## 2011 CMT Results Show Increases from 2010, Continuing a Positive Trend for the Fourth Generation CMT

Student performance on the Connecticut Mastery Test (CMT) is generally better than it was in 2010, continuing a trend of incremental improvement over previous years. The CMT assesses approximately 250,000 students on their application of skills and knowledge in the academic content areas of mathematics, reading and writing in Grades 3 through 8, and science in Grades 5 and 8. This year marks the sixth administration of the Fourth Generation CMT, which was first administered in March 2006. The March 2006 administration serves as a baseline year for examining changes in student performance over the course of the Fourth Generation.

The CMT has five student performance levels for each content area tested: Below Basic, Basic, Proficient, Goal and Advanced. The Proficient level is used to identify schools and districts that are making "Adequate Yearly Progress" (AYP) under No Child Left Behind (NCLB). The Goal level, more challenging than the Proficient level, is the state target for student performance. The CMT also has vertical scales in mathematics and reading to validly measure growth in tested students' performance from 2006 to 2011. Today, complete state-, district- and school-level CMT results can be found on the CMT Online Reports Web site (www.ctreports.com). In September, parents will receive individual student CMT performance results for their children.
"It is encouraging to see that our public schools are making progress by increasing the numbers of students who are moving into the Proficient level of performance and from the Proficient level into the Goal level," commented Acting Commissioner Coleman as he reviewed the 2011 results in comparison to previous years. "However, our greatest challenges are ahead of us. We must accelerate our efforts to improve the outcomes for those students who are at risk of scoring below Proficient, while at the same time challenging all students to perform at higher levels."

Table 1 compares the 2011 CMT results for the percentage of students scoring at or above Proficient and at or above Goal with those from 2006 and 2010.

Table 1: CMT Performance, by Grade, Percent At/Above Goal and Percent At/Above Proficient in Years 2006, 2010 and 2011.

|  |  | Mathematics |  | Reading |  | Writing |  | Science |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Grade | Year | \% <br> At/Above <br> Proficient | \% <br> At/Above <br> Goal | \% <br> At/Above <br> Proficient | \% <br> At/Above <br> Goal | \% <br> At/Above <br> Proficient | (t/Above <br> Goal | \% <br> At/Above <br> Proficient | At/Above <br> Goal |
| 3 | 2006 | 78.3 | 56.3 | 69.2 | 54.4 | 81.7 | 61.1 | NA | NA |
| 3 | 2010 | 83.6 | 62.6 | 72.3 | 57.1 | 80.3 | 58.3 | NA | NA |


|  |  | Mathematics |  | Reading |  | Writing |  | Science |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Grade | Year | \% <br> At/Above <br> Proficient | \% <br> At/Above <br> Goal | \% <br> At/Above <br> Proficient | \% <br> At/Above <br> Goal | \% <br> At/Above <br> Proficient | (t/Above <br> Goal | \% <br> At/Above <br> Proficient | \% <br> At/Above <br> Goal |
| $\mathbf{3}$ | $\mathbf{2 0 1 1}$ | $\mathbf{8 4 . 3}$ | $\mathbf{6 3 . 3}$ | $\mathbf{7 4 . 0}$ | $\mathbf{5 8 . 4}$ | $\mathbf{8 1 . 1}$ | $\mathbf{6 1 . 1}$ | NA | NA |
| 4 | 2006 | 80.3 | 58.8 | 71.8 | 57.8 | 84.2 | 62.8 | NA | NA |
| 4 | 2010 | 85.2 | 67.2 | 72.9 | 60.0 | 86.5 | 63.6 | NA | NA |
| $\mathbf{4}$ | $\mathbf{2 0 1 1}$ | $\mathbf{8 5 . 2}$ | $\mathbf{6 7 . 3}$ | $\mathbf{7 4 . 7}$ | $\mathbf{6 2 . 5}$ | $\mathbf{8 5 . 4}$ | $\mathbf{6 5 . 5}$ | NA | NA |
| 5 | 2006 | 80.8 | 60.7 | 72.8 | 60.9 | 85.3 | 65.0 | NA | NA |
| 5 | 2010 | 87.8 | 72.6 | 75.4 | 61.8 | 87.3 | 68.2 | 82.5 | 59.7 |
| $\mathbf{5}$ | $\mathbf{2 0 1 1}$ | $\mathbf{8 7 . 6}$ | $\mathbf{7 2 . 7}$ | $\mathbf{7 5 . 1}$ | $\mathbf{6 1 . 4}$ | $\mathbf{8 8 . 0}$ | $\mathbf{6 6 . 8}$ | $\mathbf{8 2 . 4}$ | $\mathbf{6 0 . 2}$ |
| 6 | 2006 | 79.8 | 58.6 | 75.4 | 63.6 | 82.7 | 62.2 | NA | NA |
| 6 | 2010 | 88.2 | 71.0 | 85.5 | 74.9 | 85.5 | 65.9 | NA | NA |
| $\mathbf{6}$ | $\mathbf{2 0 1 1}$ | $\mathbf{8 8 . 5}$ | $\mathbf{7 1 . 6}$ | $\mathbf{8 6 . 5}$ | $\mathbf{7 6 . 0}$ | $\mathbf{8 6 . 1}$ | $\mathbf{6 5 . 3}$ | NA | NA |
| 7 | 2006 | 77.8 | 57.0 | 76.4 | 66.7 | 80.9 | 60.0 | NA | NA |
| 7 | 2010 | 87.4 | 68.8 | 85.3 | 77.5 | 79.7 | 61.3 | NA | NA |
| $\mathbf{7}$ | $\mathbf{2 0 1 1}$ | $\mathbf{8 7 . 2}$ | $\mathbf{6 8 . 7}$ | $\mathbf{8 5 . 7}$ | $\mathbf{7 7 . 8}$ | $\mathbf{7 9 . 8}$ | $\mathbf{5 8 . 9}$ | NA | NA |
| 8 | 2006 | 78.9 | 58.3 | 76.6 | 66.7 | 81.9 | 62.4 | NA | NA |
| 8 | 2010 | 86.6 | 67.5 | 82.6 | 73.4 | 80.6 | 62.7 | 76.0 | 63.1 |
| $\mathbf{8}$ | $\mathbf{2 0 1 1}$ | $\mathbf{8 6 . 0}$ | $\mathbf{6 6 . 8}$ | $\mathbf{8 3 . 4}$ | $\mathbf{7 4 . 7}$ | $\mathbf{8 1 . 6}$ | $\mathbf{6 4 . 8}$ | 75.9 | 63.3 |

