



E&R Report 04.19

September 2004

## **WAKE COUNTY PUBLIC SCHOOL SYSTEM GRADUATES AS UNC FRESHMEN: COLLEGE ADMISSIONS AND PERFORMANCE TRENDS COMPILATION OF 1990-2003**

Authors: Temple Robinson & Karen Banks

### **ABSTRACT**

*This report uses data published by the University of North Carolina (UNC) Office of General Administration to measure how well Wake County Public School System (WPCSS) high school graduates compare to North Carolina public high school (NCPHS) graduates in the college admissions process. It also examines how well WPCSS high school graduates compare to the UNC freshmen class in advanced, non-remedial, and remedial college courses. Based on those parameters, from Fall 1990 to Fall 2002, WPCSS graduates had more success than NCPHS graduates overall in the college admissions process. Furthermore, WPCSS graduates had more successful academic years in comparison to all UNC freshmen. Therefore, the data suggest that WPCSS graduates are more prepared for the college admissions process and collegiate courses than their peers.*

### **INTRODUCTION**

The North Carolina High School Feedback Reports provide information on how well recent North Carolina public high school (NCPHS<sup>1</sup>) graduates complete the college admissions process and chart their academic progress during their freshman year at a University of North Carolina (UNC) institution. These reports are published by the UNC Office of General Administration and have been distributed yearly to school districts since 1992. The reports compile data on state, district, and school levels. The UNC Web site is our official source of data. However, occasional updates and corrections made to the site mean data may not exactly match our previous reports. This report uses that data to determine how well Wake County Public School (WCPSS) high school graduates compare to NCPHS graduates overall in the UNC college admissions process. It also measures how well WCPSS graduates perform academically in comparison to the UNC<sup>2</sup> freshmen class.

<sup>1</sup> All public schools in North Carolina, including WCPSS

<sup>2</sup> UNC freshmen information also includes data on all in-state and out-of-state students from public and private schools. WCPSS data is included in the UNC freshmen statistics.

**APPLICATIONS, ACCEPTANCE, AND ENROLLMENT**

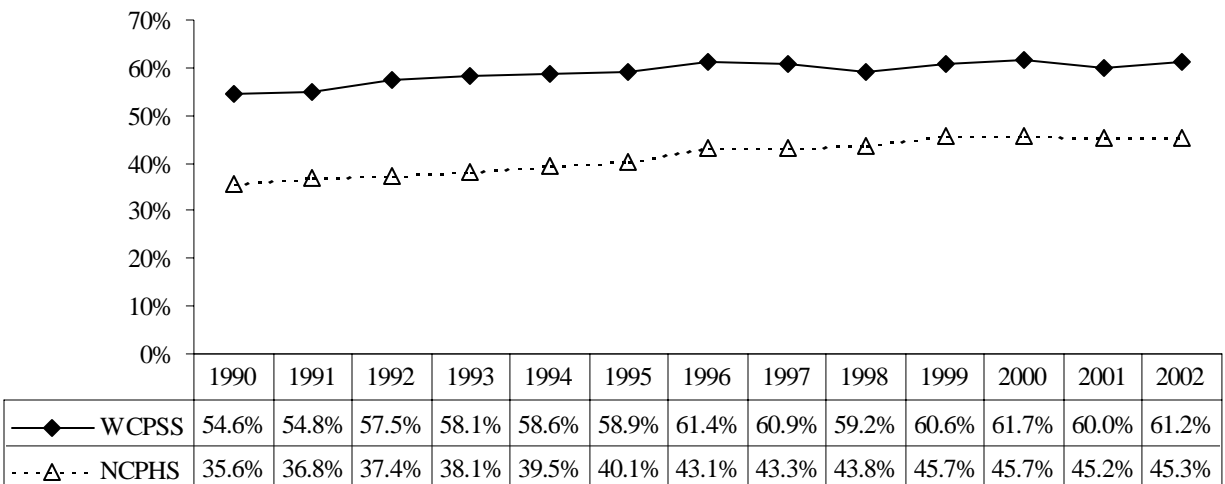
Some of the indicators used to measure the readiness of high school graduates for college are applications, acceptance, and enrollment statistics. Based on the data from the UNC Office of General Administration, WCPSS graduates are more successful than NCPHS graduates in those areas.

**UNC College Applications**

Based on the college admissions data:

- Each year, when compared to NCPHS graduates, a higher percentage of WCPSS graduates applied to at least one UNC institution, with a difference of at least 14.8% (see Figure 1).
- Both WCPSS graduates and NCPHS graduates have an overall positive trend line. WCPSS percentages peaked in Fall 2000 at 61.7%, whereas NCPHS graduates' percentages peaked twice at 45.7% in Fall 1999 and Fall 2000.

**Figure 1**  
**Graduates who Applied to at Least One UNC Institution**  
**Fall 1990 - Fall 2002**

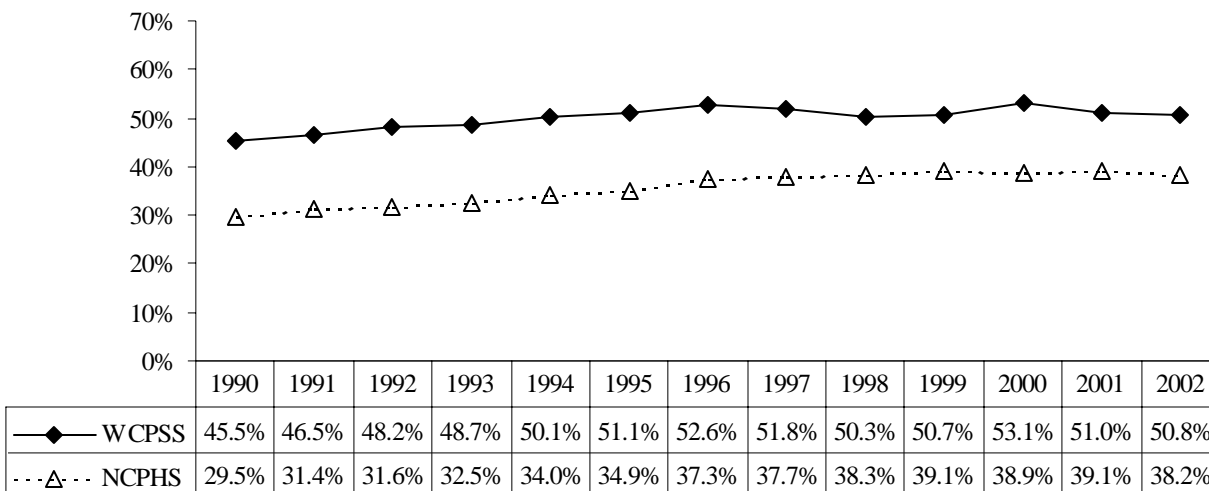


**UNC College Admissions**

Admission records for WCPSS and NCPHS graduates demonstrate a pattern similar to college applications:

