wahkiakum counties).⁷

Comparing Teacher Retention in Different Districts

Teacher retention does differ to some extent by district. In order to examine retention and mobility at the district and school levels, we turn to our analysis of the 20 sample districts. Listed in order of student enrollment, these districts include: Seattle, Tacoma, Spokane, Lake Washington, Edmonds, Evergreen (Clark), Bellevue, Yakima, South Kitsap, Bellingham, Olympia, Richland, Oak Harbor, Walla Walla, Aberdeen, Ephrata, Naches Valley, Hockinson, Oroville and Winlock. While not statistically representative of the state's districts⁸ this strategic sample provides a representation of districts and schools in various parts of the state serving students with widely varying educational needs and circumstances. By disaggregating the data at district and school levels, patterns of high and low retention can be identified, as well as the relationship between retention and school poverty and ethnicity, and inequities that may not be so visible at the state level.

A close look at teacher retention and mobility in these sample districts reveals that after five years, districts differ in the extent to which their teachers stay at the same school. The percentage of teachers who stayed at the same school within their district varied from 44 to 77 percent when averaged across the three time periods. The same variation is true of districts' ability to retain teachers within district boundaries. One district kept a little over half (58 percent) of its teacher workforce after five years, while another retained, on average, 82 percent. In most districts, close to one-fifth of teachers exited the Washington system after five years. Only one district in the sample lost more than 30 percent of their teachers from the Washington system as a whole. Nearly all of the districts' retention statistics improved over the three time periods, as did statewide retention statistics. Some districts, such as Bellevue, showed a considerable increase in the percentage of teachers retained in the same school (Bellevue's stayers in the same school increased nearly ten percentage points across the three time periods). District-level retention statistics for each of these twenty districts and the state as a whole are found in Appendix F and G. Appendix F contains information regarding the 10 largest districts in the sample, and Appendix G the 10 smaller sample districts.

The movement of teachers both within districts and externally is related to district size. In short, larger districts tend to have greater movement of teachers to other schools within the district and less movement to other districts in the state. Curiously, the three largest districts in the state have some of the lowest rates of movement to other districts. For Seattle, Tacoma and Spokane, the rate of teacher mobility to other districts was 5, 4 and 3

⁷ For more information on this study of small and rural districts see "Examining Teacher Retention and Mobility in Small and Rural Districts in Washington State," (Elfers & Plecki, 2006).

⁸ A statistically representative sample of the state's districts would result in a sample comprised primarily of districts with under 1,000 students (half of the districts in the state), rendering the sample less useful for this set of analyses.

percent, respectively, averaged across three time periods. These statistics are lower than the state average of eight percent.

Comparing Retention Among Schools Within the District

When one compares schools within a district on their teacher retention rates, the following pattern emerges: *there are even greater differences between schools within a district than between districts*. As Table 3.5 demonstrates with data from the 1998 to 2002 time period, schools within a given district can range from those that have very high turnover of teaching staff across five years (the lowest rate of retention is 11 percent in one district) to those that retain 100 percent of their staff. The coefficient of variation, a simple metric for characterizing how much a district's schools differ from one another in their ability to keep teachers over the five-year period, captures the pattern across all of the district's schools. For example, of the 15 largest districts in the sample, Seattle and Bellevue show the greatest variation among schools, while Spokane and Yakima, among others, show less variation.

The measure of variation in the following table, along with the mean percentage of teachers retained in the school, suggests the following: in some districts, school-level retention rates are consistently higher than other districts. For example, Spokane shows the highest average retention rate per school (68 percent), and Bellevue the lowest (39 percent) during this time period. Additionally we compared retention rates by school level (elementary, middle and high), but we found no significant differences.

Table 3.5: Percent Teachers Retained at the Same School, by District and School Level (largest 15 districts in sample): 1998/99 to 2002/03 Two Point in Time Analysis

	Number of Schools in 1998	Lowest % Retention Rate	Highest % Retention Rate	Mean % Retention Rate	Coefficient of Variation
All Schools	429	13	100	55	0.26
Seattle	92	13	94	49	0.31
Tacoma	50	28	77	54	0.22
Lake Washington	38	22	75	54	0.20
Bellevue	26	15	64	39	0.34
Olympia	18	37	100	67	0.19
Edmonds	31	25	75	52	0.24
South Kitsap	14	48	80	65	0.17
Richland	11	43	71	59	0.13
Evergreen (Clark)	24	32	64	51	0.19
Bellingham	18	35	72	54	0.18
Oak Harbor	9	51	74	61	0.14
Spokane	46	41	90	68	0.17
Yakima	20	40	86	64	0.18
Walla Walla	9	49	71	59	0.15
Aberdeen	9	36	75	61	0.20
Retention by School Level					
Elementary	287	13	100	56	0.26
Middle	72	22	80	54	0.24
High	54	15	83	54	0.24

Number of schools in each analysis varies, as smallest districts and combination schools are not included in all analyses.

This initial examination of within-district variation, coupled with the variation among districts in poverty rates, student demographics, and size, highlights the importance of understanding the specific context of an individual district when analyzing the retention and mobility of teachers.

Retention and School Characteristics, and its Relation to Student Performance

How is teacher retention or mobility related to student poverty, race/ethnicity, or performance on state assessments? To investigate this relationship, we merged data regarding student characteristics and student achievement. To be sure, a host of other factors that may impact student learning are not included in the analysis, but the factors we considered are likely to capture some essential aspects of the retention story. Only data collected systematically for all schools in the sample was included (using data from the 1998 to 2002 time period). With regard to student performance measures, we used the school-level reading and mathematics scores on the 2002 Washington Assessment of Student Learning (WASL).

A closer look at individual districts, with emphasis on the larger ones, affords an opportunity to examine the connections among student characteristics, teacher retention and student performance in more detail, without the potentially confounding effects of differing district conditions. We did so with the seven largest districts in our sample during the 1998 to 2002 time period. Table 3.6 shows one aspect of that analysis, by displaying the simple correlation⁹ between rates of teacher retention (in the same school) with indicators of the school’s student population and performance.

	Seattle	Tacoma	Spokane	Bellevue	Edmonds	Evergreen	Lake Washington
Number of schools	92	51	46	26	31	24	38
<u>Teachers retained by percent...</u>							
Poverty	-0.49	-0.17	-0.20	-0.23	-0.18	-0.11	0.44
White students	0.41	0.29	0.10	0.24	0.11	-0.30	-0.41
African American students	-0.43	-0.34	-0.02	NA*	NA	NA	NA
Hispanic students	-0.21	-0.08	-0.23	-0.31	-0.21	NA	NA
Native American students	-0.06	NA	NA	NA	NA	NA	NA
Asian students	0.03	-0.09	NA	0.01	0.04	0.24	0.17
Bilingual students	-0.17	0.00	-0.04	-0.27	-0.23	-0.21	0.57
WASL reading	0.43	0.04	0.04	-0.04	0.40	0.55	-0.32
WASL math	0.44	0.06	0.04	0.00	0.33	0.39	-0.41

*Note: NA refers to correlations that were not calculated due to extremely low sample size.

Taken one district at a time, several things appear. First, there is correlational evidence that within the district, teacher retention is linked to the composition of the school’s student body – in particular, the poverty level of the school’s students. Most noticeably,

- In six of seven districts, schools serving a higher-poverty student population retain fewer teachers than schools serving a lower-poverty student population.
- In five of seven districts, schools with a greater percentage of white students have higher retention rates.
- In Seattle and Tacoma, schools serving a larger proportion of African American students retain fewer teachers.

Even though the overall pattern is generally similar in most of the seven districts, the strength of the relationship between teacher retention and student characteristics varies across the districts. Seattle, for example, shows a more pronounced relationship between

⁹ A correlation is a statistic that describes the degree of relationship that exists between two variables. The correlation between any two variables can be positive, negative or zero. The closer the number is to zero, the weaker the relationship, with zero indicating no relationship. The closer the number is to one, the stronger the relationship. A positive correlation means that increases in one correspond to increases in another, while a negative correlation means that increases in one correspond to decreases in another.

teacher retention and these student characteristics. This perhaps reflects the fact that there are large numbers of schools and the schools vary more on these student characteristics. However, the analysis makes clear that the link between poverty, teacher retention and student performance is not largely or uniquely an urban phenomenon. Evidence of this relationship was found in large suburban districts as well. For example, from the initial correlational data, we find a strong correlation between retention and student performance in Seattle, Edmonds and Evergreen.

These results, combined with the data about the relation between retention rates and student ethnicity, prompt us to suggest that the examination of teacher retention on a school-by-school basis is most informative when grounded in the individual context of the district.¹⁰ Clearly, the analyses presented here beg further questions about other district conditions that may be important to consider when examining differences in teacher retention at the school level.

Retention of School Principals

A potentially important part of the teacher retention story resides in the stability of leadership within the school. School leadership can play an important role in teacher job satisfaction and the decision of teachers to stay in a particular school or remain in the profession. In our Fast Response survey work (Knapp et al., 2004) teachers cite the significance of a collegial environment as one of the most important reasons for staying at their current school. Support from an administrator was also mentioned as a key factor. Evidence from these surveys suggests that leadership instability or turnover may contribute toward a less cohesive school staff and an increase in teacher turnover or movement to other schools.

To consider this possibility, principal turnover was examined in each of the 416 schools represented in the 20-district sample for the 1998-2002 time period.¹¹ With respect to the retention and mobility of school principals in the 20-district sample, analyses revealed that school principals are more likely to move than teachers, though they typically do so within their own districts. Of all the schools in the sample, only 36 percent had the same principal for each year over the five-year period. Approximately two-thirds of principals stayed within district boundaries, as compared to three-quarters of teachers. Principal stability in schools has some bearing on teacher retention. To some extent, the more principals a school had over the five-year period, the lower the retention of teachers. Retention rates for principals at elementary, middle and high schools are similar in most cases. However, in Tacoma and Spokane, high school principals are retained at higher levels than in other districts.

¹⁰ For school-by-school data on all of the schools in the 20-district sample see the report, "Teacher Retention and Mobility: A Look Inside and Across Districts and Schools in Washington State," (Plecki et al., 2005).

¹¹ The number of schools included in the principal retention analyses is not identical to the number used in the teacher retention analysis because for several schools, principal information could not be located in the S-275 database. Consequently, the schools for which we could not identify a principal were not included in the principal retention analyses.

Conditions Impacting Teacher Mobility, From the Teachers' Perspective

Patterns of mobility, attrition and retention derived from database statistics raise many questions about *why* teachers stay or move. To answer these questions, one of our Fast Response surveys included questions about teachers' decisions to consider moving from one school to another. The survey work also uncovered differences in factors influencing mobility decisions between teachers working in high- and low-poverty schools.

When looking at the entire sample of teachers, particular conditions stood out as strong reasons for teachers to remain in their current schools. These are related to the type or stability of teaching assignment, the nature of their colleagues and collegial community, school location, personal or family considerations, school climate, and support in dealing with parents and students. Table 3.7 provides details about teachers' responses.

	Strong Reason to Stay	Moderate Reason to Stay	Moderate or Strong Reason to Leave	Not a Factor
My teaching assignment	75%	17%	5%	3%
Presence of staff with whom I feel comfortable working	68%	22%	7%	1%
Stability in assignment	65%	23%	6%	6%
Collegial community with other teachers	63%	27%	8%	2%
Geography region or school location	60%	24%	11%	5%
Personal or family considerations	56%	20%	12%	11%
Presence of staff who share my values about teaching and schooling	52%	38%	7%	1%
Overall school climate	51%	35%	12%	1%
Staffing willingness to go the extra mile	51%	34%	11%	3%
Respectful and orderly learning environment	49%	31%	17%	2%
Support in dealing with parents and students	48%	29%	17%	4%

Sample (Year 2): N=313

As can be seen in Table 3.7, two of the three most frequently cited factors concern the nature and stability of their teaching assignment. This finding regarding the importance of teaching assignment is consistent with results from the Teacher Follow-up Survey (TFS) from the National Center for Education Statistics (Luekens, Lyter & Fox, 2004). Forty percent of TFS respondents indicated that an opportunity for a better teaching

assignment was a reason to move to a new school. Our survey results also indicate that a majority of teachers consider the presence of staff with whom they feel comfortable working, collegial community with other teachers, presence of staff who share their values about teaching and schooling, and staff willingness to “go the extra mile” to be strong reasons to stay in their school. The geographic location of their school, the school’s proximity to home, and personal and family considerations all comprise additional reasons which teachers identify as influences on their decision to stay in a particular school.

