

Report to the Joint Legislative Education Oversight Committee

June 15, 2020

The University of North Carolina System Chapel Hill, North Carolina Pursuant to Section 9.3 (b) of S.L. 2010-31, the Board of Governors of The University of North Carolina shall 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 the biennium and report the results of this study to the Joint Legislative Education Oversight Committee.

Introduction

The purpose of this report is to provide data to the Joint Legislative Education Oversight Committee concerning school administration programs at the constituent University of North Carolina institutions and the trends that influence supply and demand of school-based administrators in North Carolina. For this study, school administrators are defined as superintendents, principals, and assistant principals.

The data included in this study were collected by the North Carolina Department of Public Instruction and provided to the UNC System Office by the Education Policy Initiative at Carolina. The data, collected between 2011 and 2019, represent the most recent information available for each indicator.

This report is divided into five sections:

- Demographics of North Carolina School Administrators
- Demand Trends for North Carolina School Administrators
- Supply Trends for North Carolina School Administrators
- Discussion of Findings
- Conclusions

Demographics of North Carolina's School Administrators

Superintendents. Demographic data indicate that 74 percent of school superintendents in North Carolina public schools during the 2018-2019 academic year were male, 76 percent were White and 23 percent were African-American, and the average age was 52 years. Superintendents reported an average of 25.3 years of experience in education with eight percent having achieved a master's degree and 91 percent holding doctorates or other advanced degrees.

Principals. The data also indicate that 62.1 percent of North Carolina public school principals are female, 72 percent were White and 26 percent were African-American. The average age for principals was 46 with a range of 45-48 across regions. The data suggest that principals have an average of 20.9 years of experience in education with 76 percent having achieved a master's degree, and 23 percent holding doctorates or other advanced degrees.

Assistant Principals. The data show that North Carolina assistant principals are 63 percent female, 65 percent white and 33 percent African-American. Assistant principals were mostly in their early to mid-40s, with an average of 43 to 45 years of age across regions. Assistant principals averaged 17.3 years of experience in education with 86 percent having achieved a master's degree and 9.9 percent holding doctorates or other advanced degrees.

The following tables provide detailed demographic data about North Carolina's superintendents, principals, and assistant principals. To further clarify school administrator regional supply-and-demand, each table offers data disaggregated by geographic region. The State Board of Education Regions & Districts are described below:

Northeast Region / District 1

Beaufort, Bertie, Camden, Chowan, Currituck, Dare, Gates, Halifax, Hertford, Hyde, Martin, Northampton, Pasquotank, Perquimans, Pitt, Roanoke Rapids, Tyrrell, Washington, Weldon

Southeast Region / District 2

Brunswick, Carteret, Craven, Duplin, Greene, Jones, Lenoir, New Hanover, Onslow, Pamlico, Pender, Wayne

North Central Region / District 3

Chapel Hill-Carrboro, Chatham, Durham, Edgecombe, Franklin, Granville, Harnett, Johnston, Lee, Nash, Orange, Person, Vance, Wake, Warren, Wilson

Sandhills Region / District 4

Bladen, Clinton, Columbus, Cumberland, Hoke, Montgomery, Moore, Richmond, Robeson, Sampson, Scotland, Whiteville

Piedmont Triad Region / District 5

Alamance, Asheboro, Caswell, Davidson, Davie, Elkin, Forsyth, Guilford, Lexington, Mount Airy, Randolph, Rockingham, Stokes, Thomasville, Surry, Yadkin

Southwest Region / District 6

Anson, Cabarrus, Cleveland, Gaston, Iredell, Kannapolis, Lincoln, Mecklenburg, Mooresville, Rowan, Stanly, Union

Northwest Region / District 7

Alexander, Alleghany, Ashe, Avery, Burke, Caldwell, Catawba, Hickory, McDowell, Mitchell, Newton-Conover, Watauga, Wilkes, Yancey

Western Region / District 8

Asheville, Buncombe, Cherokee, Clay, Graham, Haywood, Henderson, Jackson, Macon, Madison, Polk, Rutherford, Swain, Transylvania

Tables 1, 2, and 3 provide the number of school administrators within an age range.