The following section provides a sampling of results by content area tested, highlighting the Goal-level performance for Grade 3 students who took the CMT for the first time in 2011, and for Grade 8 students who are preparing to enter high school this fall. Approximately 41,000 students take the standard grade-level CMT in each of Grades 3 through 8 . Each one percentage point increase over time in the percent of students scoring at Goal represents approximately an additional 410 new students moving into that performance level.

## Reading

- From 2006 to 2011, the percentage of Grade 3 students who scored at or above Goal in reading increased from 54.4 percent to 58.4 percent, for an increase of four percentage points. This translates into an additional 1,640 students who were meeting Goal in reading in 2011 over the number meeting Goal in 2006.
- In Grade 8, the percentage of students who scored at Goal in reading increased from 66.7 percent in 2006 to 74.7 percent in 2011, for an increase of eight percentage points. This indicates that approximately 3,280 additional 8th-graders met the state's Goal standard for reading in 2011 than met Goal in 2006.
- The percentage of students meeting Goal in reading has increased steadily over the Fourth Generation of the CMT from 2006 to 2011, and is at its highest point in 2011 in every grade except Grade 5.


## Mathematics

- The percentage of Grade 3 students meeting Goal for mathematics in 2011 ( 63.3 percent) is seven percentage points higher than it was in 2006 ( 56.3 percent). As a result, approximately 2,870 more Grade 3 students are meeting Goal in 2011 than did so in 2006.
- For Grade 8, 66.8 percent of CMT test-takers are meeting Goal in 2011, compared with 58.3 in 2006, for an increase of 8.5 percentage points. This translates into approximately 3,485 additional students within that grade who would have not met Goal in 2006.
- Over the course of the Fourth Generation CMT, there have been steady increases in the percentage of students meeting Goal in mathematics in all six grades, with Grades 5, 6 and 7 registering doubledigit gains.


## Writing

- For Grade 3 writing, the percentage of students scoring at Goal has remained relatively flat between 2006 and 2011 at 61.1 percent.
- In Grade 8, 64.8 percent of the CMT test-takers scored at Goal in 2011 compared with 62.4 percent in 2006, for an increase of 2.4 percentage points or, approximately, an additional 980 students meeting Goal in 2011.
- Across the grades between 2006 and 2011, the percentage of students scoring at the Goal level in writing increased in Grades 4, 5, 6 and 8, decreased in Grade 7, and did not change in Grade 3.


## Science

CMT science has been administered in Grades 5 and 8 since 2008.

- In 2008 (not listed in Table 1), 55.2 percent of Grade 5 students met Goal in science. By 2011, the percentage increased by five percentage points to 60.2 percent. This represents the equivalent of an additional 2,050 students meeting Grade 5 Goal in science.
- From 2008 to 2011, there was a 4.4 percentage point increase in Grade 8 science performance at the Goal level, which accounts for approximately 1,800 additional students meeting Goal in 2011 than in 2008.


