



Ministry of
Science & Technology
and
Earth Science,
Government of India



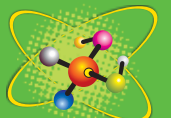
Future Cities India 2020SM Competition

2009-10

Sponsor



www.futurecitiesindia2020.co.in



MINISTRY OF SCIENCE & TECHNOLOGY
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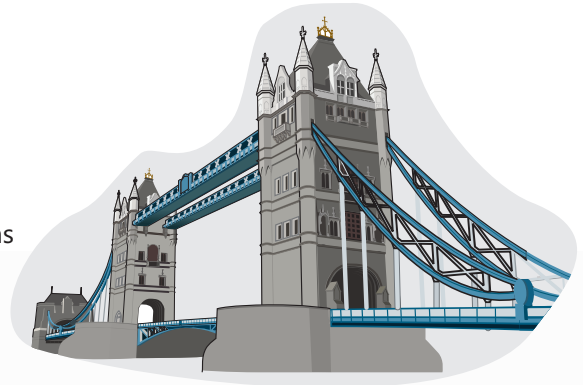


India's economic performance in recent years has been among the best in the world, with much of the growth taking place in its urban areas. Up to 70 percent of its gross domestic product is contributed by its cities, creating mounting demands for infrastructure improvements. These demands will only increase as more people are attracted to these hubs of economic activity.

Less than 30 percent of the more than one billion people in India currently live in urban areas. It is estimated that by 2020, India's cities will be home to 75 percent of its citizens, and a relatively small number of mega cities will absorb the bulk of this population boom.

To keep these mega cities efficient, places in which people can comfortably live and work, major infrastructure improvements will be needed, including:

- Modern housing, office buildings, and industrial plants
- Reliable, affordable mass transportation systems
- Energy-efficient utilities and associated distribution systems
- Fast, secure communication networks
- Expanded roads and highway systems



The Future Cities India 2020 Competition is designed to actively engage the students of India in developing solutions to these challenges, and encourages them to become part of an expanded talent pool of professionals that can help the country meet its ever-increasing need for infrastructure development as well as the need to sustain the profession.

The Competition

The Future Cities India 2020 Competition is a national level competition sponsored by the Ministry of Science and Technology in association with Bentley Systems. The competition has been designed for high school students and focuses on the use of science and technology development process to solve real world challenges, incorporating real world data, using globally recognized professional software. The Program engages teachers as counselors and technical professionals as mentors and the students provide realistic, innovative solutions while learning a marketable skill.

The hands-on nature of the competition encourages the students to develop, design, and integrate their ideas, while fostering an interest in math, science, engineering, architecture, and facility planning through a real-world application of those disciplines.



The Competition Outline

The competition is open to all schools in the National Capital Region and will take place in two levels.

Zonal Level Competition :

- There are a total of five zones. Delhi is divided into four zones (North, South, East & West) and NCR is divided into one zone.
- Schools need to nominate their competing teams (at most two teams) each of which consists of four students and one teacher.
- Only XI grade students are eligible for participation.
- Teams will receive a problem statement about which the students will write an essay of up to 500 words.
- Registrations are sent to the Program Manager - Future Cities India 2020 (contact details overleaf).
- Teams are screened on the basis of the essay written on the problem statement.
- Three teams from each zone, a total of fifteen will qualify for National Final.



National Level Competition :

The teams competing at the National Level Competition will be provided with and trained on Bentley Software at no charge. A Mentor from the Industry will be provided by the Competition Organizers. The teams will:

- Develop a project plan to guide team activities.
- Work as a team under the guidance of a mentor and a teacher.
- Use engineering software from Bentley to design their infrastructure concepts.
- Submit their conceptual solutions according to prescribed deadlines.
- Build a physical model of their design solution.
- Present their solution to a panel of judges.

Bentley professional software will be provided at no cost to all competing schools at the national level. The teams will compete against each other for national honors and prizes. The winning team will be announced and honored in a memorable award ceremony.



The Judging Criteria

The competition will be evaluated against various criteria

Project Design Solution Report	25 percent
Computer Model	25 percent
Physical Model	25 percent
Team Presentation	25 percent

The Competition Prize

- Winners - Scholarship and award trophy
- Students - Prizes and certificates for all participants
- Teacher and Mentors - Awards and recognition
- Special awards winners - Prizes from sponsors

2008-09 Competing Schools

Amity International School, Gurgaon, Haryana
 Apeejay School, Noida, Uttar Pradesh
 Apeejay School, Faridabad, Haryana
 Apeejay School, Saket, New Delhi
 Apeejay School, Sheikh Sarai, New Delhi
 Father Agnel School, Gautam Nagar, New Delhi
 Modern School, Vasant Vihar, New Delhi
 Convent Of Jesus & Mary Bangla Sahib Marg, New Delhi
 Kendriya Vidyalaya, Tagore Garden, New Delhi
 Oxford Senior Secondary School, Vikaspuri, New Delhi
 Apeejay School, Pritampura, New Delhi
 Amity International School, Saket, New Delhi
 Vasant Valley School, Vasant Kunj, New Delhi
 Manava Bharati India International School, Panchsheel Park, New Delhi

2008-09 Distinguished Mentors

Mr. Rajesh Rohatgi - Transport Specialist, World Bank
 Mr. A. K. Gupta - General Manger (Project), Railway Land Development Authority
 Mr. Viswanath Jagid - DGM (Highway Design), BCEOM
 Ms. Nimisha Pal - Vice President (Traffic & Transport), ICT India Pvt. Ltd.
 Mr. Tapan Mondal - IT.Div.(Mn) Dwarka Project, Delhi Development Authority
 Mr. Deep Sharma - XEN/C/NDWCS, N.Rly, Northern Railway
 Mr. Amit Jain - Dy. COM/C/NDWCS, N.Rly, Northern Railway
 Mr. Anand Vijay - DGM(Law) and CPIO, Railway Land Development Authority
 Mr. D.R. Gupta - GM(PID), Railway Land Development Authority
 Mr. Pankaj Goel - EDP - Joint Director, Border Research Organisation
 Mr. Rajesh Chopra - Mouchel Group
 Mr. Vipin Gandhi - ME Structures. Sr.Design Engineer, Arch Consultancy Services
 Mr. B. Mondal - BE Civil, Highway & Traffic, Chief (Operations), Stanley Consultants Pvt. Ltd.
 Ms. Sujata Savant – AGM/Traffic & Transport, RITES Ltd.
 Mr. R. G. Sharma – Dy. General Manager (CIVIL), RITES Ltd.

2008-09 Winning School

Manava Bharati India International School, Panchsheel Park, New Delhi



How to Register

Teachers and school administrators can register their teams by downloading the form available at www.futurecitiesindia2020.co.in and sending by either email to admin@futurecitiesindia2020.co.in

or by mail to:

The Program Manager

Future Cities India 2020,

c/o Bentley Systems India Pvt Ltd.

203, Okhla Industrial Estate, Phase-III, New Delhi-110 020

Tel. : +91 11 4161 4122 to 26 Fax : +91 11 4161 4128

for more details please visit us at www.futurecitiesindia2020.co.in