Teachers’ reasons for wanting to stay in their schools vary somewhat by region of the state. The largest regional difference concerns cost of living. More than three times as many teachers in Eastern Washington (58 percent) noted cost of living as a strong reason to stay at their schools than teachers in the Central Puget Sound region (21 percent). Only one-third (33 percent) of teachers located in Western Washington but outside of the Central Puget Sound indicate that cost of living is a strong reason to stay.

The reasons which might influence a teacher to move from their current school are more varied and less strongly held than the reasons teachers give for remaining in their schools. Table 3.8 provides the most commonly cited reasons teachers indicate if they consider leaving their school (in this table we combine “strong” and “moderate” reasons to leave).

Table 3.8: Reasons Teachers Give for Moving to Another School		
	Moderate or Strong Reason to Leave	Not a Factor
The amount of support at home for students' learning (e.g., homework help, positive attitudes towards schooling)	35%	8%
Degree to which time is built into the school day, week, or year to enable professional learning	34%	9%
Resources or financial incentives to support professional learning	33%	11%
Nature of support services to meet students' needs	30%	8%
Level of disciplinary issues in teaching students at this school	29%	6%
Fairness in how staff are treated	25%	3%

Sample (Year 2): N=313

As the table reveals, no single reason dominates. The amount of support at home for students’ learning (e.g., lack of homework help or positive attitudes towards schooling) is viewed by approximately a third of teachers (35 percent) as a strong or moderate reason to consider leaving their school. A third of teachers also indicate that the degree to which

time is built into the school schedule to enable professional learning, and the resources or financial incentives provided to support professional learning form moderate or strong reasons to leave their schools.

While Table 3.8 identified factors that were cited as reasons influencing teachers' decisions to leave the school, other influences were characterized by teachers as "not a factor" in their decision. Others which teachers identified as "not a factor" included the following: the percentage of students from historically underrepresented racial or ethnic groups (41 percent), salary (30 percent), the amount of pressure parents or community members exert on the school to boost student achievement (24 percent), how the school mentors or supports inexperienced teachers (21 percent), the value placed on diversity (22 percent) and school size (20 percent).

One regional difference emerged with respect to the influence of salary on teachers' decisions to stay or leave a school. More teachers in Western Washington (22 percent) consider low salary to be a moderate or strong reason to leave their current school, compared with only 9 percent of teachers in Eastern Washington. This result is consistent with the finding regarding cost of living as a strong reason to stay at a school for the majority of teachers in Eastern Washington (where cost of living is lower).

The relation between teacher retention and the poverty level of the school raises important questions about how teachers' reasons to stay or change schools might differ in low- and high-poverty school settings. Understanding teachers' perspectives on this matter is critically important, given that high-poverty schools are often targets of both state and district policy action. Thus, we compared survey responses of those teachers working in schools with greater than 50 percent of students in poverty¹² with teachers working in schools with poverty rates of 20 percent or less. These two groupings represented a total of 210 teachers.

The items which emerged as having the greatest differences between teachers in high- and low-poverty schools are presented in Table 3.9.

¹² Poverty as measured by Free or Reduced Price Lunch count.

Table 3.9: Reasons Teachers Give for Leaving High- vs. Low-Poverty Schools

Percent of teachers indicating a moderate or strong reasons to leave	Low Poverty Schools	High Poverty Schools
The amount of support at home for students' learning (e.g., homework help, positive attitudes towards schooling)	16%	62%
Level of disciplinary issues in teaching students at this school	10%	53%
Nature of support services to meet students' needs	18%	44%
Resources or incentives to support professional learning	23%	43%
Ease of communication with parents about their children's learning	4%	40%
Degree to which parents or community members actively participate in school	5%	35%
Responsiveness of students to teaching and school	7%	35%
Level of student performance at the school	6%	33%

Sample (Year 2): N=210

As can be seen in Table 3.9, certain conditions are likely to make a big difference in teachers' desire to stay at a school. For example, teachers' views on the amount of support at home for students' learning (62 percent compared to 16 percent) and the level of disciplinary issues in teaching students (53 percent compared to 10 percent) vary considerably depending on the poverty level of the school. Additionally, the ease of communication with parents about their children's learning, the degree to which parents and community actively participate in school, and the responsiveness of students to teaching and school are additional influences that distinguish the views of teachers in high- and low-poverty schools.

From national survey data we know that teachers who leave a school are more critical of school leaders on a variety of leadership measures (Luekens, Lyter & Fox, 2004). Our survey work reveals that teachers view leadership and leadership support differently when they are situated in high- and low-poverty schools. Consider for example, the percentages of teachers in low-poverty schools identifying aspects of school leadership as a strong reason for staying at their current school, in Table 3.10 below.

Table 3.10: Aspects of School Leadership or Leadership Support that Might Influence a Teacher to Stay at their Current School, Varying by Poverty Level

Percent of teachers indicating a <u>strong</u> reason to stay	Low Poverty Schools	High Poverty Schools
Degree to which a respectful and orderly learning environment has been established	59%	38%
Support in dealing with parents and students	58%	35%
Fairness in how staff are treated	52%	38%
Degree of focus on student performance in the classroom	48%	29%
Organization of time in the school day	32%	21%

Sample (Year 2): N=210

First, the data signal that leaders can affect the school’s working environment in ways that matter to teachers: leaders’ actions and values touch, among others, the treatment of staff, the orderliness of the school environment, the focus on student learning, the organization of time, and interactions with parents. Second, the generally low response of teachers in high-poverty schools on measures of school leadership suggests that most teachers in these settings may not see their school leaders as particularly effective in these aspects. To be fair, there are often major leadership challenges in schools serving economically disadvantaged student populations. Third, teachers in lower-poverty schools are more likely to see leadership support as a compelling reason to stay.

Brief Summary and Policy Implications

For the most part, the problem in Washington state is not solely about teacher supply (though there are specific shortages in mathematics, science, special education and bilingual education), nor is it solely about teacher retention (though there are particular districts and schools where this is a problem). Instead, a more widespread issue exists regarding the quality and type of support for teachers’ work. Policymakers can productively focus attention on enhancing support mechanisms (as in professional development systems, mentoring, and on-site assistance) for classroom teachers. When addressing the issue of retention in specific districts and schools where difficulties are present, policy makers and leaders should consider that retention issues may depend on subtle interactions between forces and conditions within the district, as much as from elsewhere outside the district. In this context, leaders can profitably spend time analyzing where schools are succeeding at retaining teachers and where they are not, how retention patterns map on to the relative poverty level of student populations within the district, and how this impacts learning for students.

Understanding the specific dynamics associated with the retention and mobility of school principals is also worthy of district leaders’ attention. In addition, policymakers and educators should take note of the factors which influence teachers’ decisions to stay or leave a school. Issues such as teaching assignment, collegial community and time for

professional learning should be taken into consideration. Finally, particular attention should be paid to issues specific to retaining teachers in high-poverty schools, such as disciplinary issues, the nature of support services for students and support at home for student learning.

IV. Beginning and Novice Teachers

The Case of Novice Teachers

Attrition at the end of a teaching career is normal and inevitable. Attrition in the early years of teaching is more troublesome, as it may represent a premature loss of teaching talent. It is well-known that new teachers leave the profession at higher rates than experienced teachers (Murnane, Singer & Willett, 1988; Murnane, 1984; Lortie, 1975). Attrition and mobility is common in the initial stages of most occupations as individuals learn about the workplace and discover whether or not the job is a good fit. However, induction into the teaching profession is particularly critical because teaching requires a significant acquisition of skills in the first few years, and a high turnover of beginning teachers can impact the quality of instruction that students receive (Lankford, Loeb & Wyckoff, 2002).

The findings from earlier exploratory work we have conducted provide evidence to support the notion that novice teachers in Washington have higher attrition and mobility rates than their more senior colleagues, but not to the extent that is often heard in policy circles: “fifty percent of beginning teachers leave the profession in the first five years.” In a sample of 20 districts in the state we found that novice teachers change schools at a higher rate, often to another school within the district (Plecki et al., 2005). This report provides new data and analysis about the specific workforce characteristics, attrition, retention, and mobility rates for a cohort of all beginning teachers in Washington state.

The main points in this section include the following:

- Attrition rates for beginning teachers are lower than are often believed.
- Both beginning and novice teachers move to other schools at higher rates, with the highest rates of movement or attrition seen after the first year.
- A quarter of beginning teachers are located in high poverty schools. When beginning teachers move, the most common move is to a school of similar poverty level.
- Novice and beginning teachers in small and rural districts move out of the district at somewhat higher rates than their peers statewide.

In this chapter, we describe the characteristics of a cohort of all beginning teachers in Washington in 2000 and teachers’ employment status after five years. We also provide some comparison data for all teachers in the workforce and for a subgroup of novice teachers (0 to 4 years of experience) during the same time period. To take the analysis a step further, we also provide additional detail about the 2000 cohort of beginning teachers

by presenting their mobility, retention, and attrition rates for each year between 2000-01 and 2004-05.

Table 4.1 provides descriptive characteristics for all classroom teachers in Washington state in 2000 and retention and mobility after five years. Data is presented for beginning teachers (less than one year of experience), novice teachers (0 to 4 years of experience), and all teachers.

