Principal Supply and Demand Report

Prepared by the Principals' Executive Program NC Center for School Leadership Development

for the University of North Carolina Office of the President Division of University-School Programs

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Introduction

High quality school administrators are essential for our schools to meet the challenges posed by our state ABC Accountability system, and now the federal No Child Left Behind (NCLB) legislation. The literature on school reform consistently points to the key role school administrators play in creating high quality schools for our students. For that reason it is critical that we examine the supply and demand of school administrators across our state. As stated in early reports many factors influence the balance of supply and demand of principals. These factors include attrition of educators (promotion, career changes, retirement etc.), the number of licensed candidates from our approved education programs, student enrollment, federal, state and local policies, and economics (Department of Public Instruction, 2002).

This report is written in response to House Bill 257, 1993 Session Laws that directs the Board of Governors to:

study the issue of supply and demand of school administrators to determine the number of school administrators to be trained in the programs in each year of each biennium. The Board of Governors shall report the results of this study to the Joint Legislative Education Oversight Committee no later than March 1, 1994, and annually thereafter.

The purpose of this report is to provide data to the Education Leadership Task Force and the Joint Legislative Education Oversight Committee Concerning School Administrator Programs at the Constituent University of North Carolina Institutions about the trends that influence supply and demand of school based administrators in North Carolina. For this study, school administrators are defined to include principals and assistant principals.

This report is divided into four parts: 1) Demographic Trends; 2) Demand Trends, 3) Supply Trends, and 4) Summary of Findings.

I. Demographic Trends of North Carolina School Administrators

Demographic data collected by the Department of Public Instruction indicates that the average North Carolina principal is likely to be 45 or older (73% of current principals), and white (75.66% of current principals), with a master's degree (69% of current principals). We have slightly more female principals than males (52.33% female) and the majority have more than 20 years of education experience (71%).

The average assistant principal is younger than the average principal. Only 61% of all assistant principals are 45 or older; and 26% are 40 or younger. In addition, they have less experience than principals. Only 43% have 20 or more years of educational experience. Fifty-eight percent of our assistant principals are female, and 71% are white.

The following tables provide extensive demographic data about our principals. Tables 1 and 2 provide information on the age of our current school administrators. Tables 3 and 4 provide information on administrator's total education experience. Table 5 and 6 provide information about the highest degree earned by our administrators. Tables all provide a statewide measure, as well as data by region.

Table 1 below provides data about the age of current North Carolina principals. The data indicate that across the state 51% of all principals are 50 years or older. In four state regions, more than 52% of principals at 50 years or older (Southcentral 57%, Southeast 52%, Southwest 58%, and West 53%).

Table 1: Principal Age 2004-2005

Age	<40	40-44	45-49	50-54	55+
Statewide	19%	11%	19%	28%	23%
Central	23%	12%	19%	24%	22%
Northeast	17%	11%	25%	25%	22%
Northwest	23%	12%	19%	26%	20%
Southcentral	11%	10%	22%	34%	23%
Southeast	19%	10%	19%	29%	23%
Southwest	17%	10%	15%	34%	24%
West	15%	15%	17%	27%	26%

Table 2 provides data about the age of current North Carolina assistant principals. The data indicate that across the state 45% of all assistant principals are 50 years or older. The 40 years or younger category in Table 2 is the largest, with 26% of current North Carolina assistant principals in that age range.

Table 2: Assistant Principal Age 2004-2005

Age	<40	40-44	45-49	50-54	55+
Statewide	26%	13%	16%	24%	21%
Central	38%	13%	14%	20%	15%
Northeast	33%	16%	15%	17%	19%
Northwest	35%	17%	13%	18%	17%
Southcentral	25%	14%	14%	28%	19%
Southeast	28%	20%	14%	20%	18%
Southwest	39%	11%	13%	17%	20%
West	26%	21%	20%	12%	21%

Table 3 provides data about the total education experience of current North Carolina principals. The data indicate that across the state 51% of current principals have 25 or more years of experience. This trend is consistent across the state regions with four regions having a higher percentage of principals with more than 25% years of experience (Southcentral 58%, Southeast 52%, Southwest 52%, and West 56%).