- In Figure 2, more WCPSS graduates were accepted into at least one UNC institution, when compared to NCPHS graduates, with a difference of at least 11.6%.
- Both WCPSS graduates and NCPHS graduates have an overall positive trend line. Percentages climaxed in Fall 2000 at 53.1% for WCPSS graduates. As for NCPHS graduates, their highest percentage of 39.1% occurred in both Fall 1999 and Fall 2001.
- The percentages of WCPSS graduates and NCPHS graduates accepted by at least one UNC institution had net increases. NCPHS graduates experienced higher percentage growth (8.7%), than WCPSS graduates (5.3%).

**Figure 2**  
**Graduates Accepted by at Least One UNC Institution**  
**Fall 1990 - Fall 2002**

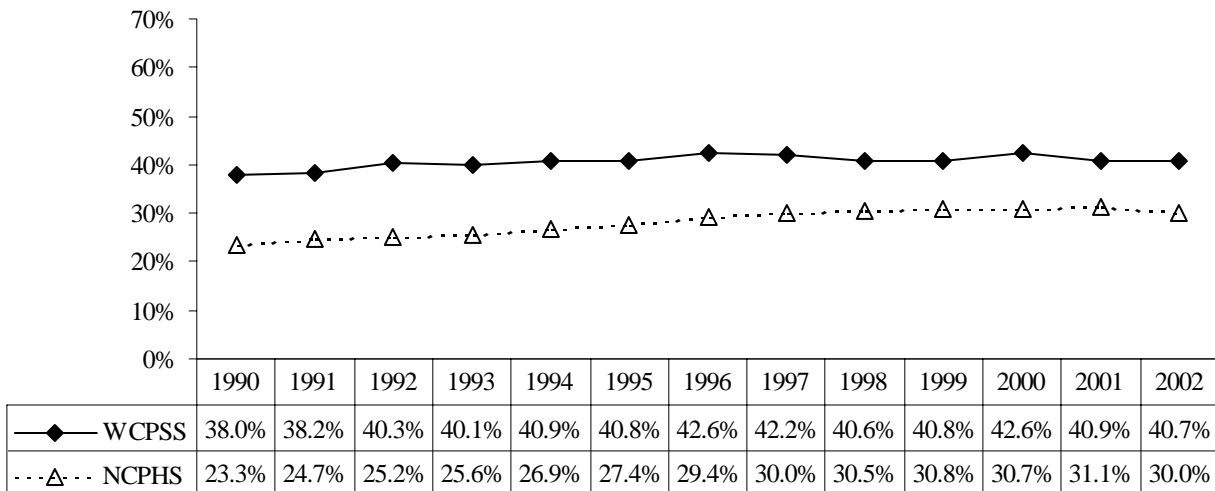


**UNC College Enrollment**

As shown in the next figure, enrollment figures from Fall 1990 to Fall 2002 also paint a favorable picture of WCPSS graduates:

- Consistently, WCPSS graduates have had a greater percentage of graduates enrolled in a UNC institution, when compared to NCPHS graduates, with at least a 9.8% difference.
- Both WCPSS graduates and NCPHS graduates experienced net percentage increases. The highest percentage of enrollment of WCPSS graduates was 42.6% in Fall 1996. Moreover, the highest percentage of enrollment of NCPHS graduates was 31.1% in Fall 2001.
- NCPHS graduates had more percentage growth (6.7%) than WCPSS graduates (2.7%) in the percentage of graduates enrolled in a UNC institution. Part of the minimal growth is due to graduates' decisions to attend colleges that are not members of the UNC system.

**Figure 3**  
**Graduates Enrolled in a UNC Institution**  
**Fall 1990 - Fall 2002**



### FRESHMAN PERFORMANCE

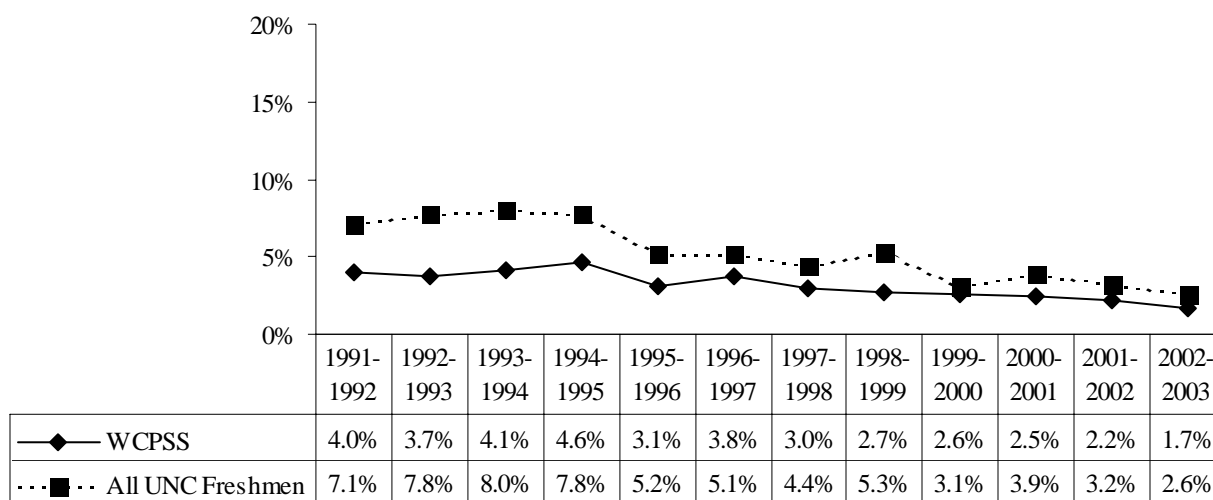
Though high school applications, admissions, and enrollments measure how well students meet the criteria to apply and enroll in college, it does not determine their performance. Therefore, in this report, several indicators are used to determine the academic readiness of high school graduates for college; and they are based on students’ academic performance during the freshman year. Particularly, it examines the percentage of freshmen who enrolled in remedial English and math, advanced placement in English and math, and average grade point average (GPA) earned in non-remedial courses. Based on the collected data, since 1991-92<sup>3</sup>, WCPSS graduates have continually scored better than UNC<sup>4</sup> freshmen.

