# 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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#### Table of Contents

List of Tables	3
Introduction	4
Demographic Trends	5
Demand Trends	9
Supply Trends	12
Summary of Report	14
Appendix A: LEAs by Regions	15

### List of Tables

Table

1	Principal Age	5
2	Assistant Principal Age	6
3	Principal Total Education Experience	6
4	Assistant Principal Total Education Experience	7
5	Principal Highest Degree Level Earned	7
6	Assistant Principal Highest Degree Level Earned	7
7	Race and Gender of Principals	8
8	Race and Gender of Assistant Principals	8
9	Full Time Principals and Assistant Principals Employed in NC Public Schools, Past and Projected	9
10	Assistant Principals with Provisional License	10
11	Comparison of Percent of North Carolina Schools by Region and Percent of Provisional Licenses	11
12	Distribution of New Principals by Regions	11
13	Distribution of New Assistant Principals by Regions	11
14	Sources of New Principals and Assistant Principals	12
15	Degrees Conferred in MSA Programs 1999-2000 through 2002-2003	13

#### 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 54% of all assistant principals are 45 or older; and 33% are 40 or younger (an increase from 23% <40 in 2002). In addition, they have less experience than principals. Only 44% have 20 or more years of educational experience. Fifty-one percent of our assistant principals are female, and 75% 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 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 52% of all principals are 50 years or older. There is a similar trend across districts in all but one region in North Carolina (Central region-48% of principals are 50 years or older). In four state regions, more than 52% of principals at 50 years or older (Southcentral 53%, Southeast 54%, Southwest 57%, and West 57%). Approximately 52% of principals will be eligible to retire over the next five years.

2003-2004										
Age	<40	40-44	45-49	50-54	55+					
Statewide	16%	11%	21%	30%	22%					
Central	21%	11%	20%	27%	21%					
Northeast	14%	11%	25%	25%	25%					
Northwest	18%	12%	20%	32%	18%					
Southcentral	11%	11%	25%	34%	19%					
Southeast	16%	9%	21%	27%	27%					
Southwest	15%	10%	18%	34%	23%					
West	13%	13%	17%	30%	27%					

## Table 1: Principal Age 2003-2004

Table 2 provides data about the age of current North Carolina assistant principals. The data indicate that across the state 39% of all assistant principals are 50 years or older. The 40 years or younger category in Table 2 is the largest, with 33% of current North Carolina assistant principals in that age range.

2005-2004											
Age	<40	40-44	45-49	50-54	55+						
Statewide	33%	13%	15%	22%	17%						
Central	38%	11%	14%	23%	14%						
Northeast	30%	17%	13%	20%	20%						
Northwest	34%	14%	16%	18%	18%						
Southcentral	22%	13%	18%	24%	23%						
Southeast	32%	13%	18%	21%	16%						
Southwest	32%	15%	13%	21%	19%						
West	33%	13%	16%	26%	12%						

# Table 2: Assistant Principal Age 2003-2004

Table 3 provides data about the total education experience of current North Carolina principals. The data indicate that across the state 52% of current principals have 25 or more years of experience. This trend is consistent across the state regions with two regions having a higher percentage of principals with more than 25% years of experience (Central 56%, Southcentral 59%).

2005-2004										
Age	<10	10-14	15-19	20-24	25-29	30+				
Statewide	6%	11%	12%	19%	29%	23%				
Central	4%	11%	11%	18%	27%	29%				
Northeast	6%	13%	11%	17%	29%	24%				
Northwest	7%	16%	14%	17%	30%	16%				
Southcentral	5%	7%	12%	17%	33%	26%				
Southeast	9%	12%	12%	20%	27%	20%				
Southwest	4%	10%	17%	19%	23%	27%				
West	6%	10%	12%	21%	28%	23%				

Table 3: Principal Total Education Experience 2003-2004

Table 4 provides data about the total education experience of current assistant principals. The data indicate that across the state 21% of current assistant principals have 10 or fewer total years of education experience.