## Vertical Scale Score Reporting

The CMT vertical scales are designed to measure change or growth in student achievement across grades (i.e., from Grade 3 to Grade 4, from Grade 4 to Grade 5, etc.) on tests that have different characteristics and items, but have similar content. Vertical scales were developed in the content areas of mathematics and reading. The vertical scales were constructed so that each vertical scale score represents the same theoretical achievement level, whether derived from a Grade 3, Grade 4, Grade 5, Grade 6, Grade 7 or Grade 8 CMT scale score. Each grade-level CMT scale score (range 100-400) in mathematics or reading corresponds to a specific value on a common mathematics or reading vertical scale score (range 200-700). Thus, students in different grades taking different tests can have the same vertical scale score representing the same level of achievement defined by the vertical scale.

Table 2: Grade 3 - 5 CMT Growth by Cohort

| Cohort Years | Cohort Grade <br> Levels | Mathematics |  | Reading |  |
| ---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Growth | Average Vertical <br> Scale Score | Growth |  |
| Cohort 2006 | $\mathbf{3}$ | 450 |  | 424 |  |
| $\mathbf{2 0 0 7}$ | $\mathbf{4}$ | 491 | 41 | 451 | 27 |
| $\mathbf{2 0 0 8}$ | $\mathbf{5}$ | 523 | 32 | 477 | 26 |
| Cohort 2007 | $\mathbf{3}$ | 453 |  | 424 |  |
| $\mathbf{2 0 0 8}$ | $\mathbf{4}$ | 492 | 39 | 451 | 27 |
| $\mathbf{2 0 0 9}$ | $\mathbf{5}$ | 527 | 35 | 482 | 31 |
| Cohort 2008 | $\mathbf{3}$ | 452 |  | 424 |  |
| $\mathbf{2 0 0 9}$ | $\mathbf{4}$ | 496 | 44 | 458 | 34 |
| $\mathbf{2 0 1 0}$ | $\mathbf{5}$ | 531 | 35 | 480 | 22 |
| Cohort 2009 | $\mathbf{3}$ | 456 |  | 428 |  |
| $\mathbf{2 0 1 0}$ | $\mathbf{4}$ | 499 | 43 | 456 | 28 |
| $\mathbf{2 0 1 1}$ | $\mathbf{5}$ | 531 | 32 | 480 | 24 |

Table 2 compares the growth in student performance from Grades 3 through 5, in mathematics and reading, for four cohorts of matched students who started testing in Grade 3 in 2006 through 2009. The cohort of Grade 3 students that started in 2009 was tested in Grade 5 in 2011. The information in the table can be interpreted in the following manner for the Grade 3 cohort that began in 2009:

- The average mathematics vertical scale score for the 2009 Grade 3 cohort of students was 456 ; this, on average, is higher than the average score for each of the previous three cohorts.
- When this cohort was tested as Grade 4 students in 2010, the average mathematics vertical scale score was 499 , the highest among the four cohorts. The difference of 43 scale points represents the cohort growth in mathematics between Grade 3 and Grade 4.
- When the same cohort was tested in mathematics in 2011, the average vertical scale score was 531, which was as high or higher than the previous three cohorts. The difference of 32 scale points represents the average growth in the students' performance between Grades 4 and 5 .
Similar comparisons can be made about the growth of students in Grades 3 through 5 in reading.
Table 3 compares the growth in student performance from Grades 6 through 8 in mathematics and reading for four cohorts of matched students who were tested in Grade 6 in 2006 through 2009, and were tested in Grade 8 in 2008 through 2011.

Table 3: Grade 6-8 CMT Growth by Cohort

| Cohort Years | Cohort Grade <br> Level | Mathematics |  | Reading |  |
| ---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Growth | Average Vertical <br> Scale Score | Growth |  |
| Cohort 2006 | $\mathbf{6}$ | 533 |  | 491 |  |
| $\mathbf{2 0 0 7}$ | $\mathbf{7}$ | 555 | 22 | 506 | 15 |
| $\mathbf{2 0 0 8}$ | $\mathbf{8}$ | 571 | 16 | 517 | 11 |
| Cohort 2007 | $\mathbf{6}$ | 540 |  | 492 |  |
| $\mathbf{2 0 0 8}$ | $\mathbf{7}$ | 559 | 19 | 513 | 21 |
| $\mathbf{2 0 0 9}$ | $\mathbf{8}$ | 576 | 17 | 521 | 8 |
| Cohort 2008 | $\mathbf{6}$ | 544 |  | 496 |  |
| $\mathbf{2 0 0 9}$ | $\mathbf{7}$ | 564 | 20 | 519 | 23 |
| $\mathbf{2 0 1 0}$ | $\mathbf{8}$ | 581 | 17 | 530 | 11 |
| Cohort 2009 | $\mathbf{6}$ | 548 |  | 500 |  |
| $\mathbf{2 0 1 0}$ | $\mathbf{7}$ | 568 | 20 | 524 | 24 |
| $\mathbf{2 0 1 1}$ | $\mathbf{8}$ | 580 | 12 | 532 | 8 |

