In January 2017, the Board of Governors of the University of North Carolina unanimously approved *Higher Expectations*, a five-year Strategic Plan for the UNC System. The Plan calls on the UNC System to achieve ambitious goals in access, student success, affordability and efficiency, economic impact and community engagement, and institutional excellence and diversity.

Progress on these goals and metrics will be achieved through the hard work and commitment of institutional leaders, faculty, and staff. In that spirit, President Margaret Spellings and Chancellor J. Todd Roberts have established this agreement to identify the contributions that the North Carolina School of Science and Mathematics aspires to make to the UNC Strategic Plan over the next five years.

Recognizing that the UNC System’s greatest strength lies in the distinct missions of its universities, the performance framework provides leaders with an opportunity to identify System-level commitments that align with institution-level priorities. NCSSM, in consultation with the UNC System office, has prioritized the five goals outlined on the following pages.

NC School of Science and Mathematics’s sizable contributions to the UNC Strategic Plan will amplify the UNC System’s role as the “mighty engine” of North Carolina, creating a better future for the state’s communities, families, and economy.

Margaret Spellings  
President  
University of North Carolina

J. Todd Roberts  
Chancellor  
NC School of Science and Mathematics
North Carolina School of Science and Mathematics: Five-year Goals and Associated Interim Benchmarks

Prioritize

1. **Rural and low-income enrollments:** NCSSM will increase the number of students from rural and low-income communities enrolled in its Interactive Videoconference courses (IVC) and its IVC Enrichment courses. NCSSM’s focus is to increase the total number of students enrolled from Tier 1, Tier 2, and rural and low-income schools in Tier 3.

   **Metrics for Measuring Growth**

   By the 2021 academic year, increase the number of students from Tier 1, Tier 2, and rural and low-income schools in Tier 3 enrolled in NCSSM’s IVC courses and enrichments by 50% over fall 2016 levels.

   **Baseline Data**

   Student Enrollments in IVC Courses and participation in IVC Enrichments from Tier 1, Tier 2, and rural and low-income schools in Tier 3:
   - 2015-16 AY = 739 students
   - 2016-17 AY = 1,241 students

   **Goal**

   Serve 1,862 students from Tier 1, Tier 2, and rural and low-income schools in Tier 3 through NCSSM’s IVC courses and enrichments by the 2021 academic year.

   **Interim benchmarks:**

<table>
<thead>
<tr>
<th>Base (2016)</th>
<th>Fall 2017</th>
<th>Fall 2018</th>
<th>Fall 2019</th>
<th>Fall 2020</th>
<th>Fall 2021</th>
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</thead>
<tbody>
<tr>
<td>1,241</td>
<td>1,334</td>
<td>1,458</td>
<td>1,583</td>
<td>1,722</td>
<td>1,862</td>
</tr>
</tbody>
</table>

   Data Definition: Enrollment data capture each student course enrollment for IVC courses, and enrichments count the number of students served in a school as part of the outreach activity.

   Data Source: Focus student information system and Distance Education and Extended Programs (DEEP) records

2. **Enrollment of Underrepresented Minority Students:** NCSSM will increase enrollment of underrepresented minority (URM) students in its residential and virtual learning programs.

   **Metrics for Measuring Growth**

   By the 2021 academic year, increase the number of URM students enrolled in NCSSM’s residential and virtual learning programs (online and IVC) by 50% over 2016-17 academic year levels.

   **Baseline Data**

   Total Enrollment of URM students:
   - 2015-16 = 262
2016-17 = 278

Goal
Increase of 139 URM students in Online/IVC/Residential by the 2021 academic year.

Interim benchmarks:

<table>
<thead>
<tr>
<th>Base (2016)</th>
<th>Fall 2017</th>
<th>Fall 2018</th>
<th>Fall 2019</th>
<th>Fall 2020</th>
<th>Fall 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>278</td>
<td>299</td>
<td>327</td>
<td>354</td>
<td>386</td>
<td>417</td>
</tr>
</tbody>
</table>

Data Definition: Number of enrolled students in IVC/online and residential in each year with underrepresented minority (URM) status. This includes American Indian/Alaska Native, Native Hawaiian/Pacific Islander, Hispanic/Latino, Black African American, and multi-racial students who are not White/Asian.