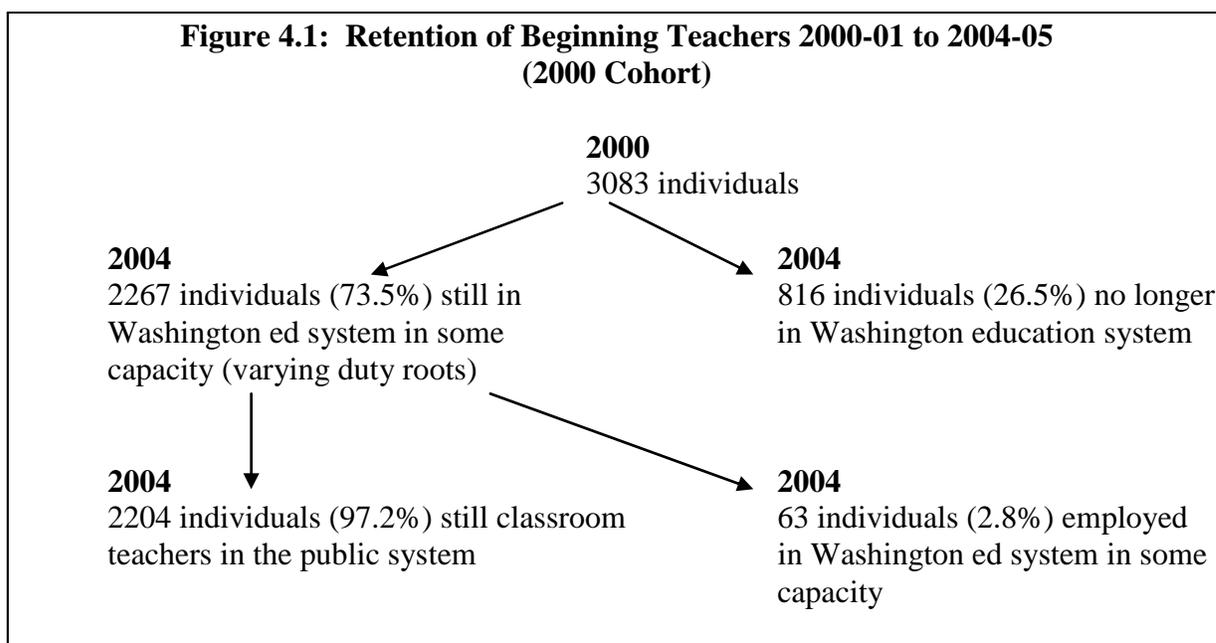
Table 4.1: Characteristics of the Washington Teacher Workforce in 2000 and After 5 Years All Teachers, Novice Teachers and Beginning Teachers (Retention and Mobility Two-Point in Time Analysis: 2000-01 and 2004-05)						
	All Teachers* (n = 53,216)		Novice Teachers 0 - 4 years experience (n = 12,468)		Beginning Teachers Less than 1 yr exp (n = 3,083)	
	Number	Percent	Number	Percent	Number	Percent
<i>Retention and Mobility (after 5 yrs)*</i>						
Stayers (in same school)	31,489	59.2%	6,340	50.9%	1,402	45.5%
Movers (in district)	7,226	13.6%	1,829	14.7%	455	14.8%
Movers (out of district)	3,900	7.3%	1,525	12.2%	410	13.3%
Exiters (not in WA ed system)	10,601	19.9%	2,774	22.2%	816	26.5%
<i>Age in 2000</i>						
21-30	8,652	16.3%	7,051	56.6%	1,977	64.1%
31-40	12,024	22.6%	2,954	23.7%	566	18.4%
41-50	17,180	32.3%	1,952	15.7%	426	13.8%
51-60	14,269	26.8%	494	4.0%	111	3.6%
61+	1,091	2.1%	17	0.1%	3	0.1%
<i>Ethnicity</i>						
Asian/Pacific Islander	1,206	2.3%	377	3.0%	97	3.1%
African American	830	1.6%	245	2.0%	62	2.0%
Hispanic	1,062	2.0%	374	3.0%	98	3.2%
Native American	431	0.8%	104	0.8%	22	0.7%
White	49,687	93.4%	11,368	91.2%	2,804	91.0%
<i>Experience</i>						
Less than one year					3,083	5.8%
0-4 years	12,468	23.4%	12,468	23.4%	NA	NA
5-14 years	18,728	35.2%	NA	NA	NA	NA
15-24 years	13,663	25.7%	NA	NA	NA	NA
25 yrs or more	8,357	15.7%	NA	NA	NA	NA

*Duty root 31, 32 or 33 with FTE designation greater than 0 in 2000. Headcount statistics rather than FTE are used for this analysis.

Analysis of the statewide data for Washington indicates that about one-quarter (26.5 percent) of beginning teachers (less than one year of experience) leave the state's education system after five years, either temporarily or permanently. The pattern for novice teachers (less than five years of experience) is similar, with 22 percent of novice teachers exiting the Washington system five years later. In contrast to a frequently cited statistic that half of teachers quit in the first five years, these data indicate that 74 percent

of beginning teachers who started as classroom teachers in 2000 were still in the Washington education system in some capacity five years later.

Figure 4.1 illustrates the movement and attrition of the 2000 cohort of beginning teachers five years later. The beginning cohort of teachers in 2000 was comprised of 3,083 individuals. Five years later, 73.5 percent of these individuals were still working as educators in some capacity in Washington state, while 26.5 percent had exited the Washington education system either temporarily or permanently. Of those who stayed in the Washington education system after five years, nearly all (97.2 percent) were still classroom teachers. Only a small percentage of individuals were working in other assignments in public schools and districts. This analysis does not account for those who left Washington to teach in other states, and therefore cannot be used as an accurate measure of those who left the profession. These findings are consistent with analyses of the 1996 and 1997 cohorts of beginning teachers in Washington in which 72 percent and 74 percent respectively were still in the workforce after five years (Plecki et al., 2003).



Despite the fact that most new teachers are retained in the Washington education system after five years, the attrition rates for both beginning and novice teachers are higher than for the workforce overall. Beginning and novice teachers move to other schools and districts at higher rates than their more experienced colleagues. The percentage of beginning teachers who are still in the same school after five years is lower than the statewide average rate for all teachers (46 percent compared to 59 percent). Both beginning and novice teachers move to other districts at a higher rate (13 and 12 percent, respectively) than the overall teacher workforce (7 percent).

The statewide data about beginning teachers also reveals a disproportionate relationship between teachers of color and the increasingly diverse student population. A slight increase (less than 3 percent change) in the diversity of the teacher workforce can be seen

among both novice and beginning teachers, with most of the change explained by the increased proportion of Hispanic/Latino/a and Asian teachers. This suggests that the new entrants into the labor force do not represent a significant departure from the overall pattern of a predominately white population of teachers.

As can be seen in Table 4.2, the distribution of beginning teachers by age reveals some interesting trends, particularly with regard to the percentage of teachers over the age of 40 entering the workforce. In 1996, 13.9 percent of beginning teachers entering the workforce were over the age of 40, but by 2004 that percentage had increased to nearly a fifth of all beginning teachers (19.1 percent).

Age	1996 (n = 2,348)		2000 (n = 3,083)		2004 (n = 2,624)	
	Number	Percent	Number	Percent	Number	Percent
21-30	1,559	66.4%	1,977	64.1%	1,661	63.3%
31-40	462	19.7%	566	18.4%	463	17.6%
41-50	287	12.2%	426	13.8%	381	14.5%
51-60	35	1.5%	111	3.6%	113	4.3%
61+	5	0.2%	3	0.1%	6	0.2%

**Duty root 31, 32 or 33 with FTE designation greater than 0 in 2000. Headcount statistics rather than FTE are used for this analysis. Beginning teachers include those with less than one year of experience.*

Beginning Teachers: Characteristics and Mobility Patterns in the First Five Years

In order to more fully understand the characteristics, distribution and mobility patterns of new teachers, we chose to analyze the 2000 cohort of all beginning teachers in Washington in greater depth. For this analysis, we compiled additional descriptive data regarding their distribution by school characteristics, such as school size, poverty, the racial/ethnic diversity of students, and regional location. We also examined the full or part-time status of this cohort of beginning teachers and how they were distributed across districts in the state. Finally, we examined the mobility and attrition patterns of these teachers for each year over their first five years (from 2000 to 2004).

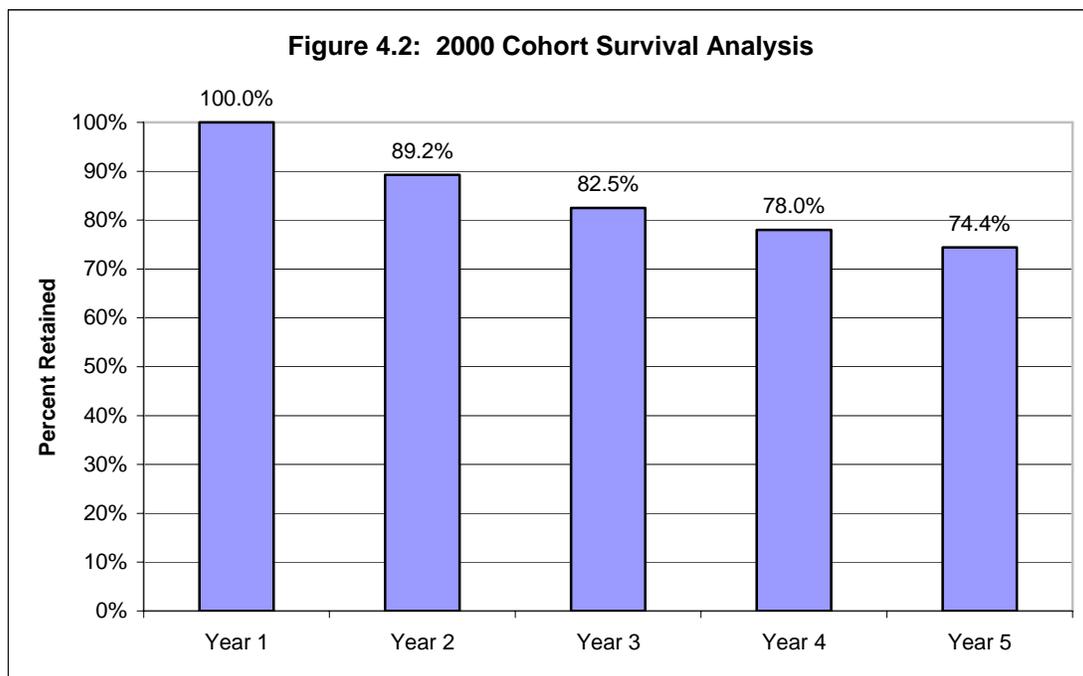
The vast majority of beginning teachers were employed full-time in 2000, with 83 percent having a full-time equivalent appointment of 90 percent or greater. After the first year, the percentage of full-time teachers increased to approximately 90 percent in each subsequent year. The 2000 cohort of beginning teachers were located in 232 of the state's 296 districts.¹³ Beginning teachers in 2000 comprised 5.7 percent of the total

¹³ Seven teachers were located in Educational Service Districts. For a complete display of teacher distribution by district, please refer to the report, "An Examination of Longitudinal Attrition, Retention and Mobility Rates of Beginning Teachers in Washington State" (Plecki, Elfers & Knapp, 2006).

teacher workforce. Among the larger districts in Washington which had higher proportions of beginning teachers in their workforce in 2000, were Seattle (10.3 percent), Bellevue (11.6 percent), Franklin-Pierce (12 percent), and Tukwila (16.2 percent).

Next, we examined how the 2000 cohort of beginning teachers were distributed across schools. The majority of beginning teachers were located in schools with an enrollment of 400 to 800 students. Approximately a quarter of the beginning teachers in 2000 were located in schools serving a substantial number of students in poverty (51 percent or more students enrolled in the Free or Reduced Price Lunch program).

A more detailed understanding of the retention and mobility patterns of beginning teachers can be understood by examining year by year trend data from 2000 to 2004. Figure 4.2 shows the percentage of beginning teachers from the original cohort of 3,051 teachers who were employed in the Washington education system in each year over this period (cohort survival analysis). As this chart illustrates, nearly 75 percent of the beginning teachers could be found in the Washington education system five years after entering the profession.



The mobility of beginning teachers in this cohort can be examined in greater detail by tracking the assignment of teachers each year over the five-year period. This analysis reveals the percentage of teachers who stayed in the same school, moved to another school or district, or left the Washington education system. The year-by-year mobility patterns of beginning teachers are displayed in Table 4.3.

Table 4.3: 2000 Beginning Teacher Cohort: Year by Year Retention and Mobility

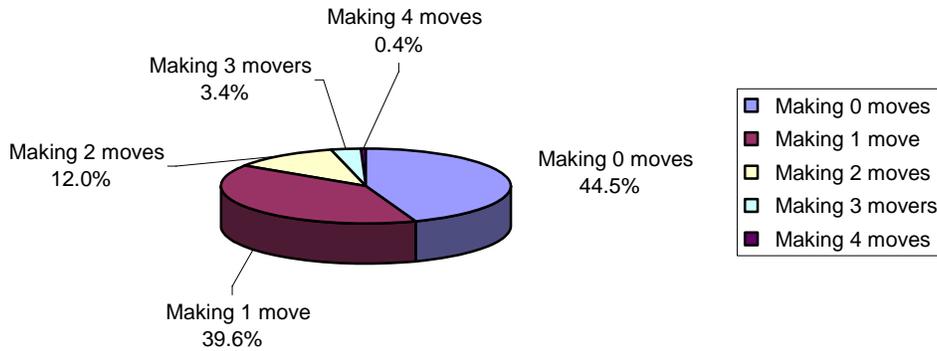
Beginning Teachers in 2000	Year 1 2000-01	Year 2 2001-02	Year 3 2002-03	Year 4 2003-04	Year 5 2004-05
# Teachers from Original Cohort	3,051	2,723	2,517	2,380	2,270
Mobility & Retention					
# Stayers in School %Stayers in School		2,286 74.9%	2,210 81.2%	2079 82.6%	1987 83.5%
# Movers in District % Movers in District		240 7.9%	125 4.6%	160 6.4%	132 5.5%
# Movers out District % Movers out District		197 6.5%	122 4.5%	70 2.8%	85 3.6%
# Exiters from WA system % Exiters from WA system		328 10.8%	268 9.8%	207 8.2%	176 7.4%

From the data in this table, we can see that yearly rates of mobility decrease over the time period studied. That is, smaller proportions of teachers chose to move or leave their workplace as years of experience increase. The highest rates of movement or attrition were seen between years one and two.

