Overview
The Massachusetts Comprehensive Assessment System (MCAS) is the current system used by the state of Massachusetts to assess how school districts are meeting curriculum standards. The MCAS tests all students, including those with disabilities and limited English proficiency. These test scores are then analyzed for every school district in the state. The MCAS tests focus on three subject areas, English Language Arts (ELA), Mathematics, and Science. Students are tested at grades 3 through 8 and then again in grade ten. Tenth grade test scores were used because high school is an important time in determining how overall education will affect the rest of these students’ lives. Tenth grade students have a greater incentive to do well on the MCAS tests as it is a requirement for graduation.

The following maps show tenth grade test scores for school districts across the state of Massachusetts. Tenth grade test scores were used because high school is an important time in determining how overall education will affect the rest of these students’ lives. Tenth grade students have a greater incentive to do well on the MCAS tests as it is a requirement for graduation.

The top map shows the Average CPI for Math and English Language Arts by district. The bottom map shows the Average CPI for all three subjects included in the MCAS tests by district.

Methodology
The Composite Performance Index (CPI) is a measure of how students are progressing in a subject area by district. This 100 point index is calculated by combining MCAS scores of students in a district. There are many factors that have the potential to affect school district performance and the quality education that a school district can provide. Many of these factors have to do with resource allocation, environment outside of school, and the quality of teachers. The Massachusetts Department of Education has made statistics on factors that could potentially contribute to education inequality available by school district.

The following maps were created by joining Excel tables found online from the Massachusetts Department of Education with a School Districts Layer from the 2000 Census in ArcMap. Classes were then created to show spatial differences between districts for each category examined.

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Risk Assessment: Factors that May Affect School District Performance

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