

INTRODUCTION FOR PARTICIPANTS IN THE NORTH TEXAS FUTURE CITY COMPETITION

Welcome to the North Texas Regional National Engineers Week Future City® Competition. If you have any questions, suggestions, comments, complaints, don't hesitate to contact the Regional Coordinator: Jean Eason, regional@dfwfuturecity.org.

The Future City Challenge: *Design and build a livable city of the future*

- Form a team
- Conceive an initial project plan and city design
- Research annual theme, study city plan and refine design
- Write paper on solution to annual theme challenge
- Build physical scale model of city
- Stay within budget
- Present final design to judges

Deliverables:

1. Project plan
2. Research Essay on this year's assigned topic
3. 3-D scale model of city
4. Oral team presentation
5. Q&A with judges

Regional Communications:

- Communication will be primarily through email. Please make sure your email system will receive/accept messages from:
 - texas_north@futurecity.org
 - regional@dfwfuturecity.org
 - easonjm@sbcglobal.net
- NTX FCC email updates – sent out approximately every 3-4 weeks. As a registered educator, you are automatically on the distribution list. If there are other educators, mentors, or parents that would like to be added to the list, they may sign up on the NTX Team Center page: <http://www.dfwfuturecity.org/teamcenter.html>.

FUTURE CITY PROGRAM ONLINE RESOURCES

Future City program information is available online in one of three places.

1. **Educator Dashboard:** <https://dashboard.futurecity.org/>
This is a new system and the exact capabilities are still TBD/TBA. For the NTX Region, we will primarily use this site to:
 - a. Download program resources, including the handbook, forms, rubrics, and student activities & handouts
We will not be using this system to create teams, upload files or score deliverables. See #3 Competition Management System ./

2. **NTX Future City website:** <https://www.dfwfuturecity.org>
Team Center section: <https://www.dfwfuturecity.org/teamcenter.html> – *bookmark this page!*
 - a. Detailed schedule of program activities and due dates
 - b. NTX regional rules
 - c. List of participants
 - d. Regional resources, including forms, orientation and video tutorials, tips, suggestions and lessons learned
 - e. Information for regional competition event

3. **Competition Management System website:**
<https://secure.dfwfuturecity.org/NorthTX/Teachers> (login links also available from NTX Team Center website)
This is the FCC CMS we've used for several years and accommodates both our FCC and FC Jr competitions (the new national CMS does not). We will use this site to:
 - a. Create and manage teams
 - b. Upload deliverables
 - c. Judge/score deliverables
 - d. Receive scores (available after competition)

NORTH TEXAS FUTURE CITY COMPETITION TIMELINE 2022-2023 *

Now – Oct 31 Nov	School Registration Registration fee due
Sep – Oct	Develop goals and project plan
Sep – Nov	Students develop initial city plans (Use SimCity to test city design ideas – optional) Research, write essay Collect recyclables and other building materials for models
11-Nov	Project Plan 1: Goals due
18-Nov	Project Plan 2: Schedule due
2-Dec <i>9 Dec</i>	Essays due <i>Last day to submit Essays (penalty deduction) **</i>
Nov-Dec	Begin design, construct model (model segments)
12-Dec	Project Plan 3: Check-in due
Dec – Jan	Complete model construction Plan and practice Presentation Practice for Q&A session
16-Jan	Project Plan 4: Reflection due
28-Jan	NTX Regional Preliminary and Finals Awards Ceremony

* Detailed schedule available on NTX FCC Team Center website:
www.dfwfuturecity.org/teamcenter.html.

** NOTE: If there is any discrepancy between the dates on the NTX CMS and the Educator Dashboard, the NTX CMS will take precedence.

NORTH TEXAS REGIONAL RULES*

Teams

- Teams consist of three 6-8 grade students, one educator-coach, one mentor (you need to have one)
 - Students must be from the same school (or organization), but not necessarily from the same class or even the same grade.
- Organizations may enter as many teams as they like. All teams can participate in the early phases of the program. Due time constraints, a maximum of 8 full-participation teams per organization may schedule Q&A sessions with the judges (see Regional Competition below.)
 - Or, organizations may work in larger groups, class (or classes) and select the three students (one team) that will represent them at the competition.
 - Or, organizations may have multiple teams and hold their own run-off to select the best team to represent them at the regional competition.

SimCity

- There is no SimCity deliverable requirement this year. However, SimCity remains an excellent means of learning about city design and operation. Codes may be available for the download and we encourage teams to use the program as a tool to test design ideas.

City Essay, Model Slideshow, and Project Plan Deliverables

- The City Essay and Project Plan deliverables are submitted to judging by uploading files to the online [Team Center – NTX CMS](#)
 - Refer to the NTX Schedule for due dates
 - City Essay should be in a common word processing document format like .doc (not as a .pdf)
 - The Model slide show should be submitted as a .pdf
 - Refer to the sample slide show and template
 - Project Plan blank .pdf forms are available on the Educator Dashboard.