The Movers: Frequency of Movement and School Characteristics

To better understand the frequency of movement among beginning teachers, we examined the number of moves each teacher made in his or her first five years in the profession. As shown in Figure 4.3, most beginning teachers either made no move (45 percent stayed in the same school over the entire period), or just one move (40 percent moved to another school or district, or exited the Washington education system) over the five years. Only 16 percent of Washington teachers moved two or more times during their first five years.

Figure 4.3: Number of Moves Made by Beginning Teachers Over a Five-Year Period (in or out of district or exiting the workforce)



We also attempted to examine whether beginning teachers who move to another school make a change to a school with higher or lower poverty than their prior school. For this analysis, we define a change in poverty as a change to a school with a poverty rate difference of at least 20 percent. Table 4.4 provides data regarding the percentage of teachers who moved to a school with lower, higher, or no difference in poverty. For example, using the 20 percent criteria, a move would be categorized as a change to a higher poverty school if the teacher moved from a school with a 35 percent poverty rate to a school with a 55 percent poverty rate. When examining the data for each of the four years, we find approximately one half of movers change to schools that have less than a 20 percent difference in poverty level. When examining the movers to higher or lower poverty levels, we find slightly higher proportions of teachers moving to lower poverty schools in years four and five. The same pattern emerges when conducting the analysis using a 10 percent criterion.

Table 4.4: Relationship Between School Poverty and Movement of Beginning Teachers Over Five Years:*
Based on 20% Difference in Poverty Rates Between Initial School and New School

	After Yr 1		After Yr 2		After Yr 3		After Yr 4	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total Movers (in or out of district)	437	100%	247	100%	230	100%	217	100%
Movers to higher poverty**	72	16.5%	32	13.0%	26	11.3%	29	13.4%
Movers to lower poverty	63	14.4%	39	15.8%	44	19.2%	44	20.3%
Movers with no poverty difference (+/-20%)	252	57.7%	153	61.9%	109	47.4%	120	55.3%
Not Reported	50	11.4%	23	9.3%	51	22.2%	24	11.1%

*Analysis does not including re-enterers

**Poverty based on percent of students enrolled in Free or Reduced Priced Lunch Program

We also analyzed whether teachers who moved left for schools with either lower or higher percentages of students from racial/ethnic minorities or higher or lower levels of student performance on the WASL in reading. Nearly half of the movers experienced no change in the overall level of diversity in the student population. The other movers transferred in relatively even proportions to more or less diverse schools, and to schools with higher and lower student performance.

Of concern in some policy circles is whether disproportionate numbers of beginning teachers are exiting higher poverty schools. By examining the poverty levels of the schools in which all beginning teachers were located and the percentage of teachers who exited from those schools in the following year, we were able to determine that teachers in the 2000 cohort did not disproportionately leave higher poverty schools (for more information, see Plecki, Elfers & Knapp, 2006). Roughly the same percentage of teachers exited from low, moderate and high poverty schools relative to the overall proportion of teachers in those schools for each year under investigation.

There is evidence to suggest that small and rural districts may have more difficulty retaining their new teachers in schools and districts. From a previous study of small and rural districts in Washington state, we found that novice and beginning teachers in small and rural districts move out of the district at somewhat higher rates than their peers statewide. Twenty percent of novice teachers in the small and rural districts moved out of district compared with only 12 percent of novice teachers statewide. Considerable variation was also found in the retention of novice teachers in different regions of the state. For example, 62 percent of novice teachers in the southwest region of the state were retained in the same school after five years compared with only 26 percent in central Washington (for more information, see Elfers & Plecki, 2006).

Brief Summary and Policy Relevance

From this analysis, we have reason to believe that the attrition and mobility rates for beginning teachers in Washington state are not as high as might be commonly perceived. In some ways, this is encouraging news for policymakers who are focused on retaining a quality workforce in the state. However, there are also several concerns that emerge from this analysis. First, the state's teacher workforce continues to fall short of representing the racial/ethnic diversity of the population of students in Washington. Second, mobility rates of beginning teachers are higher than those of their more experienced colleagues. So while a majority of new teachers remain in the profession in the first five years, they change schools or districts at higher rates.

State policies are often aimed at providing quality mentoring and induction programs for beginning teachers as a means for improving teaching and learning. Given the conditions in Washington, mentoring and induction policies have the potential for a greater impact than might occur in states with higher attrition rates for beginning teachers.

It is important to note that this analysis provides a view of beginning teachers from the perspective of the overall state workforce. This look at aggregate data for all teachers in

Washington may mask some important differences that might emerge when we look more closely within individual districts. As with other analytic work done in the area of teacher mobility, it is also important to examine whether or not patterns which emerge from state level analysis are present when looking specifically at individual district and school contexts.

V. National Board Certified Teachers

National Board Certified Teachers (NBCTs) are frequently at the forefront of policy discussions about high quality teaching. Because of the highly visible and rigorous process of professional assessments which NBCTs have completed and the substantial investment by state and local leaders, there is considerable interest in how NBCTs could provide a model for accomplished teaching, professional development and teacher leadership.

In this chapter, we summarize recent research we have conducted regarding Washington's NBCTs. Our initial survey research utilized NBCTs as a comparison group to a representative sample of teachers in Washington (Knapp et al., 2005). In this chapter we review some of findings from that work, as well as the results of a new survey administered to Washington NBCTs in the spring of 2006. This later survey examined NBCTs professional practice and leadership opportunities.¹⁴ State databases were used to provide supplementary information about the characteristics and distribution of these teachers.

The main points in this section include the following:

- NBCTs represented less than 2 percent of the Washington teacher workforce in 2005, with the vast majority continuing to work as classroom teachers following certification.
- Most NBCTs indicate their involvement in leadership activities has increased as a result of their NBCT status.
- Not all NBCTs believe their school or district does a good job of tapping their leadership skills.
- NBCTs feel more confident of their ability to teach the official curriculum and prepare students for state assessments than other teachers.
- More than half of NBCTs indicate a willingness to move to a higher-needs school. The proportion of those who were very willing to move increased substantially when presented with the possibility of incentives.

Characteristics and Distribution of Washington's NBCTs

Using the state personnel data and survey data, we were able to identify most Washington NBCTs in the year 2005-06 and compare them to all individuals working in classroom

¹⁴ For more information see the report, "National Board Certified Teachers in Washington State: Impact on Professional Practice and Leadership Opportunities," (Loeb et al., 2006).

teaching positions in the state. This data provides a portrait of how NBCTs are situated as compared to the overall teacher workforce in Washington. The characteristics and distribution of the approximately 900 NBCTs identified in Washington state last year (prior to the announcement of the new NBCTs in November 2006), are quite similar to teachers statewide (see Table 5.1). Generally speaking, a higher proportion of NBCTs is female and holds advanced degrees. Proportionately fewer NBCTs are working in schools serving larger numbers of students living in low income households (31 percent of NBCTs as compared to 38 percent of all teachers). However, it should be noted that a greater percentage of NBCTs work at the secondary level and this could account for some of the difference.¹⁵ The distribution of NBCTs by the school's percentage of students of color is quite similar to that of all teachers statewide. NBCTs are located in every Educational Service District (ESD) in the state and in proportions similar to the population of all classroom teachers.

Table 5.1: Selected Teacher Characteristics for the State and Survey Respondents (2005-06)*

	WA State Teachers (n=55,576)	All NBCTs (n=838)
<i>Gender</i>		
Female	71%	82%
Male	29%	18%
<i>Degrees</i>		
Bachelors	35%	14%
Masters and Doctorate	61%	84%
Other	4%	2%
<i>Experience</i>		
0-9 years	43%	43%
10-19 years	29%	39%
20+ years	28%	18%
<i>Free or Reduced Price Lunch</i>		
0-20 %	26%	32%
21-40 %	36%	38%
41% or above	38%	31%
<i>Students of Color</i>		
0-20 %	40%	44%
21-40 %	34%	32%
41% or above	26%	24%

* Data sources: State of Washington S-275 personnel data and school demographic data from School Report Card from 2004-05 and 2005-06. Sample size varies slightly depending on applicability and availability of data.

¹⁵ Due to a variety of factors, the average school poverty rate for high schools is lower than that of elementary schools.

The overwhelming majority of NBCTs (77 percent) in Washington state work in classroom teaching positions. Another 18 percent are in other support or specialist roles, and still a smaller proportion (5 percent) work in a variety of assignments, including administration. From this data we can see that most NBCTs hold positions in education that are directly or very closely tied to the classroom. Like most teachers in Washington state, NBCTs tend to remain working as classroom teachers in their same school and district. Few move to a different work location or change positions. As such, these accomplished teachers may be an important resource within their local contexts.

NBCTs' Involvement in Leadership Activities

While many NBCTs participated in leadership activities prior to certification, a majority of respondents (56 percent) indicate that they are somewhat or a great deal more involved in leadership at the district level as a result of their NBCT status, and more than half indicated increased involvement in leadership opportunities at their school. At the school level, NBCTs most frequently mentioned being engaged in leading the implementation of instructional approaches or curricula, and developing or facilitating study groups, workshops or other professional development for teachers. A smaller proportion of NBCTs report that their involvement in mentoring and coaching teachers has increased due to their certification status.

The vast majority of NBCTs indicate that leadership opportunities are available to them and that their building administrators and colleagues support them in their roles as leaders (over 87 percent). However, not all NBCTs believe that their school or district does a good job of tapping their leadership skills. Only 60 percent indicate that their building does a good job of tapping their leadership skills and slightly over half (54 percent) note that their district does so.

While NBCTs indicate general support for assuming leadership roles by colleagues and administrators, other factors can be a major obstacle to participation. These include time, proximity, availability and alignment of opportunities with their skills and interests, and lack of resources for release time or financial support from the school or district. A reoccurring theme among these teachers is the concern that leadership opportunities would pull them away from their first priority – their work with students.

While time is reported as a barrier, teachers are more willing to reduce their classroom teaching responsibilities in order to pursue other leadership opportunities if the opportunities are located in their own school or at the district level rather than at another school. Eighty-four percent indicated they would be willing or somewhat willing to reduce their classroom teaching responsibilities in order to pursue leadership opportunities at their school, and 79 percent indicated they would be willing to do so at the district level. However, only 65 percent indicated they would be willing or somewhat willing reduce their teaching responsibilities to pursue leadership opportunities at another school.

Impact on Professional Practice

A majority of NBCTs reported that their certification experience had a very positive impact on their work with students and a sizable portion also report very positive impacts in school and district contexts. Approximately two-thirds of respondents reported a very positive impact on how they use student assessment to inform instruction (66 percent) and how they evaluate student needs (64 percent). More than half reported a very positive impact on using multiple strategies with students (54 percent). At the same time, respondents indicate that becoming an NBCT had a relatively smaller influence on practices associated with serving students with special learning needs, including meeting the needs of students in poverty, English language learners and those receiving special education services. However, teachers in higher-poverty schools were more likely to note the impact of the certification process on these aspects of their work.

