



UNTRAVERSED

## HYPER RESILIENT CITIES

Our cities are urbanizing at an unprecedented rate. We know this. In barely a decade, two-thirds of the world's population will be comprised of city dwellers. We know this too. So let's take a moment and break this down, crudely, in terms of what this means for Indian cities.

As per the 2011 census, 30% of India's population lives in cities and by 2030, this number is expected to rise to 40%. Some recent reports even say 50%. This equals approximately 700 million people living in India's cities in 2030. Even if we assume that everyone is equally distributed in the 53 existing urban agglomerations [1] having a population over one million, we have 13 million people in each agglomeration. Basically, in 10 years, we are looking at 53 Bangalores across the country. **Are we prepared?**

However, this is only just one scenario to consider.

Imagine another scenario where this population explosion occurs not over a period of 10 years **but in a single burst**. Could our cities survive?

*Rome was not built in a day.*

*But what if it needed to be built in a day?*

The brief for the 2018-19 G Sen Trophy is a call for action under the theme '**Hyper Resilient Cities**'.

## Designing for hyper resilience

The chosen theme for the 61<sup>st</sup> year of the National Association of Students of Architecture (NASA) is 'Untraversed'... possibly because there is no joy of discovery in the traversed path. Likewise, we have been talking about resilient cities for a while now. Yet there is constant news about flash floods, rising temperatures, water scarcity and so on from so many cities across the globe. What we fail to acknowledge is that in this post-truth era, perhaps what we need is a shift in thinking from resilience to hyper resilience. Why wait for a crisis to design a course of action? In other words, how do we head down the untraversed and fast-track the creation of resilient cities... **how do we create hyper resilient cities?**

### What is city resilience?

City resilience describes the capacity of cities to function, so that the people living and working in cities – particularly the poor and vulnerable – survive and thrive no matter what stresses or shocks they encounter. [2]

Efficiency of systems and networks are surely key to hyper-resilient cities – transportation, food, water, public open spaces, utilities & services. But more importantly, we must understand the forces that shape the physical and social fabric of our cities and the consequences of our present city-building choices in the wake of climate change. We must acknowledge the cultural and socio-economic tensions that are prevalent in cities arising from inequitable access to mobility, food and public goods & services. At a broader level, this understanding also needs to be informed by a reading of the urban ecology- the interconnected relationships cities share with all of Earth's systems and inhabitants. All of this is pivotal to take action and adapt urban ecosystems for resilience.

Max Ways, former editor of Time Magazine once said during a conference that '*an idea, a song, a discovery, an invention may be born anywhere. But if it is to be communicated, if it is to be tested and compared and appreciated, then someone has always carried it to the city.*' This G-Sen trophy brief spins this thought around in the sense that it is a call for ideas on the city to enable people to come in large numbers and not just survive but to thrive successfully and be able to create an idea , a song, a discovery or an invention. As architects, we may not be able to do all of this single-handedly but this is an opportunity to push the envelope and present ourselves as a relevant profession in the times that we live in.

## THE BRIEF

As per the 2011 census data, there are 53 urban agglomerations in India with a population of 1 million or more [1]. Teams must first choose one out of these 53 urban agglomerations to work with.

Following this, teams must choose a crisis which would result in the sudden influx of **one million people into their chosen city**. Acceptable crises would include but are not limited to-

- An earthquake
- Sea level rise
- Fire
- Bombing/ war
- Mass deportation
- Contamination

Teams must elucidate an understanding of the physical form, socio-cultural & socio-economic profile of their chosen city as well as its urban ecology. Likewise, the chosen crisis must be thoroughly laid out. A construct is thus created.

Based on this analysis, teams must arrive at a response to create a hyper resilient city with emphasis on the built form as well as the systems involved in the functioning of the city. Teams are advised to bear in mind the urgency of the construct and therefore also craft a response that can be implemented in as less a time span as possible.