	Avg Age	<40	40-44	45-49	50-54	55+
Statewide	51.53	4	9	31	35	37
Northeast	49.16	2	1	5	8	3
Southeast	51.29	0	0	5	3	4
North Central	49.63	0	3	5	6	2
Sandhills	52	1	2	1	3	6
Piedmont Triad	53.17	0	0	8	3	6
Southwest	54.08	1	1	1	2	7
Northwest	49.38	0	2	4	5	2
Western	54	0	0	2	5	7

Table 1: Superintendent Age (2018-19)

	Avg Age	<40	40-44	45-49	50-54	55+
Statewide	46.33	484	574	660	425	348
Northeast	46.05	33	41	42	28	25
Southeast	48.01	39	44	62	43	49
North Central	45.64	120	125	137	81	67
Sandhills	48.06	29	58	72	55	47
Piedmont Triad	46.3	88	93	120	67	63
Southwest	45.11	116	131	129	78	46
Northwest	46.31	35	44	49	34	26
Western	47.39	24	38	49	39	25

Table 2: Principal Age (2018-19)

Table 3: Assistant Principal Age (2018-19)

	Avg Age	<40	40-44	45-49	50-54	55+
Statewide	43.69	1110	609	657	374	371
Northeast	45.04	48	26	44	23	25
Southeast	44.61	100	48	64	35	53
North Central	42.49	329	165	149	95	72
Sandhills	45.13	94	47	72	42	49
Piedmont Triad	43.96	176	109	105	55	64
Southwest	43.6	244	148	159	85	73
Northwest	43.05	63	25	27	19	15
Western	44.05	56	41	37	20	20

Tables 4, 5, and 6 provide data about the years of education experience of current North Carolina school administrators.

Table 4: Superintendents'	Years of Education	Experience (2018-19)

	Avg Years	<10	10-14	15-19	20-24	25-29	30+
Statewide	25.32	4	4	10	35	32	32
Northeast	23.53	0	2	2	6	7	2
Southeast	26.75	0	0	1	4	3	4
North Central	24.5	0	0	5	5	2	4
Sandhills	26.54	0	1	0	4	3	5
Piedmont Triad	25.25	1	1	0	4	7	4
Southwest	24.92	2	0	1	1	3	5
Northwest	23.43	1	0	1	6	4	2
Western	28.71	0	0	0	5	3	6

	Avg Years	<10	10-14	15-19	20-24	25-29	30+
Statewide	20.88	77	341	659	729	466	219
Northeast	19.95	12	22	53	33	34	15
Southeast	21.96	7	22	61	68	50	29
North Central	20.49	12	93	133	165	89	38
Sandhills	21.84	3	27	68	88	49	26
Piedmont Triad	21.25	10	59	113	121	85	43
Southwest	20.08	23	74	131	153	85	34
Northwest	20.58	6	27	53	50	38	14
Western	21.76	4	17	47	51	36	20

Table 5: Principals' Years of Education Experience (2018-19)

Table 6: Assistant Principals' Years of Education Experience (2018-19)

	Avg Years	<10	10-14	15-19	20-24	25-29	30+
Statewide	17.27	442	755	799	639	318	174
Northeast	17.17	27	35	44	31	27	7
Southeast	17.46	42	73	68	68	35	14
North Central	16.39	143	220	188	150	64	45
Sandhills	17.75	36	77	73	65	37	16
Piedmont Triad	18.03	56	114	142	114	45	38
Southwest	17.51	78	178	194	152	71	37
Northwest	16.68	27	31	43	25	17	6
Western	17.67	33	27	47	34	22	11

Tables 7, 8 and 9 display data around the degrees earned by superintendents, principals and assistant principals

	Bachelor's	Bachelor's Master's		Doctoral
Statewide	1	9	19	87
Northeast	0	5	4	10
Southeast	0	2	3	7
North Central	0	0	2	14
Sandhills	0	0	1	12
Piedmont Triad	0	0	0	17
Southwest	1	1	1	9
Northwest	0	1	3	9
Western	0	0	5	9