#### Remedial English

For remedial English, statistics reveal that:

- A lower percentage of WCPSS graduates took a remedial English course, compared to UNC freshmen, with at least a 0.5% difference (see Figure 4).
- Though the percentages generally increased from 1991-94, the trend line shows an overall continual decrease after 1994. UNC freshmen experienced a greater net percentage decrease (4.5%), than WCPSS graduates (2.3%).
- In 2002-03, both WCPSS graduates and UNC freshmen had the lowest percentage of students who took a remedial English course, with 1.7% and 2.6% respectively.

**Figure 4**  
**Students Enrolled in Remedial English Courses**  
**1991-92 through 2002-03**



<sup>3</sup> Information prior to 1991-1992 is not available.

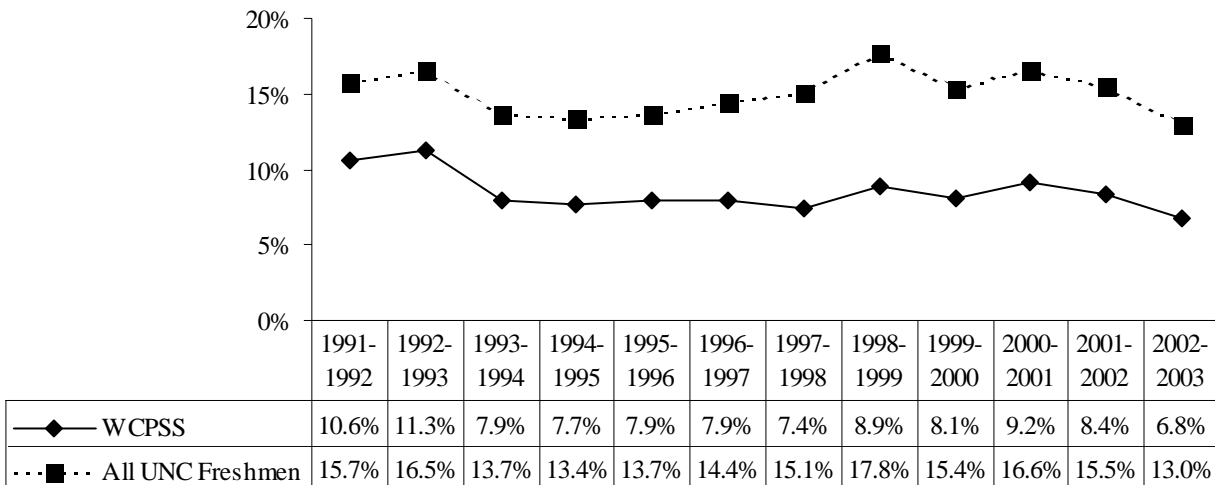
<sup>4</sup> UNC freshmen information also includes data on all in-state and out-of-state students from public and private schools. WCPSS data is included in the UNC freshmen statistics.

**Remedial Math**

As the following figure demonstrates, for remedial math:

- More UNC freshmen required math remediation than WCPSS graduates, with at least a 5.1% difference or more each year.
- Though the trend line curves, there has been a steady decrease in the percentage of graduates enrolled in a remedial math course since 2000. WCPSS graduates have the greatest net difference at 3.8%, compared to UNC freshmen’s net difference of 2.7%.
- Both WCPSS graduates and UNC freshmen’s percentages were the lowest in 2002-03, at 6.8% and 13.0% respectively.
- Overall, when compared to remedial English, a higher percentage of students needed remediation in math, for both WCPSS graduates and UNC freshmen.

**Figure 5**  
**Students Enrolled in Remedial Math Courses**  
**1991-92 through 2002-03**

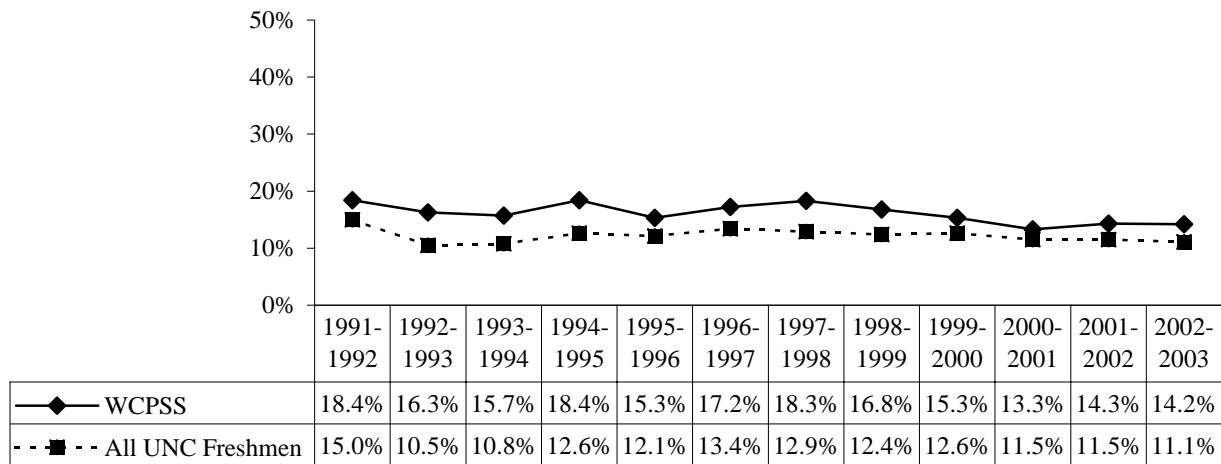


**Advanced Placement in English**

Statistics in Figure 6 show that in advanced placement in English:

- Each year, more WCPSS graduates were enrolled in advanced placement English courses than UNC freshmen, with a difference of at least 1.8%.
- The percentage of students enrolled in advanced placement in English decreased slightly in both groups since 1991-02, with WCPSS graduates decreasing by 4.2% and UNC freshmen decreasing by 3.9%.