Survey participants also reported that becoming an NBCT had a positive impact on how they work in their schools and districts, particularly how they contribute to the quality of professional community, coaching and mentoring. As might be expected, these accomplished teachers frequently serve as formally assigned mentors. Evidence suggests that such teachers bring key capabilities and experience to the task. As previously discussed, NBCTs report feeling more prepared to teach the curriculum, ready students for state assessments and manage diverse learning needs than teachers in the state sample. Therefore, one might presume that NBCTs, along with other accomplished teachers, may be in an excellent position to mentor their less experienced colleagues. However, it is noteworthy that NBCTs are no more likely to observe colleague's classrooms than the state sample (52 versus 55 percent report that this does not happen at all at their school).

Views of Professional Development

National Board Certified Teachers are more likely to report having benefited from their participation in professional development than other teachers. To be sure, by virtue of the intensive certification program to which these teachers have access, they have had a substantively different type of professional development experience, which focuses on structured and sustained training, use of student data, evaluation by colleagues, and intensive reflection on teaching practices. Nevertheless, it is instructive to see how the professional development experiences of these teachers are more positive in many regards than the response of colleagues from the statewide sample, as shown in Table 5.2.

Table 5.2: Teachers' Views of Professional Development in a Recent 18 Month Period:
Differences between NBCTs and State Sample

My professional development experiences...	Percent somewhat		
	or strongly disagree	Percent somewhat agree	Percent strongly agree
...were useful to me			
State Sample	17%	52%	31%
WA NBCTs	8%	47%	43%
...led me to make changes in my teaching			
State Sample	15%	65%	19%
WA NBCTs	11%	46%	43%
...were directly applicable to my classroom needs			
State Sample	22%	50%	27%
WA NBCTs	13%	47%	40%
...helped me prepare my students for state assessment			
State Sample	33%	48%	19%
WA NBCTs	24%	43%	31%
...positively impacted student learning in my classroom			
State Sample	19%	52%	28%
WA NBCTs	10%	44%	44%

Sample (Year 1): State Sample=350, NBCTs=134

In short, it would appear that NBCTs are individuals who have learned to make professional development work for them, or to seek out the kinds of professional learning experiences that would have that effect, or both. In turn, given their leadership roles in their respective schools and districts, they are also likely to share what they have learned with other teachers.

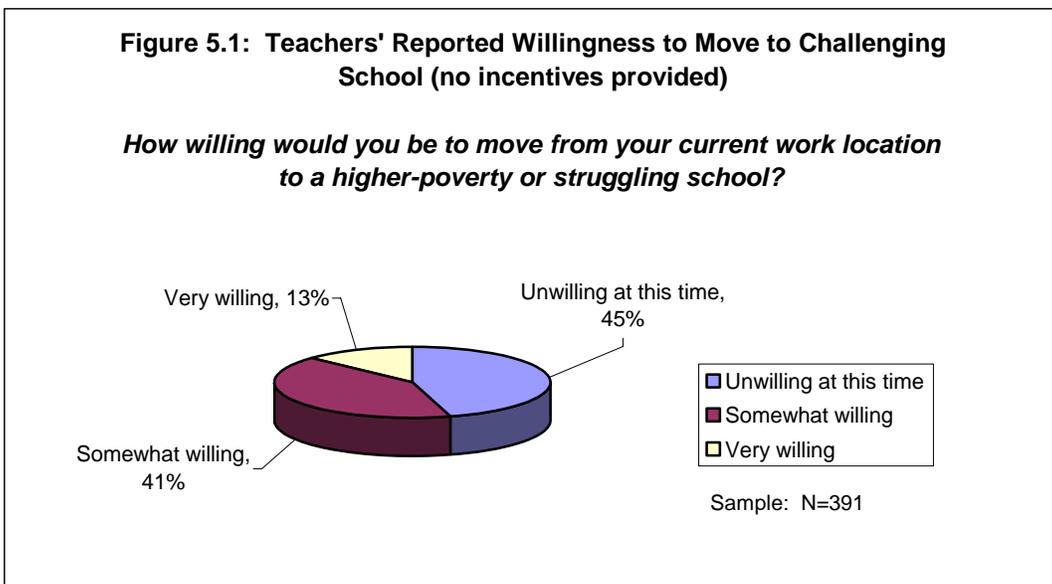
Nevertheless, the survey responses suggest that substantial improvement in professional learning support is needed:

- Half of teachers in the state sample and 63 percent of NBCTs indicate they always have the right content knowledge.
- Only a small portion of teachers (26 percent of the teachers statewide and 30 percent of NBCTs) feel they “always have the right professional development support.”
- About half of all teachers (55 percent in the state sample and 49 percent of NBCTs) agree that professional development opportunities available at their school address their teaching needs.

- While a majority (59 percent) of teachers (both statewide and NBCTs) see their professional development as addressing their students’ needs at least somewhat, a substantial fraction (41 percent) disagree.

Retention and Mobility Patterns

A number of policy discussions about Board Certified teachers have focused on the possibility of locating NBCTs in challenging schools where they may be most needed, and whether incentives should be offered to attract NBCTs to these positions. In the most recent survey, we obtained an initial impression about the willingness of NBCTs in Washington to consider changing their work location to a higher-poverty or struggling school. More than half of NBCTs (54 percent) indicated that they were either somewhat or very willing to move to a higher-poverty or struggling school (see Figure 5.1).



The proportion of those indicating that they were “very willing” to move increased substantially when presented with the possibility of incentives. A \$10,000 bonus, the promise of a significant reduction in class size, and more compensated time for planning and preparation each prompted more than three times the number of teachers to state they would be “very willing” to make a move to a higher-poverty or struggling school as compared to the number of respondents who stated they would be “very willing” without any specific incentives as shown in Table 5.3.

Table 5.3: Teachers' Willingness to Move to a High Needs School if Provided with Various Incentives

<i>How willing would you be to move from your current work location to a higher-poverty or struggling school, if you were provided with the following:</i>	Unwilling at this time	Somewhat Willing	Very Willing
A \$10,000 annual bonus	16%	37%	46%
A full-time instructional aide	28%	40%	30%
A significant reduction in class size	22%	35%	42%
More compensated time for planning and preparation	21%	37%	40%
More compensated time to work with other teachers	23%	39%	37%
An opportunity to move with at least one other NBCT	31%	36%	32%

Sample: N=391

While additional inquiry is needed, the responses of NBCTs regarding incentives to move to higher-poverty or struggling schools provide some initial indication that incentives might play a role in helping to locate Board certified teachers in schools where they may be needed most. It is important to note that teachers responded to this set of questions in relation to the school and district in which they were situated. In other words, an individual teacher may have already been in a higher-poverty or struggling school in the district as they responded to these questions.

Brief Summary and Policy Implications

NBCTs in Washington state work in positions that are close to the classroom after completing certification. Most NBCTs stay in the same school or district after certification, and most attribute their increased involvement in leadership activities to their NBCT status. NBCTs also feel more prepared to ready students for state assessments, use student assessments to inform instruction, and evaluate individual student needs. Thus, NBCTs represent a potential resource in school- and district-based efforts aimed at instructional improvement.

NBCTs also represent a group that has had a significant amount of professional development. Good professional development can enhance self-efficacy as this and other studies have shown. Yet this study also demonstrates that even highly accomplished teachers may need additional support to meet the challenges within particular teaching situations. The hunger for professional learning exhibited by NBCTs is one more reminder that accomplished teachers are still learners and their learning could be directed at fine-tuning their teacher leadership or mentoring skills. Strengthening the mentor support system in a school or district could be a purposeful investment in a cadre of teacher leaders or accomplished veterans who can act in coaching and mentoring roles.

Given that NBCTs represent a valued, and perhaps underutilized resource for teacher leadership, there are a number of issues in policy and practice worthy of consideration. Some of these policy concerns can be addressed at the state level, while others may be more appropriately considered at district and school levels. Key policy issues to be addressed include: increasing the supply and improving the equity of access to NBCTs across districts and schools; fully utilizing NBCTs' potential as accomplished teachers; and adequately supporting NBCTs in a variety of instructional leadership roles.

VI. Future Directions, Conclusions, and Implications

Our goal with this report is to provide updated information and analyses about the nature of the teacher workforce in Washington state for use by educators, policymakers, researchers, and members of the public. Building on the baseline data presented in our initial report published in 2003, we provide new information about the composition of the workforce, rates of teacher retention and mobility, and teachers' perspectives on policy relevant issues. We put a particular focus on two groups of teachers in our state: novice teachers and National Board Certified Teachers (NBCTs).

When stepping back from the specific analyses and data provided in this update, we note that important issues of equity and adequacy continue to be of concern. First, there is a need to continue to increase the number and proportion of teachers of color in the state's workforce. While some limited progress has been made, particularly with increasing numbers of Hispanic and Asian teachers, there is some indication that the numbers of African American teachers are declining. This becomes increasingly important as the number of students of color continues to rise in Washington. Second, issues of equity emerge when examining teacher retention and mobility across the state. Generally speaking, teacher retention declines as the poverty level of a school increases. Additionally, a sizable portion of teachers feel ill-prepared to work with diverse learners, especially English language learners. This implies that we are not adequately supporting teachers in their work with students who may be most in need of additional instructional attention.

The findings included in this update have implications for policy at state, district, and school levels. We organize our discussion of these policy implications along four themes: adequately supporting teachers' work, addressing the needs of new teachers, fully utilizing the resource of NBCTs, and improving the state's data capacity to help answer questions regarding teaching and learning.

Adequately Supporting Teachers' Work

The pattern of overall stability in the state's teaching force underscores the importance of supporting currently employed teachers. In particular, this means that state and district leaders should:

- *Recognize that recruitment efforts should be targeted in specific ways.* Statewide attention is still needed in shortage areas (e.g., math, science, special education and bilingual education) and with respect to recruiting teachers of color. Policy makers should also be mindful of the demographic, economic or policy changes that can impact teacher supply and demand.
- *Enhance support mechanisms for those now in the classroom.* The majority of teachers are retained within the state, especially teachers in the mid-career years. Given this relative stability, efforts to provide effective professional development and other types of support for teachers' work are likely to have a lasting impact. Our survey results indicate that teachers need additional and more effective forms of support to help them meet the needs of an increasingly diverse student population.
- *Commit to understanding the specific longitudinal picture of teacher retention and mobility at the local school level.* The pattern of retention and mobility is likely to be a unique reflection of local or regional conditions, school-level dynamics and district policies. Our surveys of teachers indicate that there are a variety of factors that influence teachers' decisions to stay or leave a school. Issues such as teaching assignment, collegial community and time for professional learning should be taken into consideration. Finally, particular attention should be paid to issues specific to retaining teachers in high-poverty schools.

Addressing the Needs of New Teachers

Washington state is in a good position to support its new teachers. Novice teachers (0 to 4 years of experience) comprise less than a quarter of the overall teacher workforce. Three-quarters of beginning teachers can be found working in the Washington education system five years later. Nevertheless, these new teachers change schools or districts at higher rates than their more experienced colleagues, especially those located in small and rural districts. A quarter of new teachers begin their teaching career in a high poverty school. This research provides evidence to support the following:

- *Develop more coordinated systems of support for beginning teachers.* Given the frequency of movement among novice teachers, greater attention to supporting the work of beginning teachers is well worth considering at both state and district levels. Approaches which consider a coordinated continuum of teacher development, from initial preservice preparation to high quality mentoring and induction during the first five years of teaching, would enhance new teachers' experiences.
- *Provide supportive working conditions at the school level.* Results from our surveys indicate that issues such as teaching assignment, time for professional learning, and collegial community among others, are factors which influence teachers' decisions to stay at a school. These are matters that have a great deal to

do with district- and school-level leadership and can be particularly important for beginning teachers.

- *Target professional development toward meeting specific teaching and learning needs.* Teachers in the early years of a teaching career present a profile of concerns and professional development needs that differ in noticeable ways from their more veteran colleagues. Additionally, as the diversity of the study population increases, it is important to assist new teachers in learning to meet the needs of diverse learners.