The final proposal must strictly be an architectural expression of the team's response to the chosen construct. Teams are encouraged to think about the inherent character/ identity of the chosen city and how they want to address it in their proposal.

Teams are encouraged to explore various tools and techniques to effectively convey the proposed architectural response for a hyper resilient city.

## JUDGING CRITERIA

- Submissions will be judged on the following criteria (but not limited to):
  - Depth of understanding of the chosen city in terms of its physical form, socio-cultural & socio-economic profile and its urban ecology
  - Clarity with which the chosen crisis is laid out and analysed
  - Clarity and innovation in the response to create a hyper resilient city
  - The manner in which the identity of the chosen city is addressed in the proposal
  - Clarity and innovation in the implementation aspect of the design for a hyper resilient city
- Bonus points will be given for:
  - The manner in which the liveability aspect is addressed in the response
  - Attention to detail.
  - Boldness and variety of representation techniques.

## SUBMISSION REQUIREMENTS

- SHEETS:
  - Ideas must be presented through a minimum of four A1 sheets and a maximum of six A1 sheets. Continuous running panels are not allowed.
  - The sheets should be properly numbered.
  - The soft copy in PDF format shall not exceed 18mb.
  - One A1 sheet out of the full set of sheets must outline the context and analysis which warrants the proposal.
  - All individual sheets shall have the words 'G SEN TROPHY 2018 - 2019' clearly mentioned on them.
  - All sheets shall also bear the NASA logo, in proper specification on the right hand bottom corner.
- VIDEO:
  - A video (not exceeding 3 minutes) must accompany the sheets to explain the broad ideology behind the proposal as well as the nuances of the design.
  - The video should contain the NASA logo.
  - The video should be shared through the google drive without any restrictions in sharing i.e. anyone with the link can view.
  - A space for a laptop to screen the video will be provided for every presentation. The laptop however must be arranged by the participating college.

- DVDS:
  - One DVD with soft copy of all the sheets in editable and PDF format and video file must be submitted. (Applicable only to shortlisted participants)
  - PDFs should be submitted as a set of high-res versions suitable for printing as well as a set of low-res versions for on-screen viewing.
  - If a college is not submitting the editable format after the announcement of the shortlisted entries, the final result of that college will be withheld.
- Any misconduct such as exposing identity through college name/stamp, participant(s) name or college code on the sheets will be DISQUALIFIED.

**PRIZE MONEY:**

Prize money of 2 lakhs Rupees is allotted to the trophy and it will be divided according to the no. of Citations and Special Mentions.

**CHECK LIST FOR SUBMISSION:**

- Soft copy of submission in PDF to be uploaded on NASA India website- <https://nasaindia.co/trophy/gsen>
- Authenticating letter from college HoD for each entry the work submitted is genuine and they have endorsed copyrights for the same and with the name of Participant(s) and stating the unit shall abide by whatever may be the final results and also agree that this entry is property of both the institute and NASA India.
- Declaration by the participant(s) stating the work submitted is genuine and they have endorsed copyrights for the same and to adhere by all the rules and regulations, Jury process and the results.
- Editable format of the sheets has to be submitted during the Annual NASA Convention (Applicable only for shortlisted entries).

**OTHER INFORMATION:**

- Registrations and submissions should be done by the Unit Secretary in NASA India website before the deadline failing which the submission shall be considered incomplete.
- Kindly print the form on the college letterhead along with the attestation by the college HoD/Principal/Director and uploaded the scanned copy of the same during registration.

References cited:

[1] [https://en.wikipedia.org/wiki/List\\_of\\_million-plus\\_urban\\_agglomerations\\_in\\_India](https://en.wikipedia.org/wiki/List_of_million-plus_urban_agglomerations_in_India)

[2] City Resilience Framework; Published in April 2014 by Ove Arup & Partners International Limited

**Any Kind of Queries need to be submitted through <https://nasaindia.co/trophy/gsen> to**

Kushal Surana

**National Vice President | 2018-19**

**NASA India**