Table 3: Principal Total Education Experience 2004-2005

Number of	<10	10-14	15-19	20-24	25-29	30+
Years						
Statewide	5%	14%	14%	16%	27%	24%
Central	9%	15%	12%	18%	25%	21%
Northeast	2%	14%	18%	16%	22%	28%
Northwest	7%	17%	12%	16%	27%	21%
Southcentral	3%	10%	13%	16%	30%	28%
Southeast	5%	17%	14%	12%	27%	25%
Southwest	4%	13%	14%	17%	27%	25%
West	4%	8%	16%	16%	26%	30%

Table 4 provides data about the total education experience of current assistant principals. The data indicate that across the state 22% of current assistant principals have 10 or fewer total years of education experience.

Table 4: Assistant Principal Total Education Experience 2004-2005

Number of	<10	10-14	15-19	20-24	25-29	30+
Years						
Statewide	22%	19%	16%	13%	16%	14%
Central	27%	15%	12%	13%	19%	14%
Northeast	21%	19%	18%	11%	16%	15%
Northwest	21%	19%	17%	16%	15%	12%
Southcentral	15%	19%	16%	18%	17%	15%
Southeast	18%	22%	19%	13%	14%	14%
Southwest	22%	22%	14%	12%	16%	14%
West	17%	20%	17%	18%	13%	15%

Table 5: Principal Highest Degree Level Earned 2004-2005

Degree Level	Master's	Specialist	Doctoral
Statewide	71%	20%	9%
Central	73%	14%	13%
Northeast	75%	20%	5%
Northwest	68%	24%	8%
Southcentral	83%	11%	6%
Southeast	76%	18%	6%
Southwest	64%	23%	13%
West	60%	33%	7%

Table 6: Assistant Principal Highest Degree Level Earned 2004-2005

Degree Level	Bachelor's	Master's	Specialist	Doctoral
Statewide	1%	86%	10%	3%
Central		88%	8%	4%
Northeast	1%	83%	13%	3%
Northwest	3%	81%	12%	4%
Southcentral	1%	91%	4%	4%
Southeast	2%	88%	8%	2%
Southwest	1%	86%	10%	3%
West	1%	72%	25%	2%

Table 7: Percentage of Race and Gender of Principals 2004-2005

Race/Gender	Female	Female	Female -	Female - Am. Indian /	Female -	Female -	Male -	Male -	Male - Am. Indian /	Male -	Male -
Statewide	- Asian	- Black 14%	Hispanic	Alaskan 1%	White 41%	Other	Black 9%	Hispanic	Alaskan	White 35%	Other
Central		17%	1%	170	42%		11%			29%	
Northeast		27%		1%	22%		17%			33%	
Northwest		6%			50%					44%	
Southcentral		19%	1%	4%	34%		11%	3%		28%	
Southeast		11%			45%		11%			33%	
Southwest		14%			45%		6%			35%	
West		1%			41%		2%			56%	

Table 8: Percentage of Race and Gender of Assistant Principals 2004-2005

Race/Gender				Female - Am.					Male - Am.		
	Female - Asian	Female - Black	Female - Hispanic	Indian / Alaskan	Female - White	Female - Other	Male - Black	Male - Hispanic	Indian / Alaskan	Male - White	Male - Other
Statewide		18%		1%	39%		10%			32%	
Central		15%		1%	37%		11%			36%	
Northeast		20%		1%	36%		10%			33%	
Northwest		23%		1%	36%			1%	2%	27%	
Southcentral		27%			31%	0	12%			30%	
Southeast		6%			39%	1%	6%			48%	
Southwest		13%			47%		11%			29%	
West		18%			39%		11%			32%	

II. Demand Trends for North Carolina School Administrators

Table 9 outlines the principal retention rate from 1997-08 through the 2003-04 academic year. Since 1998 less than 10% of principals chose to leave their position after their first year. That percentage increases every year with 36% leaving the principalship after their sixth year.