For these cohorts, reading will be used to illustrate how the vertical scale data can be interpreted. The cohort of Grade 6 students that was started in 2009 was tested as Grade 8 students in 2011. The information in the table for reading can be interpreted in the following manner for the Grade 6 cohort that began in 2009:

- The average reading vertical scale score for the 2009 Grade 6 cohort was 500 . This is higher than the average scores of each of the three previous cohorts.
- In 2010, when this cohort was tested in reading as Grade 7 students, their average vertical scale score was 524, higher than that of each of the previous cohorts, and reflecting an overall growth of 24 scale score points.
- For the same cohort, when they were tested in reading as Grade 8 students in 2011, their average vertical score was 532 . This was higher than each of the previous $8^{\text {th }}$ grade cohorts' scale scores, registering an average growth of 8 scale score points between Grade 7 and Grade 8.


## Performance by Student Subgroups

Results for the CMT are also disaggregated by subgroups: gender, eligibility for free or reduced-price meals, special education status, English language learner status and Ethnicity/Race. Appendix A contains a summary of subgroup performance at the Proficient and Goal levels for students in Grade 3 and Grade 8. While the overall trends in performance for most subgroups is positive, the results for these subgroups still reveal persistent achievement gaps in student performance that are a major focus of district and state educational efforts. Subgroup results are available for the other grades tested at www.ctreports.com.
"The disparity in student performance here in Connecticut has been an unrelenting problem that not only is evident from these latest CMT results, but also in every other standardized assessment that we report," Acting Commissioner Coleman remarked. "To systematically address this continuing problem, we must
rethink how resources such as time and instructional supports are allocated, and how we can increase the engagement level of our lowest performing students through curriculum and instructional programs that are more culturally relevant."

The following section summarizes the performance trends for Grades 3 and 8, comparing 2011 to 2010, and to the 2006 baseline year for the Fourth Generation CMT.

## Gender

- The largest gender difference in the percentages of students scoring at the Goal level is in writing, where about 70 percent of Grade 3 female students meet Goal compared with about 53 percent of Grade 3 male students, and in Grade 8, where about 73 percent of female students meet Goal compared with about 57 percent of male students. These differences have been consistent across Generation 4 CMT.
- In both Grades 3 and 8 , more than 60 percent of both male and female students are meeting Goal in 2011, while slightly higher percentages of female students than male students are meeting Goal in reading in both grades and in Grade 8 science.


## Eligibility for Free/Reduced Price Meals

Students' eligibility for free or reduced price meals is a proxy for families' social-economic status or economic need.

- Nearly twice the percentages of students who are not eligible for free or reduced price meals scored, and continue to score, at the Goal level in all tested content areas in Grades 3 and 8 than their counterparts who are eligible for free or reduced price meals.
- From 2006 to 2011, the increase in the percentage in the eligible students who have attained Goal has outpaced their non-eligible counterparts in all tested areas in Grade 3, and all but writing in Grade 8.


## Special Education Status

About 12 percent of Connecticut's public school population are designated as students with disabilities who are eligible for special education services. These students have several testing options. Depending on their level of disabilities, they may take the standard grade-level CMT (with or without testing accommodations), the Modified Assessment System (MAS) tests in mathematics and/or reading, or the Skills Checklist. The test administered to each student is based on the determination of the student's Individualized Education Program (IEP) team. Appendix A contains Grade 3 and Grade 8 results for special education students who took the standard grade-level CMT. Results for the MAS and Checklist are reported separately below. When examining the performance of students with disabilities on the CMT, the following trends emerge:

- In 2011, as in previous years, smaller percentages of students meet the state Goal than for their nondisabled counterparts.
- From 2006 to 2011, the percentage increase of students with disabilities meeting the Goal standard exceeded that of their non-disabled classmates in both mathematics and reading in both grades, but was lower in writing in Grades 3 and 8 and science in Grade 8.


## Student Performance on the Grades $\mathbf{3}$ and 8 Modified Assessment System

March 2011 was the second administration of the Modified Assessment System (MAS). The MAS is one of two alternate assessments in Connecticut. It is an alternate test of mathematics and reading that is designed for those students who, because of their disabilities, would not likely achieve a minimum of a Proficient score on the standard test, but who might be better able to demonstrate what they know and can do on the modified test. The MAS test is only available in reading and mathematics and a student may qualify for one or both of these alternate tests. These students must also take the standard grade-level writing and science tests. Of the 2011 total tested CMT population, 4.1 percent participated in the MAS Reading Test and 3.3 percent participated in the MAS Mathematics Test.