**Figure 6**  
**Students with Advanced Placement in English Courses**  
**1991-92 through 2002-03**



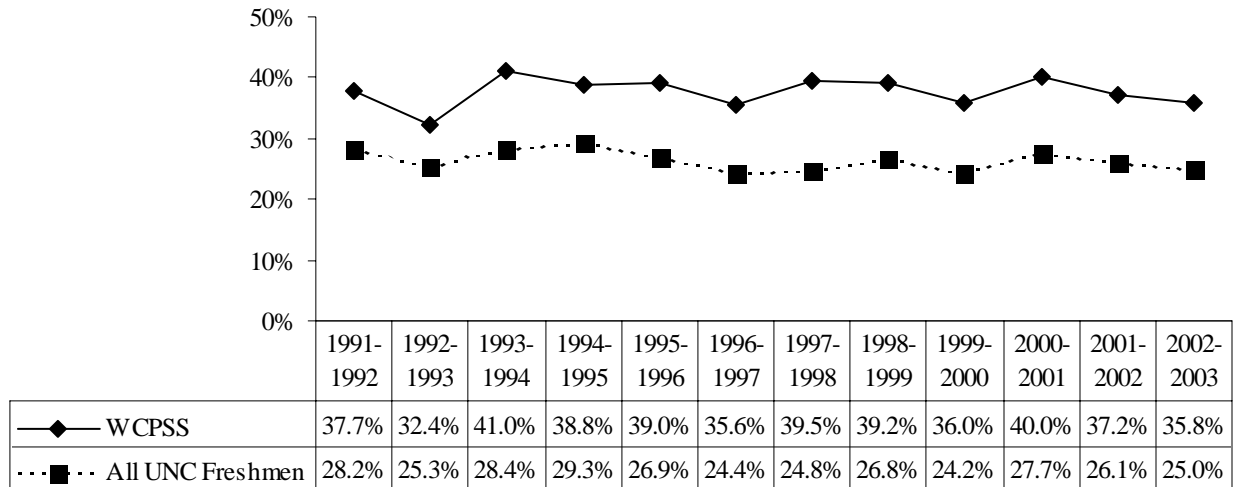
Note: 2001-02 numbers reflect corrected data from UNC Office of General Administration

**Advanced Placement in Math<sup>5</sup>**

In advanced placement in math, the numbers show that:

- Traditionally, more WCPSS graduates than UNC freshmen took advanced placement math courses, with at least a 7.1% difference (see figure 7).
- WCPSS graduates had their highest percentage of advanced placement in math in 1993-94 at 41.0%. UNC freshmen had their highest percentage of 29.3% in 1994-95.
- Though the trend line curves, UNC freshmen experienced a greater negative net percentage (-3.2%), than WCPSS graduates (-1.9%).
- More students were in advanced placement math courses than in advanced placement English courses.

**Figure 7**  
**Students with Advanced Placement in Math Courses**  
**1991-92 through 2002-03**



<sup>5</sup> Advanced placement in math includes calculus and other math courses that are higher than calculus.

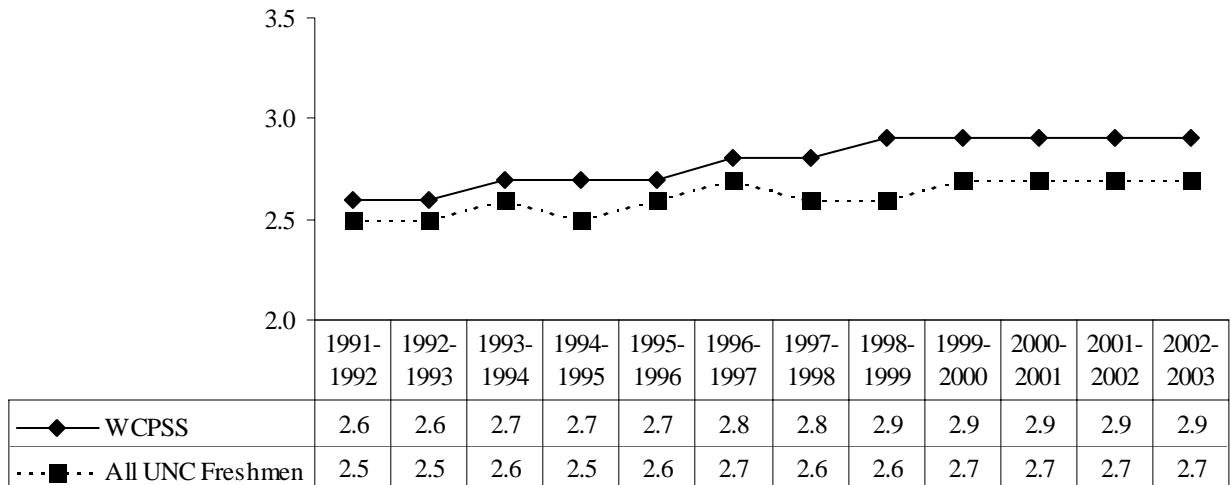


**GPA in Non-Remedial Courses**

When comparing the average GPA in non-remedial courses, WCPSS graduates have favorable results.

- Figure 8 shows that WCPSS graduates have consistently scored higher than UNC freshmen, with at least a 0.1 point difference.
- Since 1998-99, WCPSS graduates have maintained their highest GPA score of 2.9; whereas UNC freshmen reached their highest score of 2.7 in 1996-97, and have maintained that score since 1999-2000.
- The trend line has been mostly positive. UNC freshmen have a net difference of 0.2 points; however the net difference for WCPSS graduates is greater at 0.3 points.

