

23rd ANNUAL NEW ENGLAND REGIONAL FUTURE CITY COMPETITION

31st ANNUAL BSCES MODEL BRIDGE COMPETITION, and

FUTURE CAREERS (“PILOT” PROGRAM)

Through the Boston Society of Civil Engineers Section, Public Awareness and Outreach Committee, the BSCES just held our FUTURE CITY COMPETITION and our MODEL BRIDGE CONTEST. Now we are starting up our next adventure, FUTURE CAREERS. To get involved and to learn more, visit WWW.ENGINEERYOURFUTURE.ORG or contact committee chair Reed Brockman reed.brockman@aecom.com

23rd ANNUAL NEW ENGLAND REGIONAL FUTURE CITY COMPETITION

This year, middle school students were challenged with creating cities 150 years in the future that have clearly designed methods of assuring that they are ZERO WASTE COMMUNITIES. For all sorts of resources and a better understanding of this, visit www.engineeryourfuture.org. This year, the competition was held online using numerous Microsoft Teams meeting rooms.

We had over 50 teams participating, and in the end, 11 competed in the NEW ENGLAND REGIONAL FINALS.

Congratulations to all teams that participated in the 2022 Future City Competition. All teams did a truly wonderful job, and all were worthy of going on to the International finals.

We now have our final special award winner selected: THE PEOPLE’S CHOICE AWARD! **Thank you to all who voted. By popular vote, VENICE won THE PEOPLE’S CHOICE AWARD.**

Venice is representing New England at the International Finals, which also are virtual this year.

We are leaving the work by each team available for all to see:

PRESENTATIONS

Team

The Sunshine State: South Beach Salvage! (JFK MIDDLE)
Golden State: No Time to WASTE! (JFK MIDDLE)
Graen-Borg (CURIIOUS SCIENCE)
New Kanpur (WILBRAHAM-MONSON ACADEMY)
WMA Crystal City (WILBRAHAM-MONSON ACADEMY)
New Age Delhi (WILBRAHAM-MONSON ACADEMY)
Jeremie City (DERBY ACADEMY)
Oeconomia Circulares The City of Peace (DERBY ACADEMY)
Spiricual City (DERBY ACADEMY)
Venice (GOOSE & HEN FARM HOMESCHOOL COLLABORATIVE)
Dalisay (MASCONOMET MIDDLE)

Submission

<https://youtu.be/NLZnXwd-cx0>
<https://www.youtube.com/watch?v=O4Oplk-opdc>
<https://www.youtube.com/watch?v=Pliv75wLROI>
<https://youtu.be/W1uXUx11cTc>
<https://youtu.be/p4DBWImXYkw>
https://youtu.be/H5xKfBn_7N8
https://youtu.be/KH_ViRxZj3Q
https://youtu.be/M4-sYj1J_Bc
<https://youtu.be/S5uzmt4-a08>
<https://www.youtube.com/watch?v=fSsV008dIkM>
<https://youtu.be/VSmILQicAnk>

Models: <https://www.dropbox.com/sh/2x2i2uqk9l3lпки/AABea2osNBYDOiNVfkO7cM2xa?dl=0>

Essays: <https://www.dropbox.com/sh/rl16xm6bfcc1nh8/AACqkPlb8nzEoDU2-aEmFB-Va?dl=0>

Moving Parts:

Team

- The Sunshine State: South Beach Salvage!
- Golden State: No Time to WASTE!
- Graen-Borg
- New Kanpur
- WMA Crystal City
- New Age Delhi
- Derby Team 2 / Jeremie City
- Derby Team 3 / Oeconomia Circulares The City of Peace
- Derby Team 9 / Spiricual City
- Venice
- Dalisay