There are three standards that have been established for performance on the MAS: Basic, Proficient and Goal. Table 4 provides information about the number of students who were administered the MAS

Mathematics and Reading in 2010 and 2011, and the percentage scoring at the Proficient and Goal levels. Over the two year time frame, the percentage of students meeting Proficient and Goal levels of performance on the MAS in Grade 3 mathematics and Grade 8 mathematics and reading has declined, while the percentage of students meeting Proficient and Goal in Grade 3 reading has increased.

Table 4: Grade 3 and 8 CMT MAS Percentage of Students Scoring At/Above Proficient and At/Above Goal

|  |  | Mathematics |  |  | Reading |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Grade | Year | Number <br> Tested | \% At/Above <br> Proficiency | \% At/Above <br> Goal | Number <br> Tested | \% At/Above <br> Proficiency | \% At/Above <br> Goal |
| $\mathbf{3}$ | $\mathbf{2 0 1 0}$ | 1082 | 74.1 | 45.5 | 1438 | 44.3 | 29.9 |
|  | $\mathbf{2 0 1 1}$ | 1053 | 66.0 | 37.5 | 1413 | 48.9 | 31.1 |
| $\mathbf{8}$ | $\mathbf{2 0 1 0}$ | 1065 | 40.1 | 16.1 | 1183 | 64.1 | 41.4 |
|  | $\mathbf{2 0 1 1}$ | 1320 | 38.8 | 15.0 | 1425 | 63.8 | 40.1 |

## Student Performance on the CMT Skills Checklist

The second Grades 3 through 8 alternate assessment in Connecticut's assessment system is the CMT Skills Checklist, which is designed for students with significant cognitive disabilities. The Skills Checklist is completed by the student's primary special education teacher. Judgments are made by the teacher based on observations and interactions with students throughout the year. This year approximately 1.2 percent of the total tested population in Grades 3 through 8 were administered the CMT Skills Checklist. Separate performance standards have also been set for the Skills Checklist, which include three performance levels: Basic, Proficient and Independent. Table 5 summarizes the performance of Grade 3 through 8 students, inclusive, on the Skills Checklist from 2007 through 2011.

Table 5: CMT Skills Checklist Results

| Year | Number <br> Tested | Mathematics <br> \% At/Above <br> Proficient | Reading <br> \% At/Above <br> Proficient | Communication <br> \% At/Above <br> Proficient | Science <br> \% At/Above <br> Proficient |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2006 | 2098 | 19.0 | 13.4 | 20.7 | $*$ |
| 2007 | 2365 | 21.3 | 16.0 | 25.4 | $*$ |
| 2008 | 2727 | 31.0 | 23.0 | 31.0 | 64.0 |
| 2009 | 2914 | 31.0 | 22.0 | 32.0 | 63.0 |
| 2010 | 3067 | 34.4 | 24.4 | 35.4 | 67.3 |
| 2011 | 3189 | 36.1 | 25.9 | 35.5 | 66.3 |

*Science was not tested in 2006 and 2007
Since 2006 there have been steady increases in the percentages of students who have been administered the Checklist, as well as the percentages of students who have scored at the Proficient level in mathematics, reading, communication and science.

## English Language Learner Status

English language learners (ELL) are students for whom English is not their primary language. These students receive services to increase their proficiency in reading, writing, listening and speaking in English. Once students have met the English Language Proficiency standard for acquiring academic English competency, they exit ELL status. The following summarizes trends in the performance of ELLs for Grade 3 and Grade 8 CMT.

- In Grades 3 and 8 , substantially smaller percentages of ELL students have scored, and continue to score, at the Goal level in all tested areas as compared to their classmates who are native English language speakers.
- Between 2006 and 2011, the rate of increase in the percentage of students scoring at the Goal level was higher for non-ELLs in all content areas tested in Grade 3 and Grade 8.


## Ethnicity/Race

Beginning in 2011, Ethnicity/Race reporting changed. As a result of new U.S. Department of Education guidance, there are no longer five categories used for reporting as in 2006-2010. Students are now categorized in ONLY one of the following seven groups: Hispanic/Latino, American Indian or Alaskan Native, Asian, black or African American, Native Hawaiian or Other Pacific Islander, white, and Two or More Ethnicity/Races. For reporting purposes, students are classified as Hispanic/Latino, regardless of their race. Students who are not Hispanic/Latino are placed in one of the Ethnicity/Race categories, unless they belong to the Two or More Ethnicity/Race categories.

