Future City: Envisioning Tomorrow’s Cities

- Engineering Design
- Project Management
- Mentors
• Established in 1992-1993
• 40,000 students each year
• 40 regions across the country
• International: Canada (Ontario and Prince Edward Island), China, Mideast
What is Future City?
Future City is an integrated, cross-disciplinary project addressing relevant city issues and is a strong example of STEM (Science, Technology, Engineering, & Mathematics) education that addresses many state academic content standards and 21st Century Skills.

Collaborate
Plan
Design
Construct

Research
Innovate
Write
Present

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

Schools & Approved Youth Organizations can register teams

An Official Presentation Team = 3 Students, 1 Educator, 1 Mentor

What grade are team members and how many teams per school?

6th, 7th & 8th grade 3 teams per school except if you have over 90 students in the program see regional coordinator about an additional team

Can more than 3 students work on the project?

Yes, a club or class can work on multiple projects; only three official presentation teams can participate in the regional event with three students per team as presenters. Other team members may attend as observers. Future City can be used within enriched, gifted, science, social studies, Project Lead the Way, and technology classes.

Can a Future City Lite School/team attend the regional competition?

Yes a school may bring a model for display and teams are eligible for some special awards.
FUTURE CITY
EDUCATIONAL
OUTCOMES

• Practice engineering design process.

• Learn and Practice the Project Management Cycle

• Learn about cities:
  • Urban planning
  • Infrastructure and city services
  • Interdependence of technology, industry, commerce

• Practice 21st Century skills: communication, problem solving, critical thinking, collaboration

• Understand the relevance of the yearly theme.

• Practice math skills in model building.

• Demonstrate innovation, creativity and artistry.

• Use technology skills with: SimCity, online presentation, creating their model’s moving part, may use technical collaboration strategies (ex. Google Docs)

Final round judges examining a model during judging.
Reorganization of the handbook based on feedback

All deliverables are explained clearly in one section: pages 21-22 (point values on page 5)

First segment of book focuses on the project process.

Look for hints (look for the box with arrow): example: page 26 how to include the entire team when only 2 students are focused on one component of the project

Appendix: Deliverable details with the rubrics for each one

Check Lists for all deliverables in one place

Competition Rules: page 82-83 with Scoring Deductions on page 84

No significant changes from last year. Reminders:
Special Award Judges visit models

**COMPETITION FORMS**

SEE PAGES 90-94

IMPORTANT: HONOR FORM AND EXPENSEE FORM
Virtual City Design - 48 points  Due: December 15, 2017

Students design a virtual city with SimCity software; create a presentation to demonstrate their teams progress in achieving two goals with the virtual city design.

Team Registration – no fee  Due December 15, 2017

Schools/organizations can register up to 3 teams online at their Future City website home page. The city name cannot change after registration. You can name an alternate for each team. Only schools with over 90 students doing Future City can have 4 teams.

City Essay - 60 points  Due: January 10, 2018

Students write a 1,500-word essay on this year’s topic of creating an Age Friendly City.

Project Plan - 10 points  Due on Wednesday before the Competition: January 17, 2018

Students work with their team to complete a project plan to help them stay organized and focused with the Future City project.

City Model - 70 points  Due at Indiana Regional Competition: January 20, 2018

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. An Expense Report From must also be submitted at the competition which has no point value but, if missing, incurs a 15 point deduction.

City Presentation - 70 points  Due at Indiana Regional Competition: January 20, 2018

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.
COMPETITION DEADLINES ARE IMPORTANT!

2 -15 POINT DEDUCTIONS FOR VARIOUS THINGS; SEE SCORING DEDUCTIONS

Discussion with team: Go to Indiana and National website to show teams past models: Which is their favorite? Why do some look well done? Consider: Innovative design, scale, colors, zoning, detail work, neatness, demonstration of theme, arrangement of items
WHAT HAPPENS AT THE REGIONAL COMPETITION?

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

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

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

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

- **Special Awards:** Judges rotate around Walb Ballroom visiting each city and talking to teams about their areas of interest only. They select award winners for their organization.

- **Teams bring:** Expense Report (page 93) & Media Forms (IPFW has our own)

- **Teams bring:** Honor Statement (page 92) & Homeschool Affidavit if needed

- **Teams bring:** ID card must be shown on the model

- **Teams please measure** your model and visual aids as we will measure them on competition morning.

- **Team Recognition and Award Ceremony: all teams are recognized!**
INDIANA FUTURE CITY REGIONAL WINNERS ADVANCE TO NATIONAL FINALS IN WASHINGTON, D.C. IN FEBRUARY

2017 Regional Winners
Riverview Middle School
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

4 components:
- Team Goals
- Create a Schedule
- Check In
- Reflection
SimCity Info: ANY region may be used, not in sandbox mode, create off-line, turn off random disasters, build without cheat codes

Population range of 8000 - 20,000 Sims: then chart progress

Set 2 goals for your virtual city

At 2 Progress points: Document city development and progress toward goals (Report items: 4 screen shots/progress point, benchmark chart, progress toward goals, strategies toward each goal)

Slide Presentation:
- Use slide show template (submit as Power Point, Word, or Google Slides)
- Submit as a PDF for ease of uploading and downloading by judges

Submitted online at the team page when coordinator announces it is open
City Essay: An Age Friendly City
60 points

• Identify one age related challenge that exists in today’s urban environments and engineer two innovative solutions that allow your future city’s senior citizens to be as active and independent as possible.

• **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 but not required**

• 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

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 Rules 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

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
- Allowed: Props can include display boards, costumes, handouts, small mock ups, brochures, flip charts
- All visual aids included in the $100 expense report
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) x36”(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
2018 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
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QUESTIONS?

Indiana Future City Competition

Date: January 20, 2018

Snow Date: January 27, 2018

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