Moving Part Video

- https://youtu.be/ZfewEQx3_p4
- <https://youtu.be/wlD477mlqts>
- NONE RECEIVED
- <https://www.youtube.com/watch?v=kDr1i2YPJl8>
- <https://www.youtube.com/watch?v=bi9Frder8G0>
- <https://www.youtube.com/watch?v=vnm7npONbnA>
- <https://youtu.be/FvJbAUV93Io>
- <https://youtu.be/WEnEaj6ZdQY>
- <https://youtu.be/aNSp5W2RtbM>
- https://youtu.be/Qcjf_wlKQzI
- <https://youtu.be/8H4WXg0Di8Q>

Here are lists of special awards recipients, regional finalists and prize winners during the announcements between finals presentations:

FINALISTS' SCORES

Place	Team name	Score	City essay	Project plan	City model	City presentation	City Q&A	Compliance deduction
1	Venice	196	50	10	51	42	43	0
2	Derby Team 3 / Oeconomia Circulares The City of Peace	173	39	10	52	33	39	0
3	The Sunshine State: South Beach Salvage!	167	45	10	45	33	34	0

Special Awards	
	WINNER
Most Inclusive Community	The Sunshine State
Best Infrastructure	WMA Crystal City
Mosr Outstanding Innovative Concept	New Age Delhi
Best Moving Part	Spiricual City
Exceptional Public Recreation Space	Venice
Outstanding Transportation System	Dalisay
Most Innovative Material Use	Jeremie City
Most Prestigious Educational System	Golden State
Public Safety	Oeconomia Circulare
Most Abundant Food Supply	Venice
Outstanding Waste Management Practices	New Age Delhi
Most Remarkable Architectural Feature	Venice
Best Management of Water Systems	New Kanpur
Unparalled Disaster Response	Jeremie City
Sustainability Award	Spiricual City
Most Energy Efficient System	Venice
NCEES	Jeremie City
ASABE	Venice
PMIEF	WMA Crystal City
People's Choice	
Best Essay	Venice
Best Model	Oeconomia Circulare
Best Presentation	Venice

31st ANNUAL BSCES MODEL BRIDGE COMPETITION

This year, the materials were 36" long bamboo dowels and 4# test jute twine.

Here is a link to the pdf version of the RULES/SPECIFICATIONS:

<https://www.dropbox.com/s/45bmrcsd86dwt7p/2022%20BSCES%20Model%20Bridge%20Specifications.pdf?dl=0>

Over 50 teams registered and in the end 18 participated in the competition. The models were tested the last week of January by visiting each school/program and recording the loading sessions.

We had a bunch of teams that, because of the present world conditions, there was not time and want to do something later in the year. One problem that a teacher stated was that the students had trouble lashing the bamboo together, so we made this video with my friend Dan. If anyone wants to build bamboo and twine structures, it's must-watch TV! <https://youtu.be/Sgkb4TRiGzY>

Congratulations to everybody that competed in the MODEL BRIDGE CONTEST! You all did a beautiful job.

THE LINK TO WATCH THE RECORDING OF THE COMPETITION IS HERE:

https://www.youtube.com/watch?v=aY4qzeu8aYE&list=PLlc1ecU2vkEHAdQKZbW7QW2URCqpnclC&index=4&ab_channel=EngineerYourFuture

Here are the results:

Ultimate Load Results



Rank	Team	School	Members	Efficiency
1	Mr. Bamboo	Swampscott Library	Vlad and Yuri	85.71
2	Panda's Passage	Swampscott Library	Max	82.23
3	To Be Determined	Malden Catholic	Matt and Sam	31.16
4	I Don't Know, Ask Charlie	Malden Catholic	Mario and Charles	28.61
5	Crooked Hairline	Boston Latin School	Tim and Phineas	28.00
6	The Modified DaVinci	St. Paul Choir School	Quinton, David & Felix	25.65
7	The Brees Bridge	St. Paul Choir School	Gerard, Higor & Olivier	22.26
8	Double Arch	Northbridge Middle	Ryan and Luke	19.95
9	Luxurious	Northbridge Middle	Enzo, Emmy and Max	16.28
10	Uh...	Boston Latin School	Vivian and Alex	13.04
11	Hanging Truss	Northbridge Middle	Michael	12.32
12	Super Bridge	Malden Catholic	Tenzin, Terrell and Charles	11.70
13	Mat	Northbridge Middle	Reed and Tyler	11.29