**Figure 8**  
**Average GPA in Non-Remedial Courses**  
**1991-92 through 2002-03**



**Attachments**

In addition to the data presented, Attachment A charts the performance of WCPSS graduates and UNC freshmen in non-remedial core courses (English, math, physical sciences, biological sciences, social sciences, and foreign languages). Attachment B graphs the following information for each high school in WCPSS: UNC applications, admissions, enrollments, number of freshmen, and average GPA in non-remedial courses. It also presents the percentage of students at each high school who had a GPA of at least 2.0, enrolled in remedial English and math, and enrolled in advanced placement in English and math.

**CONCLUSION**

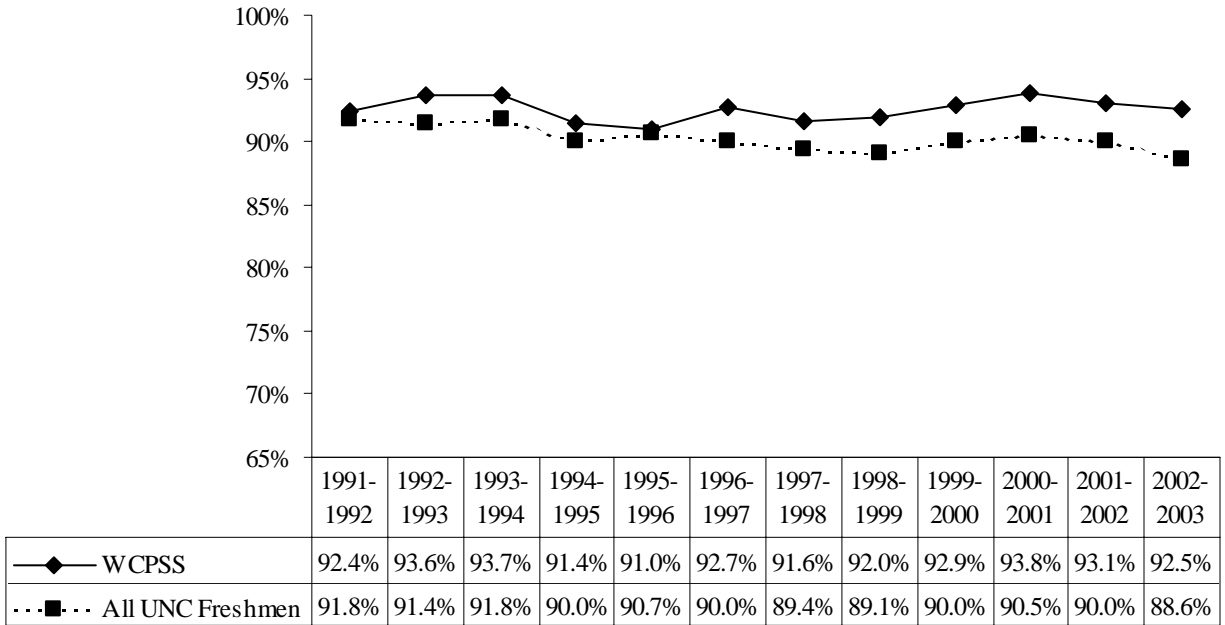
Based on the information provided by the UNC Office of General Administration, WCPSS graduates consistently outperform their UNC freshmen classmates. Therefore, the data suggest that WCPSS better prepares their graduates for the college admission process and the rigors of college academia to ensure a successful collegiate academic experience.

**REFERENCES**

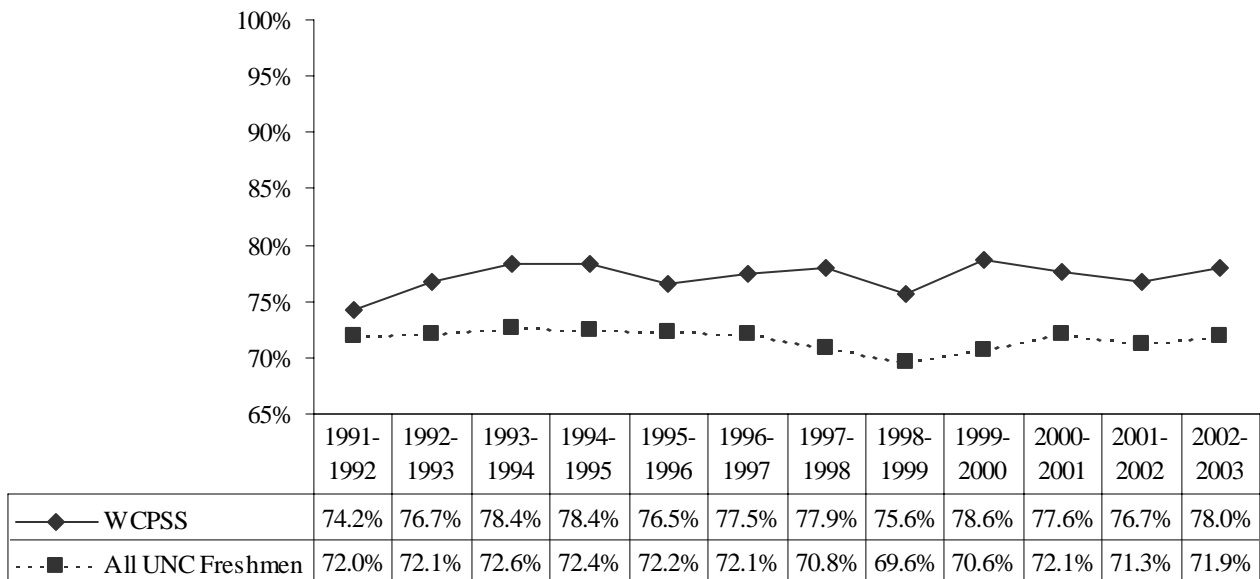
- UNC Office of General Administration. (1992). *North Carolina High School Feedback Reports*. Chapel Hill, NC: University of North Carolina.
- UNC Office of General Administration. (1993). *North Carolina High School Feedback Reports*. Chapel Hill, NC: University of North Carolina.
- UNC Office of General Administration. (1994). *North Carolina High School Feedback Reports*. Chapel Hill, NC: University of North Carolina.
- UNC Office of General Administration. (1995). *North Carolina High School Feedback Reports*. Chapel Hill, NC: University of North Carolina.
- UNC Office of General Administration. (1996). *North Carolina High School Feedback Reports*. Chapel Hill, NC: University of North Carolina.
- UNC Office of General Administration. (1997). *North Carolina High School Feedback Reports*. Chapel Hill, NC: University of North Carolina.
- UNC Office of General Administration. (1998). *North Carolina High School Feedback Reports*. Chapel Hill, NC: University of North Carolina.
- UNC Office of General Administration. (1999). *North Carolina High School Feedback Reports*. Chapel Hill, NC: University of North Carolina.
- UNC Office of General Administration. (2000). *North Carolina High School Feedback Reports*. Chapel Hill, NC: University of North Carolina.
- UNC Office of General Administration. (2001). *North Carolina High School Feedback Reports*. Chapel Hill, NC: University of North Carolina.
- UNC Office of General Administration. (2002). *North Carolina High School Feedback Reports*. Chapel Hill, NC: University of North Carolina.
- UNC Office of General Administration. (2003). *North Carolina High School Feedback Reports*. Chapel Hill, NC: University of North Carolina.