Fully Utilizing the Resource of National Board Certified Teachers

With respect to National Board Certified Teachers (NBCTs), our survey data reveals that a majority of NBCTs indicate that their involvement in leadership activities has increased as a result of their NBCT status. At the same time, not all NBCTs believe that their school or district does a good job of tapping their leadership skills. More than half of NBCTs indicated a willingness to move to a higher-needs school, and the proportion of those who would be very willing to move increased substantially when presented with the possibility of incentives. These and other findings about NBCTs prompt consideration of ways in which NBCTs can be more fully utilized and supported:

- *Increasing the supply and diversity of NBCTs.* A potential way to improve teaching and learning at both district and school levels is to encourage additional teachers to consider applying for National Board (NB) certification. Encouragement can take many forms, such as providing full or partial subsidies for certification costs or supporting networks for candidates. Also, a focused effort on recruiting teachers of color to apply for NB certification is also worth considering.
- *Ensuring equal access to NBCTs across schools and classrooms.* One approach worthy of consideration is to focus attention on encouraging teachers already working in high-needs schools to consider applying for NB certification and providing focused supports during the certification process. Alternatively, NBCTs could be encouraged to consider moving to a higher-poverty or struggling school, particularly if incentives or other supports were provided, such as salary bonuses, class-size reduction, and compensated time for planning and preparation.
- *Fully supporting and utilizing the resource represented in NBCTs.* Specific areas in which NBCTs might be well suited to engage in instructional leadership roles include student assessment, evaluation of the needs of individual students, and the use of multiple teaching strategies. Other leadership activities that might be made more available to NBCTs include opportunities to mentor others and professional community-building. NBCTs indicate that they are more willing to reduce their classroom teaching responsibilities to pursue other leadership opportunities if they are located in their own school or at the district level rather than at another school.

Improving the State's Data Capacity Regarding Teaching and Learning

A major portion of the data we were able to share in this report comes from existing databases at the state level. However, there are limits to what we can understand statewide, as the data systems used to conduct analyses for this report are designed for other purposes. Furthermore, existing databases are not easily queried, nor are they fully relational. Major gaps exist in the state's ability to provide information about key questions concerning the quality of the teacher workforce, the equity of the distribution of qualified teachers, and the match between teachers' knowledge and skills and the specific nature of their teaching assignment.

There is no systematic record of teachers' assignments by subject or grade, and there is no easy way to relate that data to teachers' credentials, endorsements, or specialized knowledge or skills. Thus, it is difficult to systematically pinpoint where attention is needed with respect to the allocation of teaching resources so that they are aligned with students' needs. For example, given the current policy attention to improving math and science education, it would be useful to know how well matched teachers' preparation, knowledge and skills are to the demands of the subject matter they teach and the learning needs of their students.

Efforts are underway to address the teacher data limitations and build a relational and timely system that can answer some bottom-line questions about teachers, teaching, support for teachers' work, and student learning. A continuation of these efforts to build a more robust, relational, and specific teacher data system is greatly needed in Washington state. In particular, school-level data about the assignment of teachers to specific grades, students, and courses would greatly enhance the ability to track the extent to which all students have access to well-qualified teachers. Improving our understanding about our state's teacher workforce can help guide educators and policymakers at state, district, and school levels as they consider ways to improve the equity of access to a high quality education for all of Washington's school children.

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Appendix A: Teacher* Ethnicity by District Size in 1996, 2000, and 2004

District Size by Student Enrollment (headcount)	1996					2000					2004				
	# Districts	% Asian Teachers	% Native American Teachers	% African American Teachers	% Hispanic Teachers	# Districts	% Asian Teachers	% Native American Teachers	% African American Teachers	% Hispanic Teachers	# Districts	% Asian Teachers	% Native American Teachers	% African American Teachers	% Hispanic Teachers
20,000+	8	4.3%	0.9%	4.5%	1.7%	10	4.2%	0.8%	3.8%	1.8%	11	4.2%	0.8%	3.3%	1.9%
10,000-19,999	22	2.4%	0.9%	1.5%	1.8%	20	2.5%	0.9%	1.4%	2.2%	19	2.8%	0.9%	1.5%	3.2%
5,000-9,999	23	1.1%	0.7%	0.6%	1.9%	28	1.4%	0.7%	0.6%	2.4%	26	1.7%	0.5%	0.5%	2.0%
1,000-4,999	100	0.8%	0.5%	0.2%	1.6%	95	0.8%	0.6%	0.2%	1.8%	94	1.1%	0.7%	0.2%	2.4%
999 and under	143	0.5%	1.1%	0.1%	1.0%	143	0.3%	1.4%	0.1%	1.1%	146	0.6%	1.0%	0.1%	1.3%

*Duty root 31, 32 or 33 with FTE designation greater than 0 in 2000.

**Headcount statistics rather than FTE are used for this analysis.

Appendix B.1: Student and Teacher Ethnicity in 2000 and 2004

Native American Students and Teachers

Native American	2000		2004	
	Number	Percent	Number	Percent
Teachers	431	0.8%	426	0.8%
Students	27,212	2.7%	28,552	2.8%

Districts with Highest Percent Native American Student Population in 2004

School District (County)	Student Enrollment	% Native American Students	# Native American Teachers	% Native American Teachers
Nespelem (Okanogan)	181	99.4%	2	15.4%
Dixie (Walla Walla)	35	97.1%	0	0
Taholah (Grays Harbor)	244	94.7%	2	9.5%
Keller (Ferry)	50	92.0%	1	25.0%
Queets-Clearwater (Jefferson)	31	90.3%	0	0
Inchelium (Ferry)	236	86.0%	3	13.6%
Wellpinit (Stevens)	466	79.0%	5	11.9%
Mount Adams (Yakima)	1,098	65.8%	10	14.9%
Cape Flattery (Clallam)	546	64.8%	8	16.0%
Grand Coulee Dam (Grant)	816	49.4%	0	0
Hood Canal (Mason)	287	36.9%	0	0
Columbia (Stevens)	230	34.8%	1	2.8%
Glenwood (Klickitat)	80	33.8%	0	0
Cusick (Pend Oreille)	272	27.9%	0	0
Oakville (Gray's Harbor)	285	27.7%	0	0

Appendix B.2: Student and Teacher Ethnicity in 2000 and 2004

African American Students and Teachers

African American	2000		2004	
	Number	Percent	Number	Percent
Teachers	830	1.6%	812	1.5%
Students	53,205	5.3%	58,152	5.7%

Districts with Highest Percent African American Student Population in 2004

School District (County)	Student Enrollment	% African American Students	# African American Teachers	% African American Teachers
Tukwila (King)	2,710	24.2%	6	4.0%
Tacoma (Pierce)	31,787	22.6%	152	8.5%
Clover Park (Pierce)	12,546	22.4%	42	6.0%
Seattle (King)	46,331	22.2%	215	7.9%
Renton (King)	13,236	18.4%	34	4.8%
University Place (Pierce)	5,361	14.9%	13	4.2%
Franklin Pierce (Pierce)	7,862	14.3%	10	2.4%
Highline (King)	17,612	14.0%	12	1.2%
Steilacoom Hist. (Pierce)	2,195	13.6%	2	1.8%
Federal Way (King)	22,602	13.5%	27	2.2%
Bremerton (Kitsap)	5,412	11.3%	6	1.8%
Bethel (Pierce)	17,798	10.6%	21	2.4%
Kent (King)	27,269	10.4%	28	2.0%
North Thurston (Thurston)	13,119	8.9%	14	1.9%
Oak Harbor (Island)	6,063	7.2%	2	0.6%

Appendix B.3: Student and Teacher Ethnicity in 2000 and 2004

Hispanic Students and Teachers

Hispanic	2000		2004	
	Number	Percent	Number	Percent
Teachers	1,062	2.0%	1,296	2.3%
Students	102,925	10.2%	131,250	12.8%

Districts with Highest Percent Hispanic Student Population in 2004

School District (County)	Student Enrollment	% Hispanic Students	# Hispanic Teachers	% Hispanic Teachers
Mabton (Yakima)	907	94.6%	9	17.6%
Roosevelt (Klickitat)	13	92.3%	0	0
Wahluke (Grant)	1,774	88.0%	10	9.0%
Granger (Yakima)	1,267	84.5%	12	16.4%
Bridgeport (Douglas)	590	83.9%	2	4.9%
Sunnyside (Yakima)	5,732	83.5%	57	18.8%
Grandview (Yakima)	3,251	81.6%	24	14.5%
Toppenish (Yakima)	3,345	79.3%	38	19.6%
Brewster (Okanogan)	969	77.0%	1	1.7%
Othello (Adams)	3,176	76.9%	21	11.9%
Palisades (Douglas)	46	76.1%	0	0
Royal (Grant)	1,415	73.4%	2	2.4%
Quincy (Grant)	2,354	73.2%	7	4.9%
Warden (Grant)	960	73.2%	3	5.5%
Orondo (Douglas)	255	70.6%	1	6.7%

Appendix B.4: Student and Teacher Ethnicity in 2000 and 2004

Asian/Pacific Islander Students and Teachers

Asian/Pacific Islander	2000		2004	
	Number	Percent	Number	Percent
Teachers	1,206	2.3%	1,387	2.5%
Students	73,663	7.3%	80,991	7.9%

Districts with Highest Percent Asian/Pacific Islander Student Population in 2004

School District (County)	Student Enrollment	% Asian/Pacific Is Students	# Asian/Pacific Is Teachers	% Asian/Pacific Is Teachers
Seattle (King)	46,331	22.9%	231	8.5%
Bellevue (King)	15,848	22.8%	39	4.0%
Renton (King)	13,236	22.1%	38	5.3%
Highline (King)	17,612	20.9%	40	4.2%
Tukwila (King)	2,710	19.6%	16	10.7%
Shoreline (King)	9,812	18.1%	26	4.5%
Mercer Island (King)	4,145	17.8%	9	4.0%
Federal Way (King)	22,602	16.7%	48	4.0%
Kent (King)	27,269	15.9%	77	5.4%
Issaquah (King)	15,388	15.4%	18	2.2%
Mukilteo (Snohomish)	14,482	14.2%	25	3.2%
Oak Harbor (Island)	6,063	14.0%	7	2.3%
Edmonds (Snohomish)	21,115	13.9%	32	2.8%
Lake Washington (King)	24,177	13.3%	56	4.3%
North Thurston (Thurston)	13,119	13.1%	21	2.8%

Appendix C:

Defining Retention and Mobility Terms and Methodology

For purposes of this study, teacher turnover includes both mobility and attrition – the extent to which teachers move to other schools and other districts, as well as leave the state education system. This analysis of five-year mobility trend data tracked the assignment of teachers at two points in time for three time periods, 1998-99 to 2002-03, 1999-00 to 2003-04, and 2000-01 to 2004-05. Using the Washington state personnel database (S-275), classroom teachers in each school and district under investigation were located during the initial school year, and also five years later to see if they were still in the Washington system of education. Some of the 1998, 1999, and 2000 teachers had changed duties, schools and districts, and some had exited the Washington education system. Since this analysis captures a snapshot of the workforce at two points in time, it is not possible to note gaps in employment during each of the five-year periods, nor is it possible to distinguish voluntary and involuntary departures.

This work includes retention and mobility analyses at several levels (state, district and school) and uses individual teacher data (both headcount and FTE) in calculations. Consequently it is important to clearly define the criteria for the schools and teachers included in these analyses.

- *Teachers* were defined as those public school teachers whose assignment is the instruction of pupils in a classroom situation and who have a designation as an elementary teacher, secondary teacher, or other classroom teacher.¹ Other teachers serving in specialist roles (e.g., reading resource specialist, library media specialist) were not included in these analyses.
- *Schools* were categorized according to grade level served.² *Elementary schools* included schools with any of the grades K-6 and none of grades 7-12. *Middle schools* included school serving primarily any of grades 6-9. *High schools* included any of grades 9-12 and none of grades K-8. *Combined schools* included those schools with one or more of the grades K-6 and one or more of grades 9-12.