1st Place: Mr. Bamboo



2nd Place: Panda's Passage



3rd Place: To Be Determined



HONORABLE MENTION:

- Umm...
- Nuntius Pontis
- Bambow Connection
- The Keough-Grenham-Casiano
- Friendship Bridge

MOST AESTHETIC			
Rank	Team	School	Members
1	Modified DaVinci	St. Paul's Choir School	Quinton, David and Felix
2	Crooked Hairline	Boston Latin	Tim and Phineas
3	Uh....	Boston Latin	Vivian and Alex

MOST AESTHETIC
1ST Place: Modified DaVinci



Trophies, certificates and t-shirts will be sent soon. Also checks: in each category, each team member will get \$100 for 1st place, \$75 for 2nd and \$50 for 3rd.

I look forward to seeing you next year, and for those that are seniors, you can always come back and help run the contest! The test model this year was made by Ivan Kadurov, now an architecture student at Wentworth Institute of Technology (the host of our competition in a “normal” year).

Thank you to all our sponsors, and to our judges and longtime volunteers/coordinators Irene Barsky, MassDOT’s Alyson Bedard and Alexander Bardow, BSCES President Shallan Fitzgerald and the MBTA’s Terry McCarthy.

FUTURE CAREERS (“PILOT” PROGRAM)

We have a new concept for a competition we are piloting called FUTURE CAREERS, and we will have a middle school category and a high school category. It is a spinoff of the Future City Competition and will start after the completion of the Future City International Finals, which are presently underway. Obviously, teams can start as soon as they have the criteria, which is here. In fact, EDUCATORS can register here: <https://forms.gle/LasmNpR4H9Q556Mt6>

The winning city from the previous year becomes the setting for a video the students are being asked to make for this competition. So, for this year, the city is Luna City, which is nestled into a crater on the moon 150 years from now (2172). Students need to make a video maximum 7 minutes long that satisfies this criteria:

- 1) How the nature of the work has changed over the previous 150 years must be explained, whether that means that is different as a result of technological advances, the changing nature of the world or the environment, or even that this career never used to exist and now has become either possible or needed.
- 2) The actual nature of the daily work must be explained, including the responsibilities and the inter-relationships with others in the community or beyond. Whether this is described in the form of a summary of a typical workday or in some other creative manner, there should be detail of the actual work done, the tools and technology involved and the role this work plays in the community or beyond.
- 3) The video must discuss the training/formal education/skills needed to perform this work. Stronger videos should capture this development as a continuing process, as education and skills development always continue.
- 4) The challenges of the work need to be depicted in the video. These can be of any nature, whether they are related to the surroundings, the pressures, the physicality of the work, the need for strong analytical skills, etc.
- 5) The favorite aspects of the work need to be described.

Each category above is scored on a scale of 0 to 4. A zero indicates the criteria has no mention. A 4 does a stellar job, not only delving into the imagination but equally tying in concepts that while not maybe presently achievable with current technology, are convincing as potential future technologies. Equally, a “4” score would show a clear understanding of the nature of the work, whether that be by displaying understanding of the work as it exists today and indicating how the 150 years of time would alter that, or describing the work from scratch. Remember, this city is on the moon 150 years from now, and all the issues that arise from that setting need to be considered.

Aside from the above categories related to the materials, there are 5 other points that will be given for the quality of the presentation. We leave the format wide open: it can be anything from a recorded zoom call to an animation to a PowerPoint presentation to a live action film. Even that can be left to the imagination. In this, the imagination is everything. No points will be given for special effects or costly production. A “5 point “ video will make complete sense, have a flow to it, be both informative and entertaining, and be well rehearsed.

In the end, scores will be from 1-25. There will be no Q&A sessions. How we share videos and score a “winner” will depend on participation, but it will be virtual.

I want to dedicate the competition to a dear friend of ours that recently passed away, Chris Evasius. We are truly going to miss him.

THANK YOU SPONSORS!



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