2003-2004										
Age	<10	10-14	15-19	20-24	25-29	30+				
Statewide	21%	19%	16%	14%	17%	13%				
Central	24%	16%	15%	13%	17%	15%				
Northeast	16%	24%	17%	13%	18%	12%				
Northwest	20%	18%	15%	16%	19%	12%				
Southcentral	15%	18%	19%	19%	19%	10%				
Southeast	18%	24%	17%	11%	17%	13%				
Southwest	22%	19%	15%	13%	17%	14%				
West	14%	19%	21%	18%	17%	11%				

# Table 4: Assistant Principal Total Education Experience 2003-2004

# Table 5: Principal Highest Degree Level Earned 2003-2004

Degree Level	Master's	Specialist	Doctoral							
Statewide	69%	22%	9%							
Central	68%	22%	10%							
Northeast	64%	26%	10%							
Northwest	67%	24%	9%							
Southcentral	70%	22%	8%							
Southeast	77%	15%	8%							
Southwest	65%	26%	9%							
West	68%	23%	9%							

# Table 6: Assistant Principal Highest Degree Level Earned 2003-2004

Degree Level	Bachelor's	Master's	Specialist	Doctoral
Statewide	1%	86%	10%	3%
Central	1%	86%	9%	4%
Northeast		83%	14%	3%
Northwest	2%	81%	13%	4%
Southcentral	1%	92%	4%	3%
Southeast		89%	9%	2%
Southwest	1%	85%	11%	3%
West	1%	73%	22%	4%

						1						
Race/Gender	Asian	Asian	Black	Black	Hispanic	Hispanic	Indian	Indian	Other	Other	White	White
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Statewide	.1	.1	13.4	8.8	.1		.9	.4	.1	.1	38	38
Central			15	10			1	1			39	35
Northeast			13	9							37	40
Northwest			8	4							37	51
Southcentral			13	12			4	3			31	37
Southeast			20	11			1				41	27
Southwest			4	7			1				33	55
West			14	7							43	36

# Table 7: Percentage of Race and Gender of Principals2002-2003

### Table 8: Percentage of Race and Gender of Assistant Principals

2003-2004

Race/Gender	Asian	Asian	Black	Black	Hispanic	Hispanic	Indian	Indian	Other	Other	White	White
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Statewide			16	8							41	35
Central			19	13							37	31
Northeast			22	10				3			27	38
Northwest			8	7							36	49
Southcentral	1		18	8			2	1			34	36
Southeast			13	9							36	42
Southwest			19	7							40	34
West			2	1							28	69

### **II. Demand Trends for North Carolina School Administrators**

Table 9 provides the current and projected number of school-based administrators from 1999-2000 through 2012-2013. Based on the last five years, 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. The Total New Hires are projected using the average turnover rate of 15% for the last five years.

Year	Principals	Asst.	New	Positions	Total	Total	Ratio	# of	ADM	Schools
	_	Principals	Positions	from	New	Adm.	AP	NC	(End of	per
				Turnover	Hires		to	Schools	$1^{st}$	1000
							Prin		month)	ADM
1999-	2,087	2,308	116	559	675	4,395	1.105	2,024	1,237,060	1.64
00										
2000-	2,131	2,377	113	648	761	4,508	1.115	2,111	1,253,135	1.68
01										
2001-	2,150	2,386	28	883	911	4,536	1.109	2,202	1,267,070	1.74
02										
2002-	2,150	2,362	(-24)	561	561	4,512	1.098	2,230	1,285,729	1.73
03										
2003-	2,188	2,316	(-4)	700	700	4,508	1.058	2,251	1,303,777	1.73
04										
2004-	2,245	2,470	207	676	883	4,715	1.1	2,245	1,320,726	1.7
05										
2005-	2,274	2,501	60	707	767	4,775	1.1	2,274	1,337,895	1.7
06										
2006-	2,304	2,534	63	716	779	4,838	1.1	2,304	1,355,288	1.7
07										
2007-	2,334	2,567	63	726	789	4,901	1.1	2,334	1,372,907	1.7
08										
2008-	2,364	2,600	63	735	798	4,964	1.1	2,364	1,390,755	1.7
09										
2009-	2,395	2,635	66	745	811	5,030	1.1	2,395	1,408,835	1.7
10										
2010-	2,426	2,669	65	755	820	5,095	1.1	2,426	1,427,150	1.7
11										
2011-	2,458	2,704	67	764	831	5,162	1.1	2,458	1,445,703	1.7
12										
2012-	2,490	2,739	67	774	841	5,229	1.1	2,490	1,464,497	1.7
13										

Table 9: Full Time Principals and Assistant Principals Employed in NC Public Schools, Past and Projected

\*Shaded cells indicate projections

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 (650% 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.