	Bachelor's Master's Sixth Year Advanced			Doctoral
Statewide	17	1902	262	310
Northeast	0	135	20	14
Southeast	1	194	19	23
North Central	1	416	41	72
Sandhills	6	203	16	36
Piedmont Triad	1	296	76	58
Southwest	5	380	47	68
Northwest	2	142	22	22
Western	1	136	21	17

Table 8: Principals' Highest Degree Earned (2018-19)

Table 9: Assistant Principals' Highest Degree Earned (2018-19)

	Bachelor's Master's Sixth Year Advanced		Doctoral	
Statewide	136	2674	172	136
Northeast	6	141	16	3
Southeast	12	265	10	13
North Central	39	706	38	27
Sandhills	15	259	8	22
Piedmont Triad	23	434	36	16
Southwest	25	602	41	41
Northwest	9	124	6	10
Western	7	143	17	6

Tables 10, 11, and 12 provide data on the gender and ethnicity of North Carolina superintendents, principals and assistant principals.

Table 10: Race and Gender of Superintendents (2018-2019)

	Female	Male	Asian	African- American	Hispani c	America n Indian	Other	White
Statewide	30	86	0	27	0	0	0	88
Northeast	4	15	0	7	0	0	0	12
Southeast	2	10	0	2	0	0	0	10
North Central	5	11	0	8	0	0	0	8
Sandhills	2	11	0	6	0	0	0	7
Piedmont Triad	9	8	0	2	0	0	0	15
Southwest	2	10	0	0	0	0	0	11
Northwest	1	12	0	1	0	0	0	12
Western	5	9	0	1	0	0	0	13

	Female	Male	Asian	African- America n	Hispani c	American Indian	Other	White
Statewide	1544	941	8	624	16	27	3	1770
Northeast	96	73	0	64	0	2	0	101
Southeast	145	91	0	50	2	1	1	177
North Central	326	203	2	181	6	0	1	334
Sandhills	173	87	1	85	1	20	0	150
Piedmont Triad	279	151	3	110	2	1	1	304
Southwest	316	182	2	112	4	1	0	371
Northwest	109	79	0	15	1	2	0	166
Western	100	75	0	7	0	0	0	167

Table 11: Race and Gender of Principals (2018-2019)

Table 12: Race and Gender of Assistant Principals (2018-2019)

	Female	Male	Asian	African- America n	Hispani c	American Indian	Other	White
Statewide	1963	1148	13	994	37	35	2	1967
Northeast	121	43	1	65	2	0	0	90
Southeast	208	92	0	69	1	3	0	221
North Central	486	310	4	332	14	5	0	437
Sandhills	197	106	2	126	5	25	1	141
Piedmont Triad	301	207	2	182	4	1	0	307
Southwest	455	253	3	198	10	0	1	478
Northwest	86	62	1	8	0	0	0	137
Western	99	75	0	14	1	1	0	156

Demand Trends for North Carolina School Administrators

Table 13 outlines North Carolina's principal retention rates from the 2011-12 through the 2017-18 academic years. Consistently, few principals left the principalship after their first year on the job, with at least an 85 percent statewide retention rate for each cohort. By the fifth year, more than half of North Carolina's principals were no longer in that position.

Table 13: Principal Retention Rates

Cohort Year	Principal One	Principal Two	Principal Three	Principal Four	Principal Five
and Size	Year Later	Years Later	Years Later	Years Later	Years Later
2011-12	2135	1861	1623	1372	1192
(N=2497)	(85.5%)	(74.5%)	(65%)	(54.9%)	(47.7%)
2012-13	2152	1875	1592	1389	1198
(N=2499)	(86.1%)	(75%)	(63.7%)	(55.6%)	(47.9%)
2013-14	2156	1847	1598	1381	1194
(N=2502)	(86.2%)	(73.8%)	(63.9%)	(55.2%)	(47.7%)

2014-15	2159	1868	1618	1410	
(N=2527)	(85.4%)	(73.9%)	(64%)	(55.8%)	
2015-16	2160	1876	1644		
(N=2509)	(86.1%)	(74.8%)	(65.5%)		
2016-17	2168	1893			
(N=2522)	(86%)	(75.1%)			
2017-18	2183				
(N=2530)	(86.3%)				

Table 14 presents data on the number of assistant principals holding provisional licenses. A one-year provisional license may be issued by a local board of education to an individual selected for employment as an assistant principal 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 Masters of School Administration (MSA) program and is participating in that program's required internship.

