INDIANA

Future City

COMPETITION

Future City: Dreams Need Doing!

“Real World”  Project Based  Mentors
• Established in 1992-1993
• 1,350 middle schools
• 225,000 volunteer hours
• 39 regions across the country

33,000 students participate in Future City every year

39 Regions

Alabama, Arizona, California
Florida, Georgia, Great Plains
Idaho, Illinois, Indiana
Iowa, Kentucky, Louisiana
Michigan, Mid-Atlantic, Minnesota
Nebraska, Nevada, New England
New Jersey, New Mexico, New York
North Carolina, Ohio, Oklahoma
Pennsylvania, South Carolina, Texas
Washington State, Wisconsin
What is Future City?
Future City is an integrated, multidisciplinary, holistic approach to relevant issues and is a strong example of STEM (Science, Technology, Engineering, & Mathematics) education that addresses Common core, state academic content standards, and 21st Century Skills.

Plan  
Write  
Design  
Present  
Construct  
Win!

2009 Indiana Regional Winners:  
Leo Jr./Sr. High School

Future City Teams
Schools & Nationally-Recognized/Approved Youth Organizations can Register Teams
A Team = 3 Students, 1 Teacher, 1 Mentor

What grade are team members and how many teams per school?
6th, 7th & 8th grade  
3 teams per school

“This competition validates areas of excellence generally marginalized in middle school.”  
-Teacher Survey Comment

2002 Regional Winners:  
Shawnee Middle School

Can more than 3 students work on the project?
Yes, a club or class can work on multiple projects; however, only three teams can participate in the regional event with three students per team as “official” presenters. Other students may attend as observers. Future City is being used as a project within enriched, gifted, science, social studies, and technology classes.
**Future City Educational Outcomes**

- Learn about a variety of careers.
- Learn about cities:
  - Design necessary city features
  - Infrastructure and services
  - Interdependence of technology, industry, commerce
- Learn to use technology as a design tool.
- Practice engineering design process.
- Improve communication skills.
- Learn about the yearly theme.
- Practice math skills in model building.
- Demonstrate creativity and artistry.
- Improve 21st Century skills: problem solving, critical thinking, teamwork, and project management

**New Approach to Future City**

- Integrated Approach rather than a “silo” approach
  - See page 5 for important diagram to share with teams
  - Emphasizes the interaction of all parts of the project
  - All project deliverables are discussed by the team at each point of the Project Management (PM) stage
- Draws direct association to the Engineering Design Process
- Program Handbook is organized by Process not the competition components:
  - Grey page edge with process designations
  - Competition rules: page 67
  - Scoring Deductions: page 69
  - Rubrics: page 75-87
Virtual City Design - 54 points  Due: December 1, 2015
Students design a virtual city using SimCity software and present their city’s progress via a slideshow presentation.

New! City Description - 60 points  Due: January 13, 2016
Students write a 1,500-word essay describing the unique attributes of their city and provide a solution to this year’s waste management challenge, Waste Not, Want Not.

City Model - 70 points  Due at Indiana Regional Competition: January 23, 2016
Students build a physical model of a section of their city using recycled materials and including at least one moving part. Due at the Regional Competition.

City Presentation - 70 points  Due at Indiana Regional Competition: January 23, 2016
Students give a 7-minute presentation (followed by a 5–8 minute question and answer period with the judges) discussing features of their future city and their solution to the citywide challenge.

New! Project Plan - 10 points  Due on Wednesday before the Competition: January 20, 2016
Students work with their team to complete a project plan to help them stay organized and focused with the Future City project.

The Deliverables: End Products

### Competition Components

**Deadlines are important!**
5 point deduction for late items

See other deductions: (pg. 69)

2009 Regional Winners:
Leo Jr./Sr. High School

Discussion with teams: Go to Indiana and National website to show teams past models: what do they like? Why do they look good?
What happens at the Regional Competition?