**ATTACHMENT A**

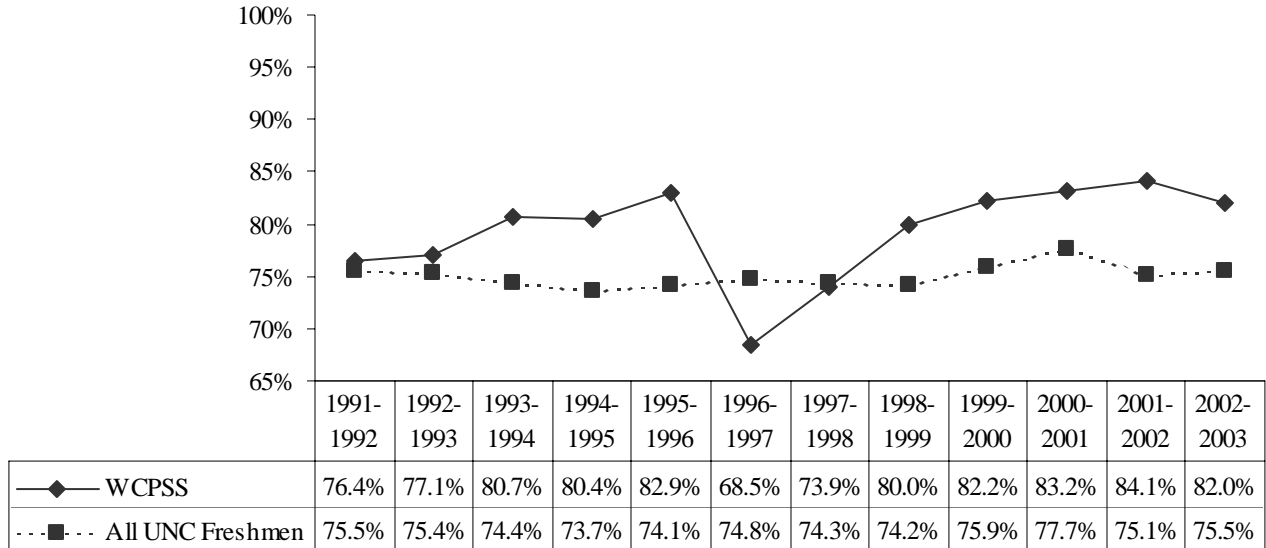
**Students who Earned a C or Better in English Courses  
1991-92 through 2002-03**



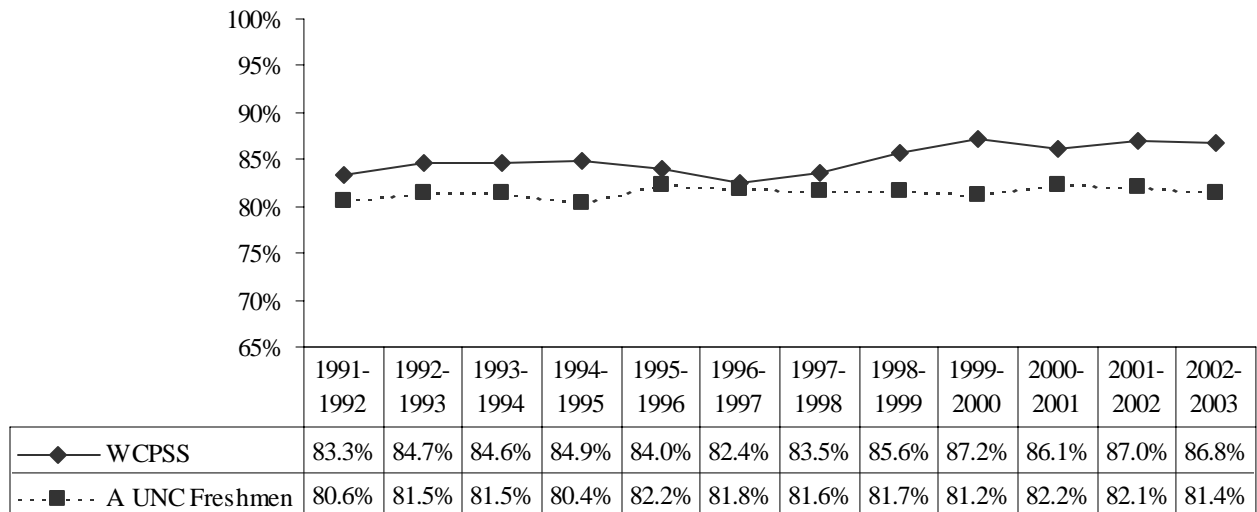
**Students who Earned C or Better in Math  
1991-92 through 2002-03**