During the 2018-19 academic school year, 12.8 percent of all newly hired assistant principals held provisional licenses. This number varies greatly by district with 26.3 percent of assistant principals holding a provisional license in the Northwest region and less than ten percent holding a provisional license in the North Central region.

Region	Number (Percentage) of Provisional Licenses
Statewide (N = 547)	70 (12.8 percent)
Northeast (N = 42)	5 (11.9 percent)
Southeast (N = 54)	9 (16.7 percent)
North Central (N = 162)	15 (9.3 percent)
Sandhills (N = 49)	6 (12.2 percent)
Piedmont Triad (N = 69)	7 (10.1 percent)
Southwest (N = 89)	13 (14.6 percent)
Northwest (N = 38)	10 (26.3 percent)
Western (N = 44)	5 (11.4 percent)

Tables 15, 16 and 17 display the number of new school administrators statewide, and by region in the 2018-19 academic year.

Region	Number of New Superintendents
Statewide	12
Northeast	4
Southeast	1
North Central	0
Sandhills	4
Piedmont Triad	2
Southwest	0
Northwest	1
Western	0

Table 15:	Number of	[•] New Superintenden	ts by Region (2018-19)
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Table 16: Number of New Principals by Region (2018-19)

Region	Number of New Principals
Statewide	253
Northeast	24
Southeast	20
North Central	59
Sandhills	16
Piedmont Triad	41
Southwest	45
Northwest	22
Western	26

Table 17: Number of New Assistant Principals by Region (2018-19)

Region	Number of New Assistant Principals
Statewide	547
Northeast	42
Southeast	54
North Central	162
Sandhills	49
Piedmont Triad	69
Southwest	89
Northwest	38
Western	44

Supply Trends for North Carolina School Administrators

Table 18 provides data collected by the Department of Public Instruction related to the annual supply for principals and assistant principals. In 2018-19, 84.2 percent of newly hired principals had served as assistant principals in 2017-18. Of the newly hired assistant principals in 2018-19, less than half, or 48.3

percent were classroom teachers in the previous year. Additionally, 15.5 percent of newly hired assistant principals were employed as assistant principal interns in 2017-18.

	New Principals (2018-19) Who Were Asst. Principals in 2017-18	New APs (2018-19) Who Were Teachers in 2017-18	New APs (2018-19) Who Served as Interns in 2017- 18
Statewide (P N=253) (AP N=547)	213 (84.2%)	264 (48.3%)	85 (15.5%)
Northeast (P N=24) (AP N=42)	18 (75%)	15 (35.7%)	7 (16.7%)
Southeast (P N=20) (AP N=54)	19 (95%)	35 (64.8%)	5 (9.3%)
North Central (P N=59) (AP N=162)	51 (86.4%)	58 (35.8%)	55 (34%)
Sandhills (P N=16) (AP N=49)	13 (81.3%)	30 (61.2%)	4 (8.2%)
Piedmont Triad (P N=41) (AP N=69)	34 (82.9%)	36 (52.2%)	4 (5.8%)
Southwest (P N=45) (AP N=89)	39 (86.7%)	48 (53.4%)	5 (5.6%)
Northwest (P N=22) (AP N=38)	19 (86.4%)	18 (47.4%)	3 (7.9%)
Western (P N=26) (AP N=44)	20 (76.9%)	24 (54.6%)	2 (4.6%)

Table 18: Sources of New Principals and Assistant Principals

Table 19 provides the number of graduates of North Carolina's Masters of School Administration (MSA) programs. Since the 2014-15 academic year, UNC System principal preparation programs have produced more than 1,300 school leaders.

