



Planning in Motion

N P C 17

APA's Smart Cities Inaugural Student Design Competition

INFORMATIONAL WEBINAR

Matt Bucchin, AICP

Director of Planning
Halff Associates, Inc., Austin, TX

Rob Kerns, AICP

Divisions Council Secretary/Treasurer

Ellen Forthofer

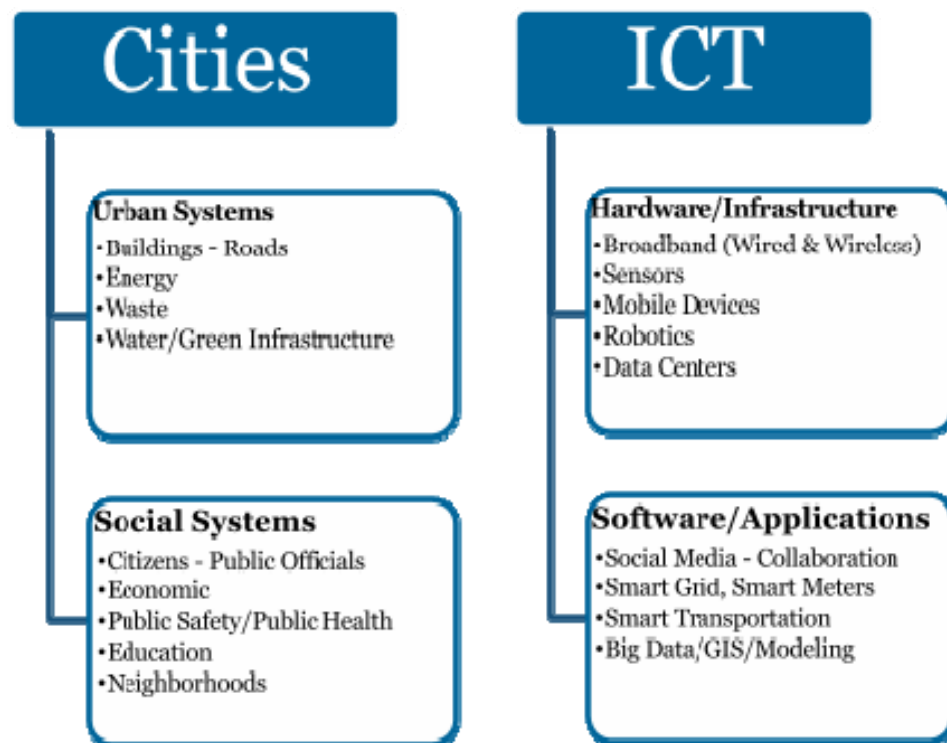
APA Student Representatives Council (SRC)
Chair

Webinar Objectives

- Introduce Smart Cities
- Provide background on APA's Smart Cities Initiatives
- Overview the parameters of the Smart Cities Student Design Competition
- Q&A

What are Smart Cities?

Smart Cities use information - communication technology (ICT) to engage citizens, to deliver city services, and to enhance urban systems.



What are Smart Cities?

SMARTER SMART CITIES

The "smart cities" agenda is mainly focused on top down technological initiatives (embedded sensors, data integration and analytics). The real smart cities of the future will mobilise human intelligence as well as artificial intelligence, bottom up creativity as well as top down control.

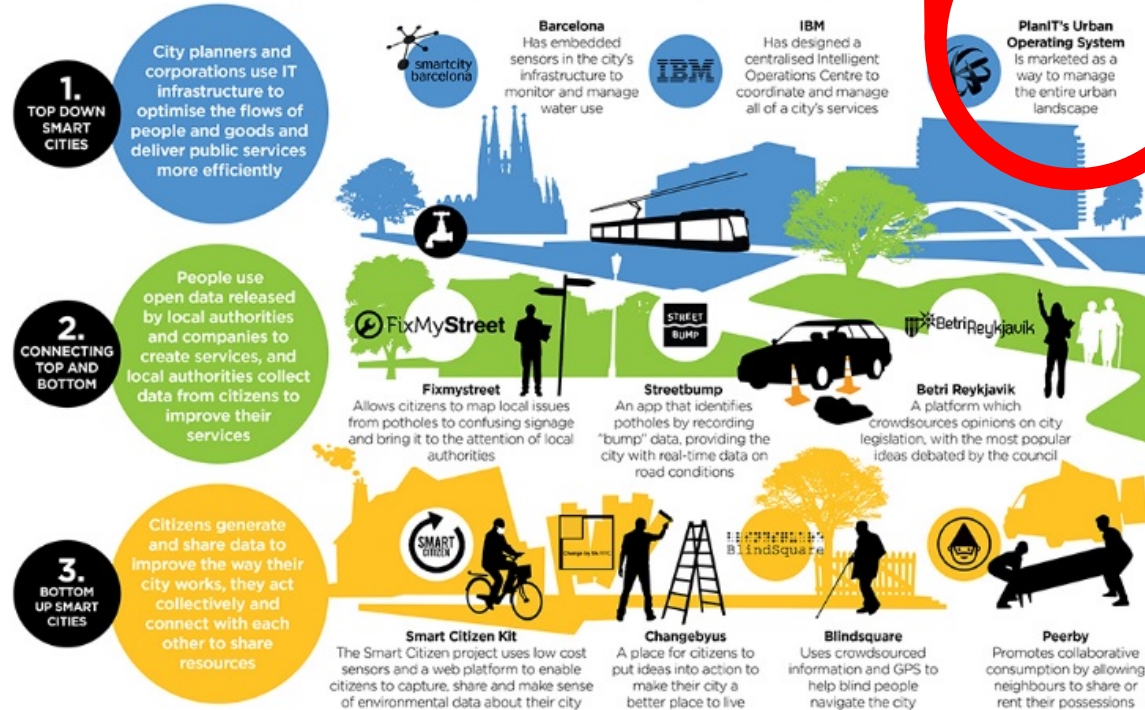


Image Source: <http://rippleeffectgroup.com>

Internet of Things (IoT) / Connectedness