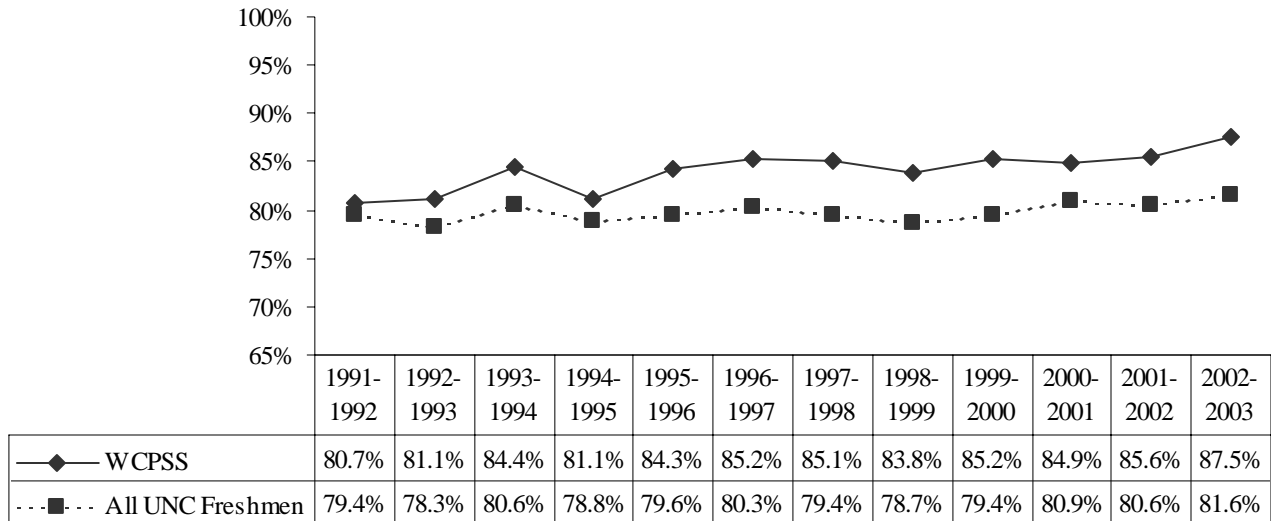
**Students who Earned C or Better in Biology  
1991-92 through 2002-03**



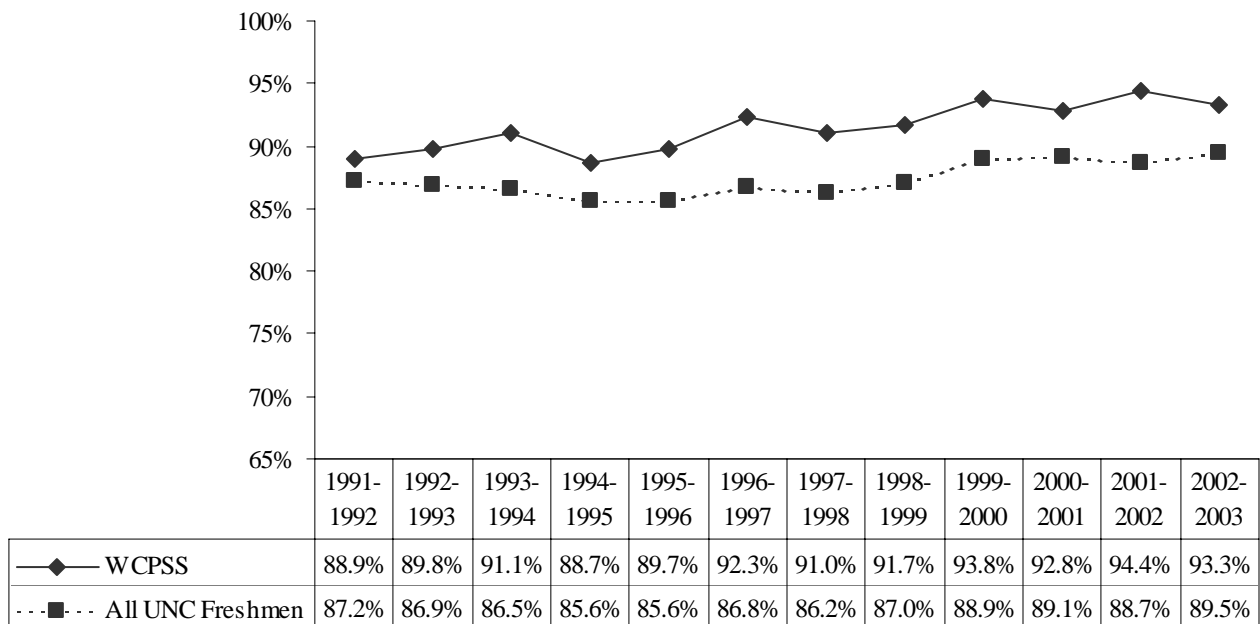
**Students who Earned C or Better in Physical Sciences  
1991-92 through 2002-03**