Institution	2014-15	2015-16	2016-17	2017-18	2018-19
ASU	38	26	19	24	17
ECU	57	50	41	61	48
ECSU	6	15	8	8	9
FSU	17	22	10	13	14
NCA&T	1	2	10	8	6
NCCU	12	14	26	14	19
NCSU	9	0	35	66	14
UNCA					
UNCCH	27	26	32	27	30
UNCC	31	22	19	36	28
UNCG	12	0	10	15	31
UNCP	23	25	19	12	27
UNCW	11	9	19	7	16
WCU	18	24	15	29	18
WSSU					
Total	262	235	263	320	277

Table 19: MSA Degrees Conferred at UNC System Institutions

Discussion of Findings

A 2016 study by the National Center for Education Statistics provides an analysis of national demographic trends in school leadership using data from the 1987-88 through 2011-12 administrations of the Schools and Staffing Survey (SASS). During this 25-year timeframe, the number of female principals in public schools increased from 25 percent to 52 percent. With regard to race and ethnicity, minimal change occurred with African-American principals increasing from nine percent to ten percent, Hispanic principals increasing from three percent to seven percent, and White principals decreasing from 87 percent to 80 percent. The average age of principals also remained fairly consistent increasing from 46.8 to 48.0 years of age. A greater number of public school principals reported having received Master's degrees (53 percent to 62 percent); however, there was a decline in the number of principals having achieved doctorates or other advanced degrees (44 percent to 36 percent).¹

Demographic Trends. Based on the 2018-19 data for North Carolina school administrators, superintendents were well educated with 91 percent holding doctorate or other advanced degrees. Superintendents also had significant experience in education with an average of 25 years in the field; however, with an average of 52 years of age many are also nearing retirement (i.e., full retirement is possible after 30 years of service). There was a lack of racial diversity among North Carolina's superintendents with African-Americans serving as the only ethnic minorities in this advanced leadership role. There was also a gender imbalance among North Carolina superintendents, although more than half of all assistant principals and principals are women.

¹Hill, J., Ottem, R., DeRoche, J., Owens, C. (2016). Trends in public and private school principal demographics and qualifications: 1987-88 to 2011-12. Stats in Brief. NCES 2016-189.

North Carolina principals were younger and had less education experience than superintendents. Principals were also further from retirement with only 27 percent having 25 or more years of experience. Also, 23 percent of principals held doctorate and other advanced degrees. More than one in four principals belonged to an ethnic minority group and almost two-thirds of all principals were women.

More than half of assistant principals were younger than 45 years of age and 39 percent had fewer than fifteen years of education experience. Also, 86 percent of assistant principals had at least a master's degree and ten percent had a doctorate or other advanced degree. More than one-third (35 percent) of assistant principals were ethnic minorities, and women represented greater numbers (63 percent) in the assistant principalship than any other level of school leadership.

Demand Trends

In 2018-19, 253 new principals were hired with the majority of new principals employed in the North Central region. Assistant principals were also in high demand with 547 new hires, almost 30 percent hired in the North Central region. Only 12 superintendents were hired state-wide.

Data regarding principal retention demonstrate that over 40 percent of North Carolina's principals were no longer employed in the state's public schools after 4 years on the job, and that more than half left their positions after five years. Age data indicated that administrator turnover rates over the next several years will increase due to retirement, particularly among superintendents. Considering the number of new MSA graduates in 2018-19 (277) and the number of assistant principals who are under the age of 40, the data indicates that a large pool of potential principals and superintendents currently exists to fill these gaps.

Supply Trends

A total of 812 school administrators were hired in North Carolina in 2018-19 (12 superintendents, 253 principals, and 547 assistant principals). Of the new principals, 84 percent were employed as assistant principals during 2017-18. In addition, 48.3 percent of assistant principals were employed as teachers the previous year. These numbers, in addition to the number of new MSA graduates (277) produced by the UNC System in 2018-19, suggest that there would be a minimal shortfall in the supply of school administrators needed to meet the state demand.

If it is assumed that out-of-state preparation data holds true to previous reports at five percent of the supply, one might deduce that the supply of new administrators produced by the UNC System equaled 54 percent of the 2018-2019 state demand for new administrators, leaving 46 percent of positions to be filled via other preparation pathways. Further exacerbating this supply issue is the fact that only 13 percent of new assistant principal hires hold provisional licenses. It is important to note that increased turnover among more experienced principals, declining enrollment in principal preparation programs, and the hiring of principals from out-of-state are key considerations when determining supply trends. In addition, there are likely many educators who hold licenses in school administration who do not yet serve as school administrators—lending even greater complexity to the estimation of school administrator supply-and-demand trends.