% employed in % employed public schools % employed in % employed in % employed in Cohort in public % employed in Year and the following public schools schools 3 public schools public schools public schools 2 years later years later 4 years later 5 years later 6 years later Size vear 1997-98 N = 203393.61% 86.62% 81.41% 74.91% 68.91% 61.68% 1998-99 93.51% N = 201787.85% 81.01% 75.21% 72.48% 66.29% 1999-00 70.07% N = 209594.36% 86.69% 79.87% 77.57% N/A 2000-01 92.33% 85.22% N = 213882.69% 77.04% N/A N/A 2001-02 92.18% 90.18% 84.50% N = 2168N/A N/A N/A 2002-03 N = 218493.41% 89.19% N/A N/A N/A N/A 2003-04 95.69% N/A N = 2227N/A N/A N/A N/A

Table 9: Principal Retention Rates 1997-98 through 2003-2004

Data from the last five years in North Carolina indicate a dramatic increase in the number of provisional licenses issued by the Department of Public Instruction since districts were allowed to issue provisional licenses. According to the 2002 Supply and Demand study written by the Department of Public Instruction, a one-year provisional license may be issued by local boards of education to individuals selected for employment as assistant principals if

- The local board has determined there is a shortage of persons who hold or are qualified to hold a principal's license and the employee enrolls in an approved program leading to a master's degree in school administration before the provisional license expires; or
- The employee is enrolled in an approved master's in school administration program and is participating in the required internship under the master's program.

If we make the assumption that all provisional licenses granted met one of those conditions then the dramatic increase (600%+ since 1999-00) indicates a shortage of qualified candidates across North Carolina. Table 10 provides the number of provisional licenses issued statewide and percentage of licenses issued by region. If we assume provisional licenses represent a part of new assistant principal hires, then 52.6 % of all new assistant principals hired in 2003-04 have a provisional license. Table 11 provides a comparison of the percentage of North Carolina Schools by region and the percentage of provisional licenses granted by region. In two regions the percentage of provisional licenses exceeds the demand created for school administrators by

school number (Southcentral & Southeast). This could indicate there are fewer qualified administrative candidates in those regions.

Table 10: Assistant Principals with Provisional Licenses

	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005
Statewide	N=40	N=120	N=232	N=244	N=262	N=243
Central	14	38	64	51	51	47
Northeast	7	14	27	13	11	10
Northwest	3	7	21	24	27	21
Southcentral	4	16	33	48	46	43
Southeast	4	20	39	54	46	45
Southwest	3	14	33	37	55	53
West	5	11	15	17	26	24

Table 11: Comparison of Percent of North Carolina Schools by Region with Percent of Provisional Licenses

Region	Percent of North Carolina	Percent of Provisional
	Schools in Region	Licenses Since 1999-00
Central	25%	23%
Northeast	9%	7%
Northwest	14%	9%
Southcentral	13%	17%
Southeast	11%	18%
Southwest	18%	17%
West	9%	9%

Table 12: Distribution of New Principals by Regions

	99-00	00-01	01-02	02-03	03-04	04-05
Statewide	N=296	N=294	N=331	N=232	N=247	N=274
Central	26.26%	25.17%	23.19%	27.59%	25.51%	21%
Northeast	8.75%	11.90%	12.35%	8.62%	6.48%	16%
Northwest	17.17%	10.88%	14.16%	15.08%	11.74%	14%
Southcentral	13.13%	17.34%	15.06%	13.36%	13.36%	11%
Southeast	10.77%	11.22%	12.05%	10.34%	13.77%	14%
Southwest	15.45%	15.30%	16.27%	15.09%	18.62%	7%
West	8.75%	8.16%	6.93%	9.91%	10.53%	17%

Table 13: Distribution of New Assistant Principals by Regions

	99-00	00-01	01-02	02-03	03-04	04-05
Statewide	N=379	N=467	N=580	N=329	N=453	N=453
Central	23.75%	25.27%	23.88%	29.79%	27.69%	26%
Northeast	8.18%	8.78%	8.93%	11.55%	6.37%	9%
Northwest	15.30%	12.85%	14.95%	12.46%	11.21%	14%
Southcentral	14.51%	15.85%	13.23%	10.03%	12.53%	13%
Southeast	11.08%	8.14%	8.76%	9.12%	12.09%	12%
Southwest	21.64%	24.20%	24.05%	19.76%	23.30%	18%
West	5.44%	4.93%	6.18%	7.29%	6.81%	8%

III. Supply Trends for North Carolina School Administrators

Table 14 provides data collected by the Department of Public Instruction related to the annual demand for principals and assistant principals. In 2003-2004 over 80% of newly hired principals were assistant principals in their previous year of employment. In 2003-2004 slightly over 39% of current assistant principals were classroom teachers in their previous year of employment and just over 38% were employed as assistant principal interns.

