

"FUTURE CITY" CHAMP From Washburne Middle School, Winnetka

Chicago, March: A city of the future -- "**Treasure Island**" -- designed by students from Washburne Middle School, Winnetka, has won the Chicago Regional National Engineers Week Future City Competition™. These eighth-grade students – Mackenzie Shannon, Kacie Swierk, Rachel Tarling and Camille Ruiz-Funes teamed up with their teacher, Timothy Hall (Editors: Contact Mr. Hall (847) 446-1380), and volunteer engineer-mentor, Ryan Wilke, Construction Manager for Bielinski Homes, Inc.

2nd Time the Charm

In 2008 (as 7th grade students) the team from Washburne came in 2nd place. Returning to the competition as 8th grade students they honed their presentation skills and designed a new Future City and took away top honors! **Treasure Island** is the name for the new city established in the San Francisco. **Treasure Island** has many great features, including being constructed with seismic isolation. The city's buildings and vehicles are powered entirely by fuel cells. Since one of the by-products of fuel cells is pure H₂O, that is one of the primary sources of water for all the buildings. The other by-product, heat, is used to heat the water and help to warm the buildings when the weather is cool. Land is dedicated for "*urban farms*" which provide the city with the freshest produce while reducing transportation costs. For garbage and recyclables, a suction system is used to carry the refuse from the buildings to an underground geodesic dome "landfills." This avoids using up valuable land on the island and the associated smells.

Mackenzie Shannon says, "I learned a lot, especially scientific concepts, teamwork, and giving a presentation. One of the major things also was learning about engineering and engineers and the different types like structural, chemical, environmental, etc. Kacie Swierk comments, "I learned a lot about teamwork. We had to work together throughout the whole project and give constructive criticism and compromise. Sometimes it was hard, but we got through it. I especially learned a lot about many science concepts such as Living Machines, Fuel Cells, Vacuum Waste Collection Systems, and many others. Overall, this is such a great project!" "The Future City Competition offers students to learn about technology, public speaking, presentation skills, teamwork, and good writing", replies Matt Miller one of the many engineering volunteers.

These 8th-graders traveled travel to Washington, DC where they competed against 38 other entries from around the country, February 16 – 20, 2009, in the Future City National Finals (www.futurecity.org). Though they did not place in the national competition the judges were impressed with their city and honored it with a special award for "The most innovative use of construction materials and techniques."

The REAL FUTURE

"This program has been instituted by the engineering profession to bring hands-on, practical applications of mathematics and science to educate young minds as to the essential role engineers play in creating our modern technological society," replied Robert B. Johnson, Bowman, Barrett & Associates, a spokesman for the Chicagoland Future City Program. "The future of America is not found on the basketball courts, football grid irons, tennis courts, golf courses or baseball diamonds, but in the minds of these young dreamers."

Chicago Runners-up include;

| | SCHOOL | PHONE | TEACHER |
|--------------|--------------------------------------|----------------|------------------------------|
| Second Place | Chicago State University, Chicago, | (773) 995-4504 | Marnie Boyd |
| Third Place | St. Paul of the Cross, Park Ridge | (847) 825-6366 | Christine Stypa/Laurie Moran |
| Fourth Place | St. Clair RXIII, St. Clair, Missouri | | Jennifer Hawkins |
| Fifth Place | Franklin Middle School, Wheaton | | Liz Simpson |

All participants in the regional competition received promotional items including, participation medallions, E-Week Tee-Shirts, Future City Water Bottles and a host of other trinkets. These gifts were courtesy of HNTB, ASCE-Illinois Section and other sponsoring societies and companies. The winning teams were feted at the Chicagoland Engineers Week Benefit, February 20th.

About the Competition

Using " SimCity 4 Deluxe™ from Maxis, each team of students from thirteen Chicago area schools generated a "blueprint" computer printout and used it to build a scale model of a section of their city. A team of students from St. Clair, Missouri ventured to Chicago to participate too! Use of recycled material is strongly encouraged in the building of the model. All models have to have one moving part. The winning team's model "**Treasure Island**" was able to cleverly demonstrate seismic [earthquake] isolation! The students also had to make a poster and write an essay. The students had to present and defend their future city design before a panel of engineer judges, including:

Rupert Graham, Superintendent of Highways – Cook Country Highway Department
Betty Shanahan, Society of Women Engineers, Executive Director
Randall Blankenhorn, Chicago Metropolitan Agency for Planning, Executive Director
Gina Trimarco, TranSystems Corporation
Kathryn Gray, GrayTech Software, Inc. and the Chair for the Engineers Week observance (www.eweek.org)

Special awards were present to schools for their individual accomplishments in the competition. The Chicago Committee on High-Rise Building (www.cchrb.org) recognized the Chicago State University for their city that demonstrated the best use of skyscrapers in their design. Stone Academy, Chicago captured an award from the Structural Engineers Association of Illinois (www.seai.org) for the best creative use of materials, concepts and construction techniques of structures in their model. The Institute of Transportation Engineers (www.ilite.org) presented Immaculate Conception Grade School, Elmhurst a special award for excellence in transportation safety and operations. All together 29 "Special Awards" were presented to teams. Even Chicago architects joined in presenting students from St. Paul of the Cross, Park Ridge with the "Most Livable Community" award from the Chicago Chapter of the American Institute of Architects. The students voted for an award too! St Clair, Missouri received the peer award for the Best Model as selected by the students. The best essay on the "Creating a Self Sufficient System Within the home Which Conserves, Recycles and Reuses Existing Water Sources," was presented to Franklin Middle School.

Derek Johnson, co-coordinator offers this comment, "It is a great experience for all involved -- the students have fun while learning about engineering and gaining valuable teamwork and presentation skills. Engineers, mentors, judges and volunteers always leave impressed by the students' ability and enthusiasm."

Regional chairman Don Wittmer notes, "It is exciting to see the interaction between the students and witness the enthusiasm that these students have in learning about engineering and the real life problems that are encounter everyday. Our hope is that this competition helps students consider the possibility of studying engineering when they attend college." In fact one of the engineer judges, Denise Armbruster was a student in the competition way back in 1995. Now she is an engineer!

Kacie Swierk replies, "Future City gives students a chance to see what life might have for us and get a feeling for what engineers do. This part I especially liked."

An Annual Event

On January 24th students met at the University of Illinois - Chicago Circle Campus to exhibit their models. More than sixty professional engineers queried the teams as to the merits of their designs. Entries were judged on creativity, city layout, and attractiveness by a variety of judges from the private and public sectors of engineering. This year was the 17th year for what has become an annual event for Chicago's engineering community. The Chicagoland engineering community is proud of their record as the only city to host the competition since its inception in 1992.

The seventeenth annual Future City Competition is sponsored in part by the National Engineers Week Foundation, a consortium of professional and technical societies and major U.S. corporations and major U.S. industries. Co-chairs of 2009 National Engineers Week are the National Society of Professional Engineers (www.nspe.org) and INTEL. Local support is provided by HNTB and ASCE-Illinois Section and other Chicagoland engineering societies and corporations including Chicago Metropolitan Agency for Planning, Turner Construction, American Society of Mechanical Engineers and IIT Alumni Association.

For those schools wishing to compete in next year's competition beginning about August 2009 contact, Don Wittmer at 312-930-9119 to be placed on the mailing list.

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Editors note: Photographs of the students models are available upon request.

For a video of the 2009 event see:

<http://www.youtube.com/watch?v=vRY3pnR-SwQ>

For sample pictures:

<http://www.futurecitychicago.org/pictures.htm>

<http://www.flickr.com/photos/10752828@N05/sets/72157614572357964/>

2008 PR and Video!

<http://news.medill.northwestern.edu/chicago/news.aspx?id=76389>

Additionally

The Future City competition is one of the elements for the recognition of NATIONAL ENGINEERS WEEK_r. Since 1951, NATIONAL ENGINEERS WEEK_r, has been the nationwide celebration of the engineering profession, to acknowledge the essential role which engineering has played in advancing civilization and adding quality to our lives. In Chicago, activities scheduled include engineering lectures, student outreach efforts, bridge building competitions and exhibitions of engineering achievements.

Contact: Tim Seedan - Western Society of Engineers at tim@wsechicago.org or at 630/ 724-9770, 241-0142 fax. For Engineers Week -Illinois details or visit the Chicagoland EWEEK website www.chicagolandeweek.org

For additional information about Illinois Engineers Week
Visit the National Engineers Week_r WEBSITE at <http://www.eweek.org> or
Illinois Engineers Week information at <http://www.chicagolandeweek.org>

Additional information on the Future City Competition can be found at www.futurecity.org