Appendix A contains 2006 and 2010 CMT results for the five previously reported Ethnicity/Race categories.

- The percentages of Grade 3 and Grade 8 white and Asian American students scoring at the Goal level in each content area tested is similar and consistently higher than percentages for Hispanic, black and American Indian students.
- Between 2006 and 2010, the increase in the percentage of Grade 3 and Grade 8 students attaining Goal was consistently higher for Hispanic, black and American Indian students in mathematics and reading as for white and Asian American students.

The 2011 results for the seven Ethnicity/Race categories are shown below in Table 6 and should be considered as a baseline year because of the change in federal guidelines. Results for the previous Ethnicity/Race categories from 2006 and 2010 are included in Appendix A.

Table 6: Performance Data by Ethnicity/Race from 2011

|  |  | Mathematics |  | Reading |  | Writing |  | Science |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Grade | Ethnicity/Race | \% <br> At/Above <br> Proficient | \% <br> At/Above <br> Goal | \% <br> At/Above <br> Proficient | \% <br> At/Above <br> Goal | \% <br> At/Above <br> Proficient | \% <br> At/Above <br> Goal | \% <br> At/Above <br> Proficient | \% <br> At/Above <br> Goal |
| 3 | Hispanic/Latino | 69.8 | 41.3 | 53.3 | 34.0 | 66.0 | 40.0 | N/A | N/A |
|  | American Indian or Alaskan Native | 80.2 | 55.7 | 69.8 | 39.6 | 78.0 | 54.1 | N/A | N/A |
|  | Black or African American | 66.6 | 36.5 | 54.0 | 33.8 | 68.3 | 42.1 | N/A | N/A |
|  | Asian | 95.0 | 82.4 | 83.0 | 70.3 | 92.6 | 78.0 | N/A | N/A |
|  | Native Hawaiian or Other Pacific Islander | 88.9 | 72.2 | 83.3 | 77.8 | 84.2 | 84.2 | N/A | N/A |
|  | White | 91.5 | 73.8 | 83.5 | 69.8 | 87.5 | 70.2 | N/A | N/A |
|  | Two or More | 84.1 | 65.8 | 74.7 | 60.8 | 80.8 | 62.0 | N/A | N/A |
| 8 | Hispanic/Latino | 67.7 | 39.2 | 63.6 | 49.9 | 62.1 | 38.1 | 50.4 | 33.5 |
|  | American Indian or Alaskan Native | 86.8 | 55.4 | 81.7 | 65.8 | 74.8 | 57.3 | 71.2 | 53.8 |
|  | Black or African American | 67.7 | 37.0 | 66.2 | 51.4 | 64.9 | 39.5 | 49.6 | 31.9 |
|  | Asian | 95.6 | 85.3 | 91.8 | 86.7 | 91.9 | 80.1 | 87.3 | 78.1 |
|  | Native Hawaiian or Other Pacific Islander | 90.0 | 50.0 | 90.0 | 60.0 | 90.0 | 70.0 | 70.0 | 70.0 |
|  | White | 93.7 | 78.8 | 91.3 | 84.9 | 89.6 | 76.2 | 87.5 | 76.9 |
|  | Two or More | 87.0 | 61.6 | 83.0 | 74.2 | 80.8 | 64.3 | 74.8 | 60.8 |

The performance patterns on the 2011 CMT among the seven Ethnicity/Race categories of students were not inconsistent with previous results. Large differences are still evident across racial subgroups in Grade 3 and Grade 8 across all the tested content areas.

## Web Reporting Tools

The CMT Online Reports Web site (www.ctreports.com) can be used for more comprehensive CMT data analysis. CMT score results beginning with the first administration of the Fourth Generation in 2006 are available on this Web site.

## Guidance for Proper Data Analysis

When analyzing CMT data, there are proper methods as well as improper methods. Conducting an improper analysis will lead to conclusions which are not necessarily supported by the data. Therefore, the Connecticut State Department of Education (CSDE) provides guidance for proper CMT data analysis in the document "CMT Interpretive Guide," which is available through the Student Assessment Link on the CSDE Web site (www.ct.gov/sde).