**Students who Earned C or Better in Social Sciences  
1991-92 through 2002-03**

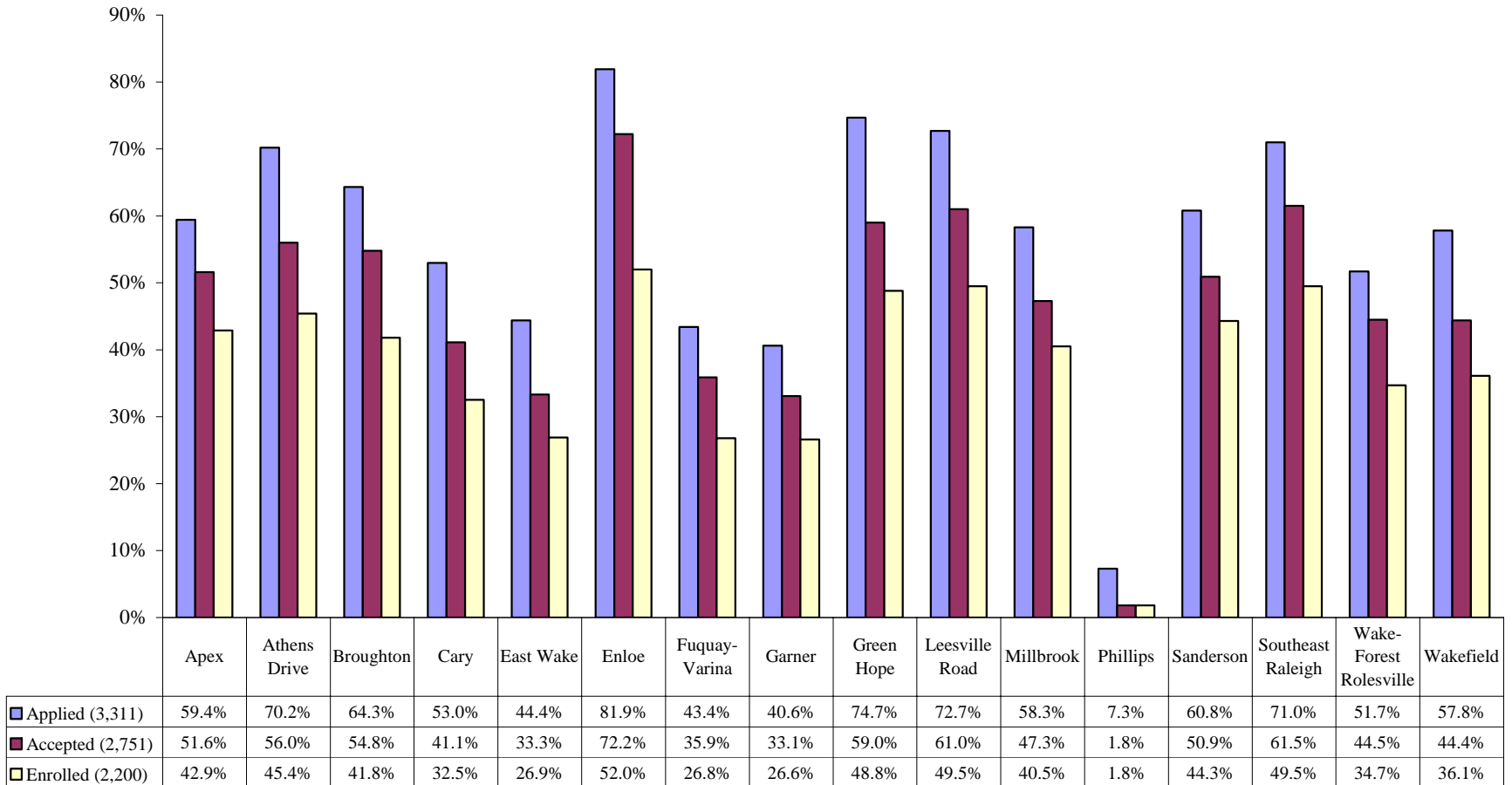


**Students who Earned C or Better in Foreign Languages  
1991-92 through 2002-03**



ATTACHMENT B

UNC Applications, Admissions, and Enrollment Data for WCPSS by High School  
2002-03



**WCPSS UNC Freshmen Placement and Performance by High School  
2002-2003**

|                      | Entry              | Placement          |                 |                                 |                      | Performance       |                    |
|----------------------|--------------------|--------------------|-----------------|---------------------------------|----------------------|-------------------|--------------------|
| High Schools         | Number of Freshmen | % Remedial English | % Remedial Math | % Advanced Placement in English | % Calculus or Above* | GPA at* Least 2.0 | Average Course GPA |
| Apex                 | 191                | 0.6%               | 4.2%            | 15.2%                           | 41.4%                | 90.6%             | 3.1                |
| Athens Drive         | 165                | 0.7%               | 3.1%            | 17.6%                           | 48.5%                | 89.7%             | 3.0                |
| Broughton            | 151                | 2.0%               | 5.3%            | 13.3%                           | 37.1%                | 82.8%             | 2.9                |
| Cary                 | 109                | 0.0%               | 2.8%            | 13.8%                           | 45.0%                | 89.0%             | 3.0                |
| East Wake            | 80                 | 6.3%               | 11.3%           | 3.8%                            | 21.3%                | 77.6%             | 2.6                |
| Enloe                | 258                | 1.2%               | 6.3%            | 28.7%                           | 33.4%                | 90.7%             | 3.2                |
| Fuquay-Varina        | 79                 | 0.0%               | 8.9%            | 6.4%                            | 25.4%                | 77.3%             | 2.8                |
| Garner               | 100                | 3.1%               | 11.1%           | 12.1%                           | 34.1%                | 78.1%             | 2.7                |
| Green Hope           | 143                | 1.4%               | 7.0%            | 12.6%                           | 33.6%                | 88.9%             | 3.0                |
| Leesville Road       | 218                | 1.9%               | 8.3%            | 13.8%                           | 40.9%                | 87.7%             | 3.0                |
| Millbrook            | 166                | 1.3%               | 6.1%            | 10.9%                           | 33.8%                | 79.6%             | 2.8                |
| Sanderson            | 149                | 0.7%               | 5.4%            | 9.4%                            | 41.0%                | 83.9%             | 3.0                |
| Southeast Raleigh    | 215                | 3.3%               | 10.7%           | 13.5%                           | 27.0%                | 75.9%             | 2.7                |
| Wake-Forest Roles.   | 82                 | 2.5%               | 7.4%            | 8.6%                            | 24.4%                | 83.0%             | 2.8                |
| Wakefield            | 65                 | 1.6%               | 7.7%            | 7.7%                            | 37.0%                | 90.8%             | 2.9                |
| <b>Total/Average</b> | <b>2,171</b>       | <b>1.7%</b>        | <b>6.8%</b>     | <b>14.2%</b>                    | <b>35.8%</b>         | <b>84.9%</b>      | <b>2.9</b>         |

Note: Data for % *Calculus or Above* = Calculus and other math courses that are higher than Calculus.  
 Due to low enrollment, no information was provided for Phillips High School  
 \*GPA At Least 2.0: calculated at the end of last semester of enrollment in a UNC university (freshmen)