Data Source: Focus student information system and DEEP staff for IVC, Residential, and Online programs

3. **NCSSM Graduates Earning Undergraduate and/or Graduate Degrees in STEM Fields:** NCSSM is a national leader in preparing graduates to pursue and earn undergraduate and/or graduate degrees in STEM, health sciences, and STEM education fields. Some 68% of NCSSM graduates earn degrees in these fields, which is more than three times greater than the national average for high school students earning their degrees in STEM fields. NCSSM’s focus is to increase the number of NCSSM graduates earning undergraduate and/or graduate degrees in STEM, health sciences, or STEM education.

**Metrics for Measuring Growth**
By the 2022 academic year, 74% of all NCSSM graduates will have earned their undergraduate and/or graduate degrees in a STEM, health sciences, or STEM education field.

**Baseline Data**
- 67.7% of all NCSSM graduates from classes 2000-2014 earned a bachelor’s, master’s, or professional/doctorate degree in a STEM, Health Professions, or STEM Education field.
- 56.7% of NCSSM graduates (2000-2014) earned an undergraduate or graduate degree from one of the 16 University of North Carolina system institutions in a STEM, Health Professions, or STEM Education field.

Interim benchmarks:

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</thead>
<tbody>
<tr>
<td>67.7%</td>
<td>68.6%</td>
<td>69.9%</td>
<td>71.2%</td>
<td>72.6%</td>
<td>74%</td>
</tr>
</tbody>
</table>

Data Source: National Student Clearinghouse

4. **Partnerships with School Districts in Rural and Low-income Counties:** North Carolina School of Science and Mathematics is committed to equity of access for high school students statewide, working in partnership with public schools and school systems to ensure that students, no matter
their zip code, have the opportunity to reach their full potential. NCSSM builds school partnerships strategically to develop pathways for students to participate in the state’s established and fastest-growing economic sectors. NCSSM’s focus is to increase the number of school districts with which it partners by delivering direct services to students, teacher professional development, and educational content development. Using technology to extend NCSSM’s reach to students in rural and small schools, NCSSM’s faculty develop courses that inspire and challenge, preparing students for success in school, work, and life.

**Metrics for Measuring Growth**

By the 2021 academic year, increase by 23 (with at least 15 being in Tier 1 and Tier 2 counties and rural, low-income schools in Tier 3) the number of schools or school systems with which NCSSM has an affiliated, cooperative, or engaged partnership, as defined in NCSSM’s Strategic Plan. This would increase the number of partnerships to 109 total, with 101 being Tier 1, 2, and rural/low-income Tier 3 schools or LEA’s.

**Baseline Data:**

NCSSM affiliated, cooperative, or engaged partnership, as defined in NCSSM’s Strategic Plan:
- 2015-16 AY = 86 total; 77 Tier 1, 2, and rural/low-income Tier 3 schools or LEA’s
- 2016-17 AY = 86 total; 75 Tier 1, 2, and rural/low-income Tier 3 schools or LEA’s

**Interim benchmarks:**

<table>
<thead>
<tr>
<th>Base (2016-17 AY)</th>
<th>Fall 2017</th>
<th>Fall 2018</th>
<th>Fall 2019</th>
<th>Fall 2020</th>
<th>Fall 2021</th>
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</thead>
<tbody>
<tr>
<td>86</td>
<td>89</td>
<td>94</td>
<td>99</td>
<td>104</td>
<td>109</td>
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</table>

Data Definition: As defined by strategic plan outreach, professional development, and IVC course activities/enrichments

Data Source: Records kept by Distance Education and Extended Programs staff related to outreach, professional development, and IVC course activities/enrichments

5. **Opportunities for Students to Participate in Real-World/Applied Learning through Research, Mentorship, Internship, Entrepreneurial, and Other Learning Opportunities**

**Metrics for Measuring Growth**

By the 2021 academic year, NCSSM will increase student participation in research, mentorship, internship, entrepreneurial, and/or other real-world learning opportunities by 20% over the 2016 academic year.

**Baseline Data**

Research, mentorship, and internship participation:
- 2015-16 AY = 394 students
- 2016-17 AY = 451 students

Entrepreneurial course and/or other activity participation:
- 2015-16 AY = 50 students
- 2016-17 AY = 51 students
Baseline combined participation: 502 students

Interim benchmarks:

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<tbody>
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<td>502</td>
<td>517</td>
<td>537</td>
<td>557</td>
<td>580</td>
<td>602</td>
<td></td>
</tr>
</tbody>
</table>

Data Definition: Unduplicated counts of residential and online student enrollment in credit-bearing courses and summer research and internship opportunities.

*Note: A school committee is working on definitions and requirements of real-world learning experiences, so data may change as definitions shift.

Data Source: Focus student information system, registrar