Conclusion

Principal turnover is a continuing issue in North Carolina with more than half of the state's principals leaving their job after five years of employment. Levin & Bradley (2019) note that principal turnover can

disrupt school improvement, increase teacher turnover, and lower gains in student achievement—these declines in student outcomes are even stronger in high-poverty, low achieving schools.² As principals often leave their jobs due to inadequate preparation and limited professional development opportunities, program improvements in principal preparation are key to increasing principal retention.

A closer look at the supply and demand of educational leaders in North Carolina reveals an issue with both the numbers of leaders being produced and the lack of racial diversity in the leadership pipeline. Research clearly indicates the positive impact of increased diversity in school leadership for both teachers and students, such as higher rates of teacher job satisfaction, greater administrative support and recognition, and more access to the resources necessary to teach. Additionally, diverse leadership in schools has been shown to reduce the disciplinary action gap between African-American and White students and improve the number of African-American students identified as academically gifted.³ Beyond the fact that there is a need for program growth and greater access to high-quality principal preparation programs, there should be more attention given to the low levels of racial diversity amongst educational leaders in North Carolina. According to the 2018-2019 data, 86 percent of superintendents are white, 74 percent of principals are white, and 67 percent of assistant principals are white in North Carolina.

In response to the need for greater access to quality preparation for school leaders, the Transforming Principal Preparation Program (TP3) was consolidated with the North Carolina Principal Fellows Program (NCPFP) in 2019, creating a more strategic and unified funding source for the principal preparation programs in North Carolina. The new NCPFP/TP3 combines TP3's competitive grants-based model with the Principal Fellows' Commission-based governance to ensure North Carolina's aspiring leaders are well-trained and retained in North Carolina's high-needs schools. The consolidation of the two principal preparation programs allows for a competitive model amongst the providers as resources are assigned to recruit high-quality candidates to the most rigorous, evidence-based preparation programs. The consolidated programs plan to produce approximately 40 percent of the state's educational leadership demand.

The consolidated NCPFP/TP3 is open to traditional public and independent institutions of higher education as well as non-traditional, non-profit routes of entry. Through the incentive of state funds, the program integrates the key research-based components of successful principal preparation nationwide, including:

- Proactive, intentional recruitment efforts;
- A high bar for entry;
- Rigorous and relevant coursework;
- Strategic and sustained investments in teacher and principal salaries;
- Teacher recruitment scholarships for hard-to-staff schools and subjects;
- Teacher leadership and alternative compensation pilots;
- Targeted investments in high-quality recruitment and principal preparation;

² Levin, S. & Bradley, K. (2019). Understanding and addressing principal turnover: A review of the research. Reston, VA: National Association of Secondary School Principals and The Learning Policy Institute.

³Viano, S. L., & B. Hunter, S. (2017). Teacher-principal race and teacher satisfaction over time, region. Journal of Educational Administration, 55(6), 624-639. doi:10.1108/JEA-10-2016-0122. See also Roch, C. H., & Elsayed, M. A. A. (2020). Race, school discipline, and administrative representation. International Public Management Journal, 23(2), 161-185. doi:10.1080/10967494.2019.1659196; Grissom, J. A., Rodriguez, L. A., & Kern, E. C. (2017). Teacher and principal diversity and the representation of students of color in gifted programs: Evidence from national data. *The Elementary School Journal*, *117*(3), 396-422. doi:10.1086/690274

- A full-time, paid residency; and
- A focus on authentic partnerships with and preparation for service in high-need schools and districts

North Carolina has demonstrated a commitment to improve the supply and capacity of educational leaders through a consolidation of state funds. However, educational leadership for public school instruction should portray representative diversity. Developing flexible, competency-based models that allow for virtual, self-paced adult professional learning in the training of K12 leadership could assist with this goal. Moreover, the creation of a coaching/mentoring model by former graduates of the NCPFP/TP3 program would build the capacity of educational leaders utilizing a prescriptive approach. With the state's ongoing commitment to educational leadership, a diverse pool of leaders can change the outcomes and experiences of our K12 students.