¹ As reported in the Office of the Superintendent of Public Instruction's personnel database (S-275), they are certificated instructional staff with a duty root designation of 31, 32 or 33. Teachers whose full-time equivalent (FTE) designation was zero for the initial year were excluded from the analysis. This likely impacts those teachers who were on-leave for the 1998, 1999 or 2000 school years and consequently may slightly over-represent leavers from the Washington state education system.

² The schools included in this analysis met the following criteria: a) Traditional schools with regular classes and/or alternative schools with non-transitory student populations. The study excluded juvenile justice centers, home school centers, special education centers, vocational education centers, and newcomer centers. The headcount and full-time equivalent (FTE) designations of these classroom teachers in special contexts are included in the aggregate district-level data, but not in the school-level data. b) Schools were in existence for at least 6 years (five year's worth of data, plus one) and were open during each year under analysis. c) The schools were not primarily preschools.

In order to examine retention patterns, teachers were placed in one of four retention categories:

- “Stayers” – teachers assigned to the same school(s) in the initial school year and also five years later.
- “Movers in” – teachers who moved to other schools in the same district, or changed assignment (other than a classroom teacher) within the same district
- “Movers out” – teachers who moved to other districts or to private schools, either as a classroom teacher or in some other role
- “Leavers” – teachers who exited the Washington education system, either temporarily or permanently³

³ Leavers may have retired, re-entered the system in subsequent years, left Washington to teach in another state or completely left the profession.

Appendix D: Characteristics of African American Teacher* Workforce: Trend Data Compared to All Teachers Statewide

	1996		2000		2004	
	All Teachers Statewide	African American Teachers	All Teachers Statewide	African American Teachers	All Teachers Statewide	African American Teachers
# Teachers (Headcount)	50,387	829	53,216	830	55,914	812
<i>Ethnicity</i>						
African American	1.6%	-----	1.6%	-----	1.5%	-----
White	93.7%	-----	93.4%	-----	93.0%	-----
<i>Age (in given year)</i>						
21-30	14.7%	10.4%	16.3%	12.8%	15.4%	11.0%
31-40	23.1%	22.7%	22.6%	19.6%	23.8%	21.1%
41-50	40.5%	40.2%	32.3%	34.0%	27.1%	28.1%
51-60	20.0%	20.4%	26.8%	28.2%	30.0%	32.9%
61+	1.7%	6.4%	2.1%	5.4%	3.8%	7.0%
<i>Experience</i>						
Less than one year	4.7%	7.6%	5.8%	7.5%	4.7%	4.6%
0-4 years	20.4%	22.6%	23.4%	29.5%	21.9%	24.9%
5-14 years	35.8%	29.1%	35.2%	27.6%	37.0%	35.3%
15-24 years	29.3%	32.6%	25.7%	21.8%	24.4%	18.5%
25 yrs or more	14.6%	15.8%	15.7%	21.1%	16.7%	21.3%

*Duty root 31, 32 or 33 with FTE designation greater than 0 in given year.

**Teacher headcount statistics rather than FTE are used for this analysis.

Appendix E.1: Teacher Retention by County of the State (Based on Teacher FTE)

County	Total FTE Teachers		Stayers (same school)				Movers (In District)				Movers (Out District)				Exiters (out of WA ed System)			
	1999	2000	1999		2000		1999		2000		1999		2000		1999		2000	
	FTE	FTE	FTE	Percent	FTE	Percent	FTE	Percent	FTE	Percent	FTE	Percent	FTE	Percent	FTE	Percent	FTE	Percent
Adams	206.9	211.3	121.1	58.5%	119.5	56.6%	28.8	13.9%	28.7	13.6%	31.5	15.2%	27.7	13.1%	25.4	12.3%	35.4	16.7%
Asotin	182.2	181.2	128.8	70.7%	133.5	73.7%	15.5	8.5%	16.4	9.1%	11.0	6.0%	6.0	3.3%	26.8	14.7%	25.3	14.0%
Benton	1415.4	1428.8	1013.8	71.6%	980.2	68.6%	138.8	9.8%	149.4	10.5%	56.7	4.0%	73.5	5.1%	206.2	14.6%	225.7	15.8%
Chelan	664.6	667.0	421.9	63.5%	440.1	66.0%	70.6	10.6%	70.4	10.6%	66.0	9.9%	59.7	8.9%	106.2	16.0%	96.9	14.5%
Clallam	558.0	553.5	329.4	59.0%	305.1	55.1%	57.2	10.3%	68.4	12.4%	54.1	9.7%	49.5	8.9%	117.3	21.0%	130.5	23.6%
Clark	3159.3	3257.9	1836.3	58.1%	1861.8	57.1%	564.7	17.9%	646.1	19.8%	158.1	5.0%	155.0	4.8%	600.1	19.0%	595.1	18.3%
Columbia	42.0	40.0	27.3	64.9%	31.2	78.1%	4.5	10.6%	3.0	7.5%	1.6	3.8%	1.0	2.5%	8.6	20.5%	4.8	11.9%
Cowlitz	864.2	854.4	565.4	65.4%	561.2	65.7%	96.0	11.1%	98.0	11.5%	59.6	6.9%	46.1	5.4%	143.2	16.6%	149.1	17.5%
Douglas	332.5	350.0	226.1	68.0%	209.7	59.9%	34.1	10.3%	62.5	17.9%	22.6	6.8%	25.1	7.2%	49.7	14.9%	52.7	15.1%
Ferry	73.1	74.7	36.5	49.9%	30.7	41.1%	11.3	15.5%	14.0	18.7%	9.7	13.2%	10.0	13.4%	15.7	21.4%	20.0	26.8%
Franklin	569.2	596.6	289.9	50.9%	349.7	58.6%	152.8	26.8%	121.5	20.4%	49.4	8.7%	36.2	6.1%	77.1	13.5%	89.2	15.0%
Garfield	27.8	27.6	22.8	82.1%	20.8	75.4%	2.0	7.2%	2.5	9.1%	0.0	0.0%	1.5	5.4%	3.0	10.8%	2.9	10.3%
Grant	861.3	882.1	525.1	61.0%	554.4	62.9%	100.5	11.7%	83.5	9.5%	87.2	10.1%	96.2	10.9%	148.4	17.2%	147.9	16.8%
Grays Harbor	686.4	693.2	429.8	62.6%	444.1	64.1%	51.2	7.5%	54.9	7.9%	83.7	12.2%	70.0	10.1%	121.7	17.7%	124.3	17.9%
Island	464.8	468.0	276.0	59.4%	295.0	63.0%	29.4	6.3%	26.8	5.7%	32.4	7.0%	27.6	5.9%	127.0	27.3%	118.6	25.3%
Jefferson	181.2	175.1	96.7	53.4%	104.5	59.7%	25.7	14.2%	20.1	11.5%	19.2	10.6%	11.0	6.3%	39.7	21.9%	39.5	22.6%
King	12501.3	12471.6	6381.9	51.0%	6776.2	54.3%	1919.0	15.4%	1730.1	13.9%	1146.1	9.2%	1065.9	8.5%	3054.3	24.4%	2899.4	23.2%
Kitsap	2118.6	2090.9	1334.5	63.0%	1317.6	63.0%	199.5	9.4%	252.5	12.1%	178.0	8.4%	133.5	6.4%	406.6	19.2%	387.3	18.5%
Kittitas	258.1	259.8	172.5	66.8%	173.4	66.7%	16.7	6.5%	20.5	7.9%	20.1	7.8%	18.4	7.1%	48.8	18.9%	47.5	18.3%
Klickitat	214.0	214.3	155.1	72.5%	157.6	73.5%	10.3	4.8%	6.9	3.2%	10.3	4.8%	8.7	4.0%	38.4	17.9%	41.1	19.2%
Lewis	672.0	680.6	462.5	68.8%	461.0	67.7%	39.4	5.9%	49.8	7.3%	65.9	9.8%	58.3	8.6%	104.3	15.5%	111.5	16.4%
Lincoln	152.6	151.5	103.8	68.0%	96.4	63.6%	9.5	6.2%	18.6	12.3%	17.6	11.5%	15.7	10.4%	21.7	14.2%	20.8	13.7%
Mason	450.8	445.4	279.5	62.0%	262.0	58.8%	42.7	9.5%	57.2	12.8%	44.6	9.9%	48.7	10.9%	84.1	18.6%	77.5	17.4%
Okanogan	410.1	410.2	265.9	64.8%	259.5	63.3%	30.7	7.5%	38.6	9.4%	43.7	10.7%	48.0	11.7%	69.7	17.0%	64.1	15.6%
Pacific	208.8	209.3	115.6	55.4%	122.1	58.3%	19.9	9.5%	24.3	11.6%	28.6	13.7%	21.0	10.0%	44.8	21.5%	41.8	20.0%
Pend Oreille	112.6	117.2	81.8	72.6%	86.4	73.7%	10.5	9.3%	7.6	6.5%	5.0	4.4%	3.0	2.6%	15.4	13.7%	20.2	17.3%
Pierce	6193.3	6480.4	3562.9	57.5%	3723.0	57.5%	950.1	15.3%	1034.7	16.0%	504.5	8.1%	473.1	7.3%	1175.9	19.0%	1249.7	19.3%
San Juan	105.8	104.1	65.0	61.4%	54.7	52.5%	10.7	10.1%	11.3	10.8%	5.2	4.9%	7.2	6.9%	24.9	23.5%	31.0	29.8%
Skagit	937.1	953.7	619.9	66.2%	629.3	66.0%	75.5	8.1%	87.7	9.2%	70.0	7.5%	72.8	7.6%	171.7	18.3%	163.8	17.2%
Skamania	74.4	74.6	52.8	71.0%	58.7	78.7%	2.9	3.9%	4.0	5.3%	6.5	8.7%	4.2	5.6%	12.3	16.5%	7.7	10.3%
Snohomish	4944.5	5020.4	2905.8	58.8%	3072.1	61.2%	620.3	12.5%	561.0	11.2%	422.3	8.5%	415.2	8.3%	996.2	20.1%	972.2	19.4%
Spokane	3744.9	3757.4	2432.2	64.9%	2387.4	63.5%	489.6	13.1%	549.9	14.6%	163.9	4.4%	157.2	4.2%	659.3	17.6%	663.0	17.6%
Stevens	342.4	347.5	238.3	69.6%	240.9	69.3%	31.9	9.3%	32.7	9.4%	22.1	6.5%	21.2	6.1%	50.1	14.6%	52.8	15.2%
Thurston	1939.5	1943.6	1284.2	66.2%	1271.5	65.4%	185.8	9.6%	204.8	10.5%	139.9	7.2%	124.2	6.4%	329.6	17.0%	343.1	17.7%
Wahkiakum	25.8	26.7	16.0	62.0%	17.2	64.4%	1.7	6.6%	1.0	3.7%	2.3	8.9%	2.0	7.5%	5.8	22.5%	6.5	24.3%
Walla Walla	485.4	482.1	304.0	62.6%	291.1	60.4%	53.9	11.1%	77.6	16.1%	31.7	6.5%	29.9	6.2%	95.7	19.7%	83.5	17.3%
Whatcom	1262.1	1287.9	791.1	62.7%	857.6	66.6%	175.6	13.9%	146.1	11.3%	66.1	5.2%	61.1	4.7%	229.4	18.2%	223.1	17.3%
Whitman	303.4	302.5	201.2	66.3%	179.4	59.3%	17.0	5.6%	24.9	8.2%	28.8	9.5%	29.8	9.8%	56.3	18.6%	68.4	22.6%
Yakima	2394.2	2441.5	1486.3	62.1%	1491.4	61.1%	299.0	12.5%	310.8	12.7%	219.0	9.1%	209.4	8.6%	390.0	16.3%	429.9	17.6%