## Appendix A- Comparisons by Subgroups

Grade 3 Subgroup Comparisons

| Grade 3 <br> Subgroup | Year | Mathematics |  | Reading |  | Writing |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \% Prof | \% Goal | \% Prof | \% Goal | \% Prof | \% Goal |
| Male | 2006 | 78.8 | 57.8 | 67.0 | 52.7 | 76.5 | 53.4 |
|  | 2010 | 83.9 | 63.7 | 70.8 | 55.9 | 74.2 | 49.9 |
|  | 2011 | 84.5 | 64.3 | 72.3 | 56.9 | 75.2 | 52.9 |
| Female | 2006 | 77.9 | 54.8 | 71.5 | 56.2 | 87.0 | 68.9 |
|  | 2010 | 83.3 | 61.4 | 73.8 | 58.3 | 86.7 | 67.2 |
|  | 2011 | 84.2 | 62.2 | 75.7 | 59.9 | 87.3 | 69.7 |
| Free/Reduced-Price Meals | 2006 | 58.1 | 30.8 | 42.5 | 24.5 | 64.2 | 36.4 |
|  | 2010 | 67.6 | 38.9 | 49.9 | 31.5 | 65 | 37.2 |
|  | 2011 | 69.2 | 40.9 | 53.6 | 34.2 | 66.4 | 39.8 |
| Full Price Meals | 2006 | 87.3 | 67.7 | 81.0 | 67.6 | 89.3 | 71.7 |
|  | 2010 | 92.2 | 75.3 | 84.2 | 70.7 | 88.7 | 70.0 |
|  | 2011 | 92.9 | 76.0 | 85.4 | 72.0 | 89.6 | 73.5 |
| Sped | 2006 | 45.2 | 23.9 | 28.6 | 17.2 | 42.3 | 20.7 |
|  | 2010 | 58.3 | 31.4 | 35.5 | 21.3 | 37.6 | 17.0 |
|  | 2011 | 60.1 | 32.8 | 37.5 | 23.1 | 38.1 | 18.0 |
| Non-Sped | 2006 | 82.3 | 60.2 | 74.0 | 58.8 | 86.1 | 65.6 |
|  | 2010 | 85.8 | 65.3 | 75.1 | 59.8 | 85.1 | 63.0 |
|  | 2011 | 86.3 | 65.8 | 76.6 | 60.9 | 85.8 | 65.8 |
| ELL | 2006 | 52.7 | 27.1 | 30.5 | 15.2 | 55.3 | 29.1 |
|  | 2010 | 57.3 | 27.9 | 28.3 | 12.9 | 51.7 | 24.2 |
|  | 2011 | 60.3 | 31.0 | 31.3 | 14.2 | 53.1 | 24.9 |
| Non-ELL | 2006 | 80.1 | 58.4 | 71.9 | 57.1 | 83.5 | 63.2 |
|  | 2010 | 85.2 | 64.7 | 75.0 | 59.8 | 82.2 | 60.5 |
|  | 2011 | 85.9 | 65.4 | 76.7 | 61.2 | 83.0 | 63.5 |
| Black | 2006 | 56.3 | 28.2 | 43.8 | 25.6 | 66.7 | 38.6 |
|  | 2010 | 65.1 | 34.6 | 50.3 | 31.8 | 66.9 | 39.4 |
|  | 2011 | * | * | * | * | * | * |
| Hispanic | 2006 | 58.0 | 31.0 | 41.1 | 24.3 | 63.3 | 35.4 |
|  | 2010 | 67.8 | 39.3 | 48.5 | 30.6 | 64.5 | 36.5 |
|  | 2011 | * | * | * | * | * | * |
| White | 2006 | 87.3 | 67.5 | 80.9 | 67.2 | 88.7 | 71.2 |
|  | 2010 | 91.4 | 73.9 | 82.8 | 69.1 | 87.0 | 67.7 |
|  | 2011 | * | * | * | * | * | * |
| Asian American | 2006 | 90.9 | 74.3 | 79.4 | 66.3 | 90.3 | 73.4 |
|  | 2010 | 92.7 | 80.0 | 83.2 | 68.9 | 91.1 | 74.1 |
|  | 2011 | * | * | * | * | * | * |
| Am. Indian | 2006 | 65.4 | 46.8 | 64.1 | 41.7 | 72.9 | 51.6 |
|  | 2010 | 82.4 | 58.2 | 72.7 | 49.7 | 78.9 | 47.6 |
|  | 2011 | * | * | * | * | * | * |

*Ethnicity/Race categories have changed in 2011; therefore, direct comparisons to previous years are not valid.