- **Schedule:** See sample schedule from last year: review of schedule

- **Scoring:** Teams attend the competition with scores recorded from the components judged in advance but not given to the teams yet: Virtual City, City Description, Project Plan

- **Scoring:** Preliminary Scores for Model and Presentation are added

- **Scoring:** Final Round Model and Presentation Scores are added to pre-judged components for Finalist Teams

- **Teams bring:** Expense Report (page 91) & Media Forms (IPFW has our own)

- **Teams bring:** Honor Statement (page 91) & Homeschool Affidavit

Indiana Future City Regional Winners Advance to National Finals in Washington, D.C. in February

2015 Indiana Regional Winners
Riverview Huntington
Educator: William Bostain
Engineer-Mentor: Albert Bostain
Future City Competition Components

Project Plan: 10 pts

- No rubric; points for completion and submission
- Do each step **as you progress** through the preparation stages
- Submit at the end of the project the week of the Regional Competition

Components:
- Team Goals (page 35-36)
- Create a Schedule (page 46-48)
- Check In (page 59-60)
- Reflection (Page 65-66)
Virtual City Power Point Slide:
54 points (see page 27)

- **SimCity Info:** ANY region may be used, not in sandbox mode, create off-line, turn off random disasters, build without cheat codes
- **Set 2 goals for your virtual city**
- **At 3 points:** document city development and progress toward goals (screen shots)
- **Slide Show Component:**
  - Use slide show template in either Power Point or Prezi (download sample slide show for teams and download the template to use for submission)
  - Limit of 28 slides
- **Submitted online** at the team page when coordinator announces it is open

City Description:
60 points (see page 29)

- Design an innovative citywide solid waste management system for your future city that is safe, environmentally sound, and energy efficient
- **1,500 words or less**
- **3 sources** (MLA style preferred and Wikipedia is not accepted as a source)
- “Word count” on computer: DOES NOT include title and reference list; DOES include picture and diagram captions
- **4 graphics/illustrations allowed**
- **10 pt. penalty if exceeds maximum words**
- Submitted online at the team page when coordinator announces it is open
- Upload as a word processing document; NOT a PDF
Competition Element: The Model  (page 30)
Name your city a creative name that captures the essence of your team’s ideas about their future city. 

Models (70 points) Model Requirements:

- No vertical models; new model every year
- 4 X 6 Model Identification Card with city name, scale, organization, presenters, teacher, mentor (5 pt. deduction)
- Follow size requirements (15 pt. deduction):
  - 25"(W) x 50"(L) x 20"(H)
  - Built to scale & proportion
  - Minimum: One moving part: electrical power must be self-contained within model dimensions
- No audio or sound
- No perishables/live animals
- May use 2 scales if identified on card
- Primarily use recycled items
- See Rule 33 about 3D printing on model pieces
- Cannot exceed $100 for all elements of the project combined including presentation aids

All models look different!
Judges use rubric: pg. 81

Hints:

- Models are moved so make them stable
- Winning models are shipped so make them sturdy
- Models are measured so examine it carefully
**Team Presentation: 70 points**

- Present city to a panel of judges
- Audio visual equipment is not allowed (see page 33)
- Allowed: Props can include display boards, costumes, handouts, small mock ups, brochures, flip charts
- All visual aids included in the $100 expense report

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**Competition Element: The Presentation (70 pts)**

Judges use rubric: pgs. 85-87

Teams display their models and describe their city to judges.

Presentation time: Cannot exceed 7 min. followed by 5 minutes of judge questions

Visual Aids can be: flip charts, foam boards, posters on easels.

- Size Rules: Single display 60”(W) x 36”(H)
- Double display each 30”x36”
- Props must fit in a 6x6x12” box
- Brochures: limited to one 8.5 X 11 sheet of paper
The Regional Finals

5 Teams Representing 5 Different Schools Compete in a Final Round before Distinguished Judges and all participants.

• Winning Team from each Region advances to National Finals in Washington, DC
• Teams receive free airfare and hotel accommodation
2016 Future City Competition

Regional Recognition and Awards
- Participation gifts for participants
- Medals to finalists
- Trophy to First Place
- Cash awards to top five teams
- Educators each receive a monetary participation award for attending regional with the team
- Special Awards for many teams

Resources
1. Educator Handbook
2. SimCity Software
3. Guiding Questions
4. Learning Blocks
5. Assessment Rubrics
6. Website Tips & Resources
7. Educator Workshop
8. Online Webinars
9. Regional Email Updates
The Deliverables:

End Products

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QUESTIONS?

Indiana Future City Competition
Date: January 23, 2016

Snow Date: January 30, 2016

Contact Information:
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