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

Table 10: Assistant Principals with Provisional Licenses

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

Region	Percent of North Carolina Schools in Region	Percent of Provisional Licenses Since 1999-00
Central	25%	24.3%
Northeast	9%	8%
Northwest	14%	9%
Southcentral	13%	16.4%
Southeast	11%	18.2%
Southwest	18%	15.8%
West	9%	8.2%

Table 12: Distribution of New Principals by Regions

	98-99	99-00	00-01	01-02	02-03	03-04
Statewide	N=276	N=296	N=294	N=331	N=232	N=247
Central	22.82%	26.26%	25.17%	23.19%	27.59%	25.51%
Northeast	8.75%	8.75%	11.90%	12.35%	8.62%	6.48%
Northwest	17.17%	17.17%	10.88%	14.16%	15.08%	11.74%
Southcentral	13.13%	13.13%	17.34%	15.06%	13.36%	13.36%
Southeast	10.77%	10.77%	11.22%	12.05%	10.34%	13.77%
Southwest	15.45%	15.45%	15.30%	16.27%	15.09%	18.62%
West	8.75%	8.75%	8.16%	6.93%	9.91%	10.53%

Table 13: Distribution of New Assistant Principals by Regions

	98-99	99-00	00-01	01-02	02-03	03-04
Statewide	N=436	N=379	N=467	N=580	N=329	N=453
Central	24.08%	23.75%	25.27%	23.88%	29.79%	27.69%
Northeast	10.09%	8.18%	8.78%	8.93%	11.55%	6.37%
Northwest	10.09%	15.30%	12.85%	14.95%	12.46%	11.21%
Southcentral	12.39%	14.51%	15.85%	13.23%	10.03%	12.53%
Southeast	10.78%	11.08%	8.14%	8.76%	9.12%	12.09%
Southwest	25.00%	21.64%	24.20%	24.05%	19.76%	23.30%
West	7.54%	5.44%	4.93%	6.18%	7.29%	6.81%

### 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.

	99-00	00-01	01-02	02-03	03-04
Number of new principals hired	N=296	N=294	N=331	N=232	N=247
% 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
% 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

Table 14: Sources of New Principals and Assistant Principals

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.

Institution	1999-2000	2000-2001	2001-2002	2002-2003
Appalachian	44	10	51	14
State Univ.				
East Carolina	71	64	103	112
Univ.				
Fayetteville State	13	25	21	31
Univ.				
North Carolina		55	92	82
State Univ.				
University of	17	21	15	33
North Carolina at				
Chapel Hill				
University of	39	38	33	45
North Carolina at				
Charlotte				
University of	38	43	26	57
North Carolina				
Greensboro				
University of				6
North Carolina				
Pembroke				
University of	7	13	14	16
North Carolina				
Wilmington				
Western Carolina	9	14	19	8
University				
UNC total	238	283	374	404

Table 15: Degrees Conferred in MSA Programs 1999-2000 through 2002-2003

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 2003 we hired 700 new administrators across North Carolina.

#### Demographic Trends:

The data on principal age indicate that a significant percent of current school principals (52%) 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-one percent are younger than 40 and 33% have 10 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. The total new hires are projected using the average turnover rate of 15% for the last five years.

#### 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.

### 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	Kings Mtn. District	Cherokee
Durham Public	Currituck	Caldwell	Cumberland	Greene	Shelby City	Clay
Franklin	Dare	Catawba	Harnett	Jones	Davidson	Graham
Granville	Edgecombe	Hickory City	Hoke	Lenoir	Lexington City	Haywood
Guilford	Gates	Newton-Conover	Lee	New Hanover	Thomasville City	Henderson
Johnston	Halifax	City	Montgomery	Onslow	Gaston	Jackson
Nash	Roanoke Rapids	Davie	Moore	Pamlico	Lincoln	Macon
Orange	City	Forsyth	Richmond	Pender	Charlotte-	Madison
Chapel Hill-	Weldon City	Iredell-Statesville	Robeson	Sampson	Mecklenburg	McDowell
Carrboro	Hertford	Mooresville City	Scotland	Clinton City	Rowan	Mitchell
Person	Hyde	Stokes		Wayne	Stanley	Polk
Randolph	Martin	Surry			Union	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					