Grade 8 Subgroup Comparisons ${ }^{1}$

|  |  | Mathematics |  | Reading |  | Writing |  | Science |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Subgroup | Year | \% Prof | \% Goal | \% Prof | \% Goal | \% Prof | \% Goal | \% Prof | \% Goal |
| Male | 2006 | 78.3 | 58.6 | 74.0 | 64.1 | 76.3 | 54.5 | NA | NA |
|  | 2010 | 85.8 | 66.8 | 80.0 | 70.3 | 74.5 | 54.6 | 74.9 | 62.3 |
|  | 2011 | 85.4 | 66.3 | 81.2 | 72.0 | 75.7 | 57.1 | 74.7 | 62.6 |
| Female | 2006 | 79.5 | 58.0 | 79.4 | 69.5 | 87.8 | 70.7 | NA | NA |
|  | 2010 | 87.4 | 68.3 | 85.2 | 76.6 | 87.0 | 71.1 | 77.3 | 63.8 |
|  | 2011 | 86.6 | 67.4 | 85.7 | 77.5 | 87.6 | 72.8 | 77.2 | 64.0 |
| Free/Reduced-Price Meals | 2006 | 54.8 | 26.5 | 51.8 | 37.6 | 63.5 | 35.3 | NA | NA |
|  | 2010 | 69.5 | 39.7 | 63.2 | 49.0 | 61.2 | 35.5 | 51.0 | 33.5 |
|  | 2011 | 69.0 | 39.3 | 65.4 | 51.2 | 63.5 | 38.7 | 51.6 | 34.7 |
| Full Price Meals | 2006 | 87.9 | 70.2 | 85.9 | 77.6 | 88.8 | 72.5 | NA | NA |
|  | 2010 | 94.2 | 79.9 | 91.2 | 84.2 | 89.6 | 75.3 | 87.7 | 76.8 |
|  | 2011 | 94.2 | 80.2 | 92.1 | 86.1 | 90.7 | 78.0 | 88.3 | 77.9 |
| Sped | 2006 | 37.8 | 17.3 | 35.0 | 24.4 | 41.6 | 18.8 | NA | NA |
|  | 2010 | 58.8 | 28.8 | 50.5 | 35.1 | 38.9 | 18.8 | 37.9 | 24.1 |
|  | 2011 | 59.2 | 27.8 | 53.1 | 38.2 | 39.2 | 19.5 | 36.6 | 22.7 |
| Non-Sped | 2006 | 84.2 | 63.7 | 82.0 | 72.2 | 87.1 | 68.0 | NA | NA |
|  | 2010 | 89.3 | 71.2 | 85.6 | 77.0 | 85.8 | 68.2 | 80.8 | 68 |
|  | 2011 | 88.3 | 70.2 | 85.9 | 77.7 | 86.6 | 70.2 | 80.7 | 68.3 |
| ELL | 2006 | 40.2 | 16.4 | 24.3 | 14.7 | 41.3 | 16.8 | NA | NA |
|  | 2010 | 38.4 | 14.6 | 22.5 | 11.0 | 27.5 | 8.8 | 16.2 | 6.2 |
|  | 2011 | 37.5 | 13.3 | 22.4 | 10.7 | 29.2 | 9.2 | 15.1 | 6.5 |
| Non-ELL | 2006 | 80.3 | 59.8 | 78.5 | 68.6 | 83.3 | 64.0 | NA | NA |
|  | 2010 | 88.3 | 69.4 | 84.7 | 75.6 | 82.6 | 64.7 | 78.3 | 65.2 |
|  | 2011 | 87.8 | 68.8 | 85.6 | 77.0 | 83.6 | 66.9 | 78.3 | 65.6 |
| Black | 2006 | 52.7 | 24.6 | 52.8 | 38.2 | 65.8 | 37.0 | NA | NA |
|  | 2010 | 68.9 | 37.7 | 64.6 | 49.8 | 62.7 | 36.7 | 49.5 | 31.0 |
|  | 2011 | * | * | * | * | * | * | * | * |
| Hispanic | 2006 | 53.7 | 25.9 | 50.4 | 36.2 | 62.0 | 34.3 | NA | NA |
|  | 2010 | 68.2 | 38.8 | 61.2 | 47.3 | 59.1 | 34.3 | 49.2 | 32.0 |
|  | 2011 | * | * | * | * | * | * | * | * |
| White | 2006 | 88.9 | 71.1 | 86.6 | 78.5 | 89.0 | 72.9 | NA | NA |
|  | 2010 | 93.8 | 79.0 | 90.5 | 83.3 | 88.8 | 73.8 | 87.3 | 76.2 |
|  | 2011 | * | * | * | * | * | * | * | * |
| Asian American | 2006 | 92.4 | 78.8 | 86.5 | 78.6 | 90.3 | 76.8 | NA | NA |
|  | 2010 | 94.0 | 84.0 | 90.5 | 84.5 | 90.7 | 78.0 | 86.2 | 76.1 |
|  | 2011 | * | * | * | * | * | * | * | * |
| Am. Indian | 2006 | 76.1 | 42.3 | 70.7 | 55.0 | 75.2 | 53.9 | NA | NA |
|  | 2010 | 82.1 | 55.6 | 76.5 | 61.1 | 77.5 | 56.3 | 64.3 | 50.6 |
|  | 2011 | * | * | * | * | * | * | * | * |

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