Table 14: Sources of New Principals and Assistant Principals

	99-00	00-01	01-02	02-03	03-04	04-05
Number of new principals hired	N=296	N=294	N=331	N=232	N=247	N=274
% of new principals employed as assistant principals in NC the preceding year	77.36	75.85	74.92	78.01	80.57	
% of new principals not employed in NC schools the preceding year	8.54	5.10	9.06	4.74	2.83	
Number of new assistant principals hired	N=379	N=467	N=580	N=329	N=453	N=453
% of new assistant principals employed as teachers in NC the preceding year	55.14	54.18	42.07	43.47	39.96	
% of new assistant principals not employed in NC schools the preceding year				9.73	7.95	
% of new assistant principals employed as interns the preceding year	16.89	16.49	29.14	34.95	38.85	39.74%

Table 15 provides the number of graduates from state Masters in School Administration Programs (MSA) since the 1999-2000 academic year. We have seen an overall increase of 70% in MSA graduates since the 1999-2000 academic year. Based on the last four academic years we see on average a 20% annual increase in the number of MSA graduates.

Table 15: Degrees Conferred in MSA Programs 1999-2000 through 2003-2004

Institution	1999-	2000-	2001-	2002-	2003-
Appalachian State University	2000	2001	2002 51	2003	37
East Carolina University	71	64	103	112	49
Fayetteville State University	13	25	21	31	25
North Carolina State University	N/A	55	92	82	67
North Carollina Central	N/A	N/A	N/A	N/A	15
University of North Carolina Chapel Hill	17	21	15	33	43

University of North Carolina at Charlotte	39	38	33	45	41
University of North Carolina Greensboro	38	43	26	57	58
University of North Carolina Pembroke	N/A	N/A	N/A	6	25
University of North Carolina Wilmington	7	13	14	16	25
Western Carolina University	9	14	19	8	11
UNC total	238	283	374	404	396

Individuals in the Reserve Pool- In addition to new graduates from MSA programs in North Carolina we have individuals who are licensed as school administrators that constitute a reserve pool of prospective school administrators. The DPI Licensure database in 2002 indicated that of the approximately seventeen thousand (16,689) individuals holding administrative licenses, the actual number of prospective administrators is small. When you remove those in the pool with expired license (6,750), and those currently employed as assistant principals and principals and/or central office directors (4,221), only 5,700 individuals remain. Of that 5,700 in 2002, 56% (3,200) were not currently employed in public education. Although 2,500 reserve pool members in 2002 appears to be a reasonable number, 56% were classroom teachers in 2002 and a large majority are age 50 or older.

IV. Summary of Findings

Using the last five years of data regarding Average Daily Membership we can project a 1.3% annual increase in student enrollment. Using that percentage we can project the number of schools, principals, and assistant principals needed for the next 10 years. If trends in student enrollment and administrative turnover continue we can expect to produce fewer prospective school administrators than we need each year through 2007-2008, after which we will produce more administrative candidates than needed to fill vacancies. In 2002-2003, we produced 404 Masters in School Administration graduates. In the fall of 2004 we hired 727 (an increase of 27 from 2003) new administrators across North Carolina.

Demographic Trends:

The data on principal age indicate that a significant percent of current school principals (51%) are over the age of 50 and have 25 years of more of education experience, making them eligible for retirement over the next five years. In contrast our current assistant principals are increasingly younger and inexperienced. Twenty-six percent are younger than 40 and 41% have 15 or less years of total educational experience. Ethnicity of current principals and assistant principals has remained constant since 2001: 1 of every 4 principals and assistant principals are members of an ethnic minority. Gender has also remained constant since 2001: approximately half of school level administrators are female.