Appendix E.2: Teacher Retention by Region of the State (Based on Teacher FTE)

Trend Data Across 2 Time Spans: 1999/00 - 2003/04 and 2000/01 - 2004/05

Regions and Corresponding Counties	Total FTE Teachers		Stayers (same school)				Movers (In District)				Movers (Out District)				Exiters (out of WA ed System)			
	1999	2000	1999		2000		1999		2000		1999		2000		1999		2000	
	FTE	FTE	FTE	Percent	FTE	Percent	FTE	Percent	FTE	Percent	FTE	Percent	FTE	Percent	FTE	Percent	FTE	Percent
Northeastern Region																		
Ferry, Okanogan, Pend Oreille, Stevens	938	950	623	66.4%	617	65.0%	84	9.0%	93	9.8%	81	8.6%	82	8.7%	151	16.1%	157	16.5%
Southeastern Region																		
Asotin, Benton, Columbia, Franklin, Garfield, Walla Walla	2772	2756	1787	64.5%	1806	65.5%	367	13.3%	370	13.4%	150	5.4%	148	5.4%	417	15.1%	431	15.6%
Central Eastern Region																		
Adams, Grant, Lincoln, Spokane, Whitman	5269	5305	3383	64.2%	3337	62.9%	645	12.2%	706	13.3%	329	6.2%	327	6.2%	911	17.3%	935	17.6%
Central Washington																		
Chelan, Douglas, Kittitas, Klickitat, Yakima	3863	3933	2462	63.7%	2472	62.9%	431	11.1%	471	12.0%	338	8.7%	321	8.2%	633	16.4%	668	17.0%
Southwest Central Region																		
Clark, Cowlitz, Lewis, Pacific, Skamania, Wahkiakum	5005	5104	3049	60.9%	3082	60.4%	725	14.5%	823	16.1%	321	6.4%	287	5.6%	911	18.2%	912	17.9%
Peninsula Region																		
Clallam, Grays Harbor, Jefferson, Kitsap, Mason	3995	3958	2470	61.8%	2433	61.5%	376	9.4%	453	11.4%	380	9.5%	313	7.9%	769	19.3%	759	19.2%
King County																		
King	12501	12472	6382	51.0%	6776	54.3%	1919	15.4%	1730	13.9%	1146	9.2%	1066	8.5%	3054	24.4%	2899	23.2%
South Sound Region																		
Pierce, Thurston	8133	8424	4847	59.6%	4995	59.3%	1136	14.0%	1239	14.7%	644	7.9%	597	7.1%	1506	18.5%	1593	18.9%
North Sound Region																		
Island, San Juan, Skagit, Snohomish, Whatcom	7714	7834	4658	60.4%	4909	62.7%	912	11.8%	833	10.6%	596	7.7%	584	7.5%	1549	20.1%	1509	19.3%

Appendix F: A Closer Look at Retention in 20 Districts: (10 Largest Sample Districts)
Trend Data Across 3 Time Spans: 1998/99 - 2002/03, 1999/00 - 2003/04 and 2000/01 - 2004/05

	Student Enrollment (98/99/00)	Student Poverty (98/99/00)	FTE teachers (98/99/00)	Stayers		Movers In District		Movers Out of District		Leavers (out WA ed system)	
				FTE	Percent	FTE	Percent	FTE	Percent	FTE	Percent
State											
1998 - 02	999,616	31.3%	49,484		58%		14%		9%		20%
1999 - 03	1,003,701	31.1%	50,141	29660	59.2%	6595	13.2%	3985	7.9%	9901	19.7%
2000 - 04	1,004,843	31.2%	50,736	30428	60.0%	6719	13.2%	3724	7.3%	9864	19.4%
Seattle											
1998 - 02	48,280	44.7%	2,437	1184	48.6%	428	17.6%	124	5.1%	702	28.8%
1999 - 03	47,989	40.8%	2,489	1263	50.7%	426	17.1%	126	5.1%	674	27.1%
2000 - 04	47,575	40.2%	2,542	1391	54.7%	373	14.7%	134	5.3%	645	25.4%
Tacoma											
1998 - 02	32,940	50.4%	1,702	933	54.8%	329	19.3%	74	4.3%	367	21.5%
1999 - 03	33,556	49.0%	1,657	942	56.8%	304	18.3%	67	4.1%	344	20.8%
2000 - 04	34,093	50.5%	1,796	1041	57.9%	326	18.2%	64	3.6%	365	20.3%
Spokane											
1998 - 02	32,403	43.6%	1,666	1141	68.5%	185	11.1%	50	3.0%	290	17.4%
1999 - 03	32,384	45.4%	1,698	1140	67.1%	198	11.7%	61	3.6%	299	17.6%
2000 - 04	31,725	43.9%	1,691	1119	66.2%	202	12.0%	52	3.1%	318	18.8%
Lake Washington											
1998 - 02	24,492	8.8%	1,143	648	56.7%	169	14.8%	80	7.0%	245	21.5%
1999 - 03	24,229	8.3%	1,135	651	57.4%	161	14.2%	83	7.3%	240	21.1%
2000 - 04	23,662	8.3%	1,135	679	59.8%	130	11.4%	84	7.4%	242	21.3%
Edmonds											
1998 - 02	21,925	21.3%	1,033	564	54.6%	112	10.8%	79	7.7%	278	26.9%
1999 - 03	21,844	20.6%	1,041	588	56.5%	108	10.4%	78	7.4%	268	25.7%
2000 - 04	22,067	20.2%	1,045	635	60.8%	98	9.3%	76	7.2%	237	22.7%
Evergreen (Clark)											
1998 - 02	19,800	23.4%	1,020	524	51.3%	270	26.5%	44	4.3%	183	17.9%
1999 - 03	20,820	23.7%	1,084	663	61.2%	179	16.5%	40	3.7%	201	18.6%
2000 - 04	21,650	25.1%	1,142	696	60.9%	196	17.2%	49	4.3%	201	17.6%
Bellevue											
1998 - 02	15,438	15.3%	815	322	39.5%	114	14.0%	88	10.7%	291	35.7%
1999 - 03	15,111	15.0%	808	349	43.3%	117	14.5%	79	9.7%	263	32.5%
2000 - 04	15,431	14.2%	802	396	49.3%	100	12.5%	75	9.3%	231	28.8%
Yakima											
1998 - 02	13,943	60.1%	686	437	63.6%	91	13.2%	36	5.2%	122	17.8%
1999 - 03	13,979	54.7%	711	439	61.8%	102	14.3%	39	5.5%	130	18.4%
2000 - 04	13,985	52.6%	738	436	59.0%	108	14.6%	31	4.2%	163	22.1%
South Kitsap											
1998 - 02	11,649	24.6%	559	352	62.9%	48	8.6%	65	11.6%	95	16.9%
1999 - 03	11,638	23.9%	572	353	61.7%	54	9.5%	64	11.2%	100	17.5%
2000 - 04	11,350	24.5%	549	349	63.6%	49	9.0%	43	7.8%	108	19.7%
Bellingham											
1998 - 02	10,419	26.2%	497	274	55.0%	97	19.5%	25	5.0%	102	20.6%
1999 - 03	10,382	25.7%	508	285	56.0%	105	20.7%	23	4.5%	96	18.8%
2000 - 04	10,398	27.1%	515	325	63.0%	76	14.7%	19	3.6%	96	18.7%

*Number of teachers includes those with FTE as a classroom teacher. Excludes those with 0 FTE who may be on leave.

Appendix G: A Closer Look at Retention in 20 Districts (10 Smaller Sample Districts)
Trend Data Across 3 Time Spans: 1998/99 - 2002/03, 1999/00 - 2003/04 and 2000/01 - 2004/05

	Student Enrollment (98/99/00)	Student Poverty (98/99/00)	FTE teachers (98/99/00)	Stayers		Movers In District		Movers Out of District		Leavers (out WA ed system)	
				FTE	Percent	FTE	Percent	FTE	Percent	FTE	Percent
State											
1998 - 02	999,616	31.3%	49,484		58%		14%		9%		20%
1999 - 03	1,003,701	31.1%	50,141	29660	59.2%	6595	13.2%	3985	7.9%	9901	19.7%
2000 - 04	1,004,843	31.2%	50,736	30428	60.0%	6719	13.2%	3724	7.3%	9864	19.4%
Olympia											
1998 - 02	9,102	20.8%	459	305	66.5%	47	10.3%	16	3.4%	91	19.8%
1999 - 03	9,124	18.6%	452	299	66.0%	57	12.7%	17	3.8%	79	17.5%
2000 - 04	9,147	18.2%	452	281	62.1%	65	14.3%	19	4.1%	88	19.6%
Richland											
1998 - 02	9,111	20.4%	424	265	62.6%	61	14.5%	15	3.6%	82	19.4%
1999 - 03	9,343	20.8%	439	294	67.1%	50	11.4%	19	4.4%	75	17.1%
2000 - 04	9,464	20.0%	452	291	64.4%	53	11.8%	23	5.1%	85	18.8%
Oak Harbor											
1998 - 02	6,535	0.0%	290	174	60.1%	23	7.8%	21	7.3%	72	24.8%
1999 - 03	6,484	4.4%	291	155	53.1%	26	9.1%	19	6.5%	91	31.4%
2000 - 04	6,342	3.7%	292	169	57.8%	19	6.6%	17	5.7%	87	29.9%
Walla Walla											
1998 - 02	6,372	41.9%	336	208	61.9%	38	11.2%	15	4.3%	76	22.6%
1999 - 03	6,312	42.0%	318	200	62.8%	44	13.7%	13	4.0%	62	19.5%
2000 - 04	6,186	42.7%	312	188	60.3%	58	18.7%	12	3.9%	53	17.1%
Aberdeen											
1998 - 02	4,181	46.5%	207	126	60.8%	20	9.5%	24	11.6%	38	18.1%
1999 - 03	4,119	48.8%	208	139	66.9%	14	6.5%	18	8.7%	37	18.0%
2000 - 04	4,123	51.7%	216	155	71.5%	12	5.7%	15	6.9%	34	15.7%
Ephrata											
1998 - 02	2,346	36.7%	110	66	59.7%	12	11.3%	15	13.6%	17	15.4%
1999 - 03	2,367	37.0%	112	67	60.1%	14	12.7%	12	10.3%	19	16.9%
2000 - 04	2,303	39.1%	113	73	64.7%	7	6.0%	11	9.3%	23	20.4%
Naches Valley											
1998 - 02	1,582	29.0%	80	52	65.0%	2	2.5%	9	11.0%	17	21.5%
1999 - 03	1,588	27.3%	79	57	71.5%	5	6.3%	7	8.8%	11	13.3%
2000 - 04	1,587	28.4%	80	54	67.1%	7	8.8%	7	8.5%	13	15.8%
Hockinson											
1998 - 02	1,252	11.3%	61	45	74.4%	5	8.2%	3	4.1%	8	13.1%
1999 - 03	1,320	12.0%	61	45	73.2%	3	4.9%	4	6.5%	9	15.3%
2000 - 04	1,379	13.3%	65	48	74.7%	1	1.5%	2	3.1%	13	20.7%
Oroville											
1998 - 02	884	62.8%	47	32	67.0%	1	2.1%	7	14.8%	8	16.1%
1999 - 03	857	68.5%	46	30	66.3%	4	7.7%	5	10.7%	7	15.3%
2000 - 04	822	69.1%	46	33	72.2%	1	2.2%	1	2.2%	11	23.0%
Winlock											
1998 - 02	821	42.6%	46	36	78.0%	1	2.2%	3	6.6%	6	13.2%
1999 - 03	845	41.5%	42	32	75.3%	2	5.9%	3	7.1%	5	11.8%
2000 - 04	840	42.8%	44	34	76.8%	3	6.8%	2	4.5%	5	11.4%

*Number of teachers includes those with FTE as a classroom teacher. Excludes those with 0 FTE who may be on leave.