What is the Future City® Competition?
Future City is a competition for middle school students (6th, 7th and 8th graders) to use their creative and innovative imaginations to design a city of the future. Students work with their teacher and an engineer (a volunteer mentor from the community) to design and build their city. Students apply science, technology, engineering, art, and technology knowledge to their projects, and at the same time enhance their writing and presentation skills.

Three students represent their team with their teacher and engineer mentor at the Regional Competition, which is scheduled for Saturday, January 11, 2020, at the Armory at Sage College in Albany, NY. These three students present their team’s 3-D city model and compete for locally-sponsored specialty awards and prizes as well as the Regional Title. The winner of the Regional Competition will receive a trip to Washington, DC to compete in the National Finals on February 15 – 19, 2020. Last year’s local awards and prizes totaled over $7,500.

Requirements & Scoring:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Points</th>
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</thead>
<tbody>
<tr>
<td>Project Plan</td>
<td>10</td>
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<tr>
<td>Virtual City Design using SimCity™</td>
<td>48</td>
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<tr>
<td>City Essay (max. 1500 words) with a focus on what makes your city unique and an assigned engineering related topic</td>
<td>60</td>
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<tr>
<td>City 3-D Model showing a section of the city</td>
<td>70</td>
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<tr>
<td>Team Oral Presentation of the city design, model, and essay topic focus</td>
<td>70</td>
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<td><strong>TOTAL POINTS</strong></td>
<td><strong>258</strong></td>
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The Teacher (Coach)
- The teacher will lead their team of students throughout the process.
- Dedicated time is up to each individual teacher. Estimated time 2-4 hours/week.
- Teachers are responsible for working with the mentor to co-advice the team of students.

How do I get matched with a mentor?
- The first step is to register on the National website: www.futurecity.org.
- Materials including the handbooks and software will be sent to the teacher.
- The Planning Committee will assist in the search for a mentor for your team, although many teams discover their mentors through parents/friends.

Mentors
- Mentors are local volunteers from the science/ engineering/technology fields who are dedicated to helping their assigned team 2-4 hours a week.
- As the team’s advisor, the mentor provides valuable input and technical assistance.
- Mentors are responsible for drawing connections between academics and the real world of engineering.
- Mentors provide enthusiasm and leadership.
- Students MUST do all the work. Teachers and mentors coach, guide and teach the students to design the city, build the city, write the essay and abstract, and prepare for the verbal presentation.
The Future City Competition is a program that is open to 6th, 7th and 8th grade students. Students from the same school, home school or members of the same nationally, regionally, or state recognized youth focused organization are encouraged to form a team and design a city of the future.

**Step 1: PROJECT PLAN (10 pts)**
- Follow the template in the handbook and at [www.futurecity.org](http://www.futurecity.org) to set goals for your project, define a schedule, conduct check-ins, and reflect on your experience. Points are earned for submitting the plan.

**Step 2: DESIGN THE CITY (48 pts)**
- Students will use *SimCity™* software in offline mode to develop a logical design of a city in the future with a population of 20,000 Sims or greater.
- The city may be built in ANY region.
- Do not use sandbox mode and turn off random disasters. Students should try to build their city without using cheat codes.
- Students choose two goals and document the development and progress towards meeting these goals in their Virtual City.
- Complete the Virtual City Presentation Template in PowerPoint, Word, or Google Slides. The deliverable is a PDF of the final presentation template (maximum of 23 slides) showing screenshots at two phases of the city’s development. Templates may be found at [www.futurecity.org/resources](http://www.futurecity.org/resources) (filter for SimCity). Status will be updated at Phase I: Sim population between 8,000 – 20,000 and Phase II: Sim population greater than 20,000.
- Select a city name to be used on all requirements of the competition.

**Step 3: CITY ESSAY (60 pts)**
- The team will write an Essay (max. 1500 words) describing the city’s key features, design attributes, infrastructure, public services and engineering solution to this year’s assigned engineering related topic. This year’s topic is Clean Water: Tap Into Tomorrow - Choose a threat to your city’s water supply and design a resilient system to maintain a reliable supply of clean drinking water.
- At least 3 sources of information must be cited on the essay reference page using Modern Language Association (MLA) format (Wikipedia may not be used as a reference).
- Place the word count at the end of the document. Word count does not include the title and reference list, but does include captions and words that appear within a graphic, illustration, or table. A maximum of 4 graphics/illustrations are allowed.
- The essay deliverable must be uploaded as a word processing document, not a PDF.
Step 4: BUILD THE CITY (70 pts)

- The team will build a 3-D Model of a section of their city. The model is a creative representation that best represents the team’s vision of a section of their city (similar to the computer design) and is not required to look exactly like the computer design.

- The model may be no larger than 25”(W) x 50”(L) x 20”(H). During the presentation, it is permissible to have extended parts, such as access doors, compartments, and hinged pullouts, as long as they are fully self-supported by the model, or - if removable - held by a presenter.

- Model must contain at least one moving part (i.e., transportation, power generation, communications, etc.). Power sources must be self-contained.

- The model must be built to scale as defined by the team. A max of 2 scales may be used.

- Students will choose the materials for building the model. Material costs for the model, presentation, etc. (e.g., visual aids, costumes, color copying/printing, 3D printing, and other demonstration aids) may not exceed $100 (cash and in-kind). Students are encouraged to use recycled items. All items used in the model and presentation must be listed with values on the Expense Form with receipts where applicable.

- Rotating city models are acceptable. No vertical-oriented models. No perishables/food, live animals, drones or flying objects, hazardous items (e.g., dry ice or fire), electrical floor or wall outlets, or audio may be used in the model.

- Include a 4” x 6” Model Identification Index Card to be displayed next to the model including: a) the city name, b) scale(s) used for the model, c) school/organization name and d) names of the three presenting students, educator, and mentor.

Step 5: COMMUNICATE RESULTS (70 pts)

- The team will prepare a verbal presentation of their city (max. 7 minute presentation, with a 5-8 minute question/answer period). Presentations should be well polished.

- Students may use visual aids, such as flip charts, foam boards, poster boards, etc. that adhere to standard sizes (24” (W) x 36” (H) for poster boards, 25” (W) x 30” (H) for flip charts, 36” (W) x 48” (H) for tri-fold boards). Up to 2 poster boards or flip charts may be displayed concurrently or 1 tri-fold board may be displayed at one time. The size does not include the easel, which will be provided.

- Other Demonstration Aids: accessories, small mock-ups, etc. used to assist with the presentation must collectively fit within a 6” x 6” x 12” volume (shoe box). If the team chooses to provide handouts, they are limited to one 8.5“x11” sheet of paper. All demonstration aids including handouts and costumes must be included on the Expense Form as part of the $100 maximum.

- Laptops, DVD/video players, mobile devices, drones, iPods, iPads, overhead projectors, audio equipment, etc. may not be used for the presentation.

Please see the handbook for scoring deductions. Deductions will be applied when necessary.