Demand Trends:

Based on the last five year's data we can expect a 1.3% increase in Average Daily Membership. Using that percentage we can project the number of North Carolina schools and consequently the number of principals. Using the average ratio of principals to assistant principals we can project the number of total school administrators. Based on the principal retention data since 1997-98 we can expect that 6% leave after their first year, increasing steadily with 36% leaving after their 6th year in the principalship.

Supply Trends:

Based on the number of graduates from the University of North Carolina system MSA programs in 2002-2003, we potentially produced 58% of the needed administrators in North Carolina to fill positions created by new school construction/expansion and turnover. Based on the last five year's data we can expect to hire 5% of needed administrators from other states. In 2003-2004 37% of new positions were filled by administrators with provisional licenses. It is important to note that not all MSA graduates actually earn the administrator license and/or assume an administrative position. We can assume any gap in program graduates, provisional licenses and out of state hires is filled by the reserve pool. The reserve pool at most, is comprised of 2,500 prospective school administrators.

V. Possible Reasons for Principal and Assistant Principal Shortages

Based on conversations with superintendents, principals, assistant principals, and MSA graduates, an interesting trend appears. Less MSA graduates seem to be interested with actually becoming an assistant principal, which is the gateway to the principalship. The data suggest that the universities are actually producing more MSA graduates than every before, but provisional certification for assistant principals has increased almost 600%. One would think that with the significant increase in MSA degrees that there would not be a need for a provisional certified assistant principal. Based on the above mentioned conversations, the trend that is becoming popular is: Many MSA graduates decide to become nationally board certified which provides a 12% salary increase. Given that the MSA degree provides a 10% salary increase, the MSA graduate can achieve a 22% pay increase without becoming an assistant principal. In fact, if a nationally board certified teacher becomes an administrator (must be at least 70% in the classroom) he or she will lose the 12% salary increase. It really becomes an economical issue for the employee. This senario would help explain why many MSA graduates are choosing to stay as teachers and not enter the administration arena. Thus creating a reduced quantity and more importantly, a less qualified pool of potential principals. However, on a positive note, many classroom teachers are achieving MSA degrees which will enhance their leadership skills and are becoming nationally board certified.

Appendix A: LEAs by Region

For the purpose of this report, LEAs were grouped by the following regions:

Central	Northeast	Northwest	Southcentral	Southeast	Southwest	West
Alamance-	Beaufort	Alexander	Anson	Brunswick	Cabarrus	Avery
Burlington	Bertie	Alleghany	Bladen	Carteret	Kannapolis City	Buncombe
Caswell	Camden	Ashe	Columbus	Craven	Cleveland	Asheville City
Chatham	Chowan	Burke	Whiteville City	Duplin	Davidson	Cherokee
Durham Public	Currituck	Caldwell	Cumberland	Greene	Lexington City	Clay
Franklin	Dare	Catawba	Harnett	Jones	Thomasville City	Graham
Granville	Edgecombe	Hickory City	Hoke	Lenoir	Gaston	Haywood
Guilford	Gates	Newton-Conover	Lee	New Hanover	Lincoln	Henderson
Johnston	Halifax	City	Montgomery	Onslow	Charlotte-	Jackson
Nash	Roanoke Rapids	Davie	Moore	Pamlico	Mecklenburg	Macon
Orange	City	Forsyth	Richmond	Pender	Rowan	Madison
Chapel Hill-	Weldon City	Iredell-Statesville	Robeson	Sampson	Stanley	McDowell
Carrboro	Hertford	Mooresville City	Scotland	Clinton City	Union	Mitchell
Person	Hyde	Stokes		Wayne		Polk
Randolph	Martin	Surry				Rutherford
Asheboro City	Northhampton	Elkin City				Swain
Rockingham	Pasquotank	Mt. Airy City				Transylvania
Vance	Perquimans	Watauga				Yancey
Wake	Pitt	Wilkes				-
Warren	Tyrrell	Yadkin				
	Washington					
	Wilson					