Budget and Expenses

- Teams have a budget for what they can spend on the model, presentation and Q&A deliverables. Expenses can be no more than \$100 per team (combined total for model, presentation, and Q&A)
- Expenses are documented on the Expense Form and include
 - Purchased items - actual receipts stapled to Expense Form
 - Donated or borrowed items - you must place a value on donated or borrowed supplies: fair market value (E-Bay or garage sale price)
 - Used items - fair market value
 - Recyclable items - (e.g., plastic bottles, soda cans, cardboard, etc.) have \$0 value
 - 3-D printed items – valued according to rules in handbook
 - Programmable circuit board (eg, Raspberry Pi) - valued at full cost (no less than \$35 – see handbook)
- \$100 budget includes all items used in the model, presentation, and Q&A: including displays, costumes, and demonstration aids.

Model

- We will continue to allow models to be built in sections to accommodate both in-person and virtual learning environments.
 - Option 1: Your team can choose to build one single model (recommended for teams working together in class)

- Option 2: Your team can choose to build multiple model segments. These model segments are separate pieces that represent various sections of the city. Model segments do not need to fit together physically.
- Scale: A model can contain up to four (4) distinct, clearly defined scales. The differing scales should not randomly applied throughout the model, but used to highlight specific areas or functions.
- Moving Part(s): Each model (entire model – not each model segment) must contain at least one moving part. Any electrical power must be self-contained (e.g., a household battery and a simple circuit).
- Model Size: Maximum size is 25" (w) x 50" (l) x 20" (h). If built in multiple segments, the pieces together cannot exceed the maximum dimensions.
- Models in their basic, transport state have a maximum size of 25 in. x 50 in. x 20 in. This includes any hinged parts (tilting or access to underground structures), braces, backdrops, etc. that might be deployed to illustrate features during the presentation. These deployable parts must be self-supported by model or held by presenter (not spread out on tables, floors, etc.)
 - Model ID cards should be attached to the model in a prominent location.
- Models will be judged on-site at the Regional Competition event. There is no model slideshow deliverable this year.

Presentation

- Presentation can be no more than 7 minutes.
- Presenters: Three students will represent the team in the presentation (teams of fewer than three students will not be disqualified, but a team cannot have more than three presenting). These three students will be considered the "official" team members.
- The focus of the presentation is on the future city design and the solution to the annual challenge.
- Demonstration aids. The model is the primary demonstration aid. However, other visual aids may be used to help explain some ideas or concepts. These might include posters, graphics, or photographs. No copyrighted materials (such as music, photos, and videos) may be used.
- Budget: If materials other than the model are used during the presentation (such as costumes, posters, or other visual aids), their cost must be included in the total budget (with the model expenses) and reported on the Competition Expense Form.
- The presentation will take place during the Preliminary Round at the Regional Competition.

Q&A Session with Judges

- Following the Presentation, the team and judges will begin a 8 minute (max) Q&A session.
 - The three official student team members (and only the student team members) will converse with the judges.
 - Educator, mentor may watch online, but cannot, under any circumstance or in any way, participate in the Q&A discussion.
 - Any additional team members may attend but will not participate in the Q&A discussion.
- Props and other demonstration aids used during the Q&A must have their cost included in the budget and recorded on the Competition Expense Form.

Regional Competition

- Both the preliminary and final rounds will take place during the Regional Competition event:
 - Preliminary round presentations and judging in the morning
 - Special Awards judging will also take place during the morning session.
 - Final round presentation and judging in the afternoon
- Preliminary competition - all teams (up to a TBA maximum of full-participation teams per organization without Regional Coordinator approval) may compete/present.

- (Organizations with multiple Partial participation teams should contact Regional Coordinator for limits on numbers of presenting teams.)
- Contesting teams will be seeded into groups based on their scores on the computer and essay portion of the competition.
- Different sets of judges (engineers and architects from around the Metroplex) will score each group.
- Team members and their immediate families (above the age of 6) only may watch presentations during the preliminary round.
- The top 4-6 teams will go to the finals.
- Only one team per organization may move on to the finals.
- Final competition - Finalists will present their designs in an auditorium before a special panel of judges and the audience.
- Awards ceremony - The Regional Competition will conclude with an awards ceremony

Special Awards

- The exact process for the NTX Special Awards will be announced by the end of the year.
- In general, the rules will be the same as the Q&A with regard to team / student participation and use of props and demonstration aids.
 - Only three student team members will converse with the judges.
 - Educator, mentor and any additional student team members will not participate in any way.
 - Props and other demonstration aids used during the Special Awards Q&A must have their cost included in the budget and recorded on the Competition Expense Form.

Awards Ceremony and Announcement of Winners

- Awards ceremony – The NTX Awards Ceremony will take place following the Final Round of judging.
- 1st, 2nd and 3rd place teams will receive medals and a monetary award for the sponsoring organization.
 - Note: at this time, we anticipate an in-person Finals Competition in Washington DC and the award of a trip for the Regional Winner this year.
- Companies and professional associations sponsor other special awards, recognizing outstanding effort in special categories. Examples of special awards:
 - Best Essay
 - Excellence in Civil Engineering
 - Architectural Achievement
 - Excellence in Transportation System Design

Other Rules

- Deadlines will not be extended. Teams making submittals after the deadlines will receive penalty points.
- Any conflicts will be resolved locally. There is no appeal.
- The judges' decisions are final.
- Prizes are not transferable or exchangeable.

* These "Additional Rules" may not agree with what is in the handbook. Where they conflict, these rules take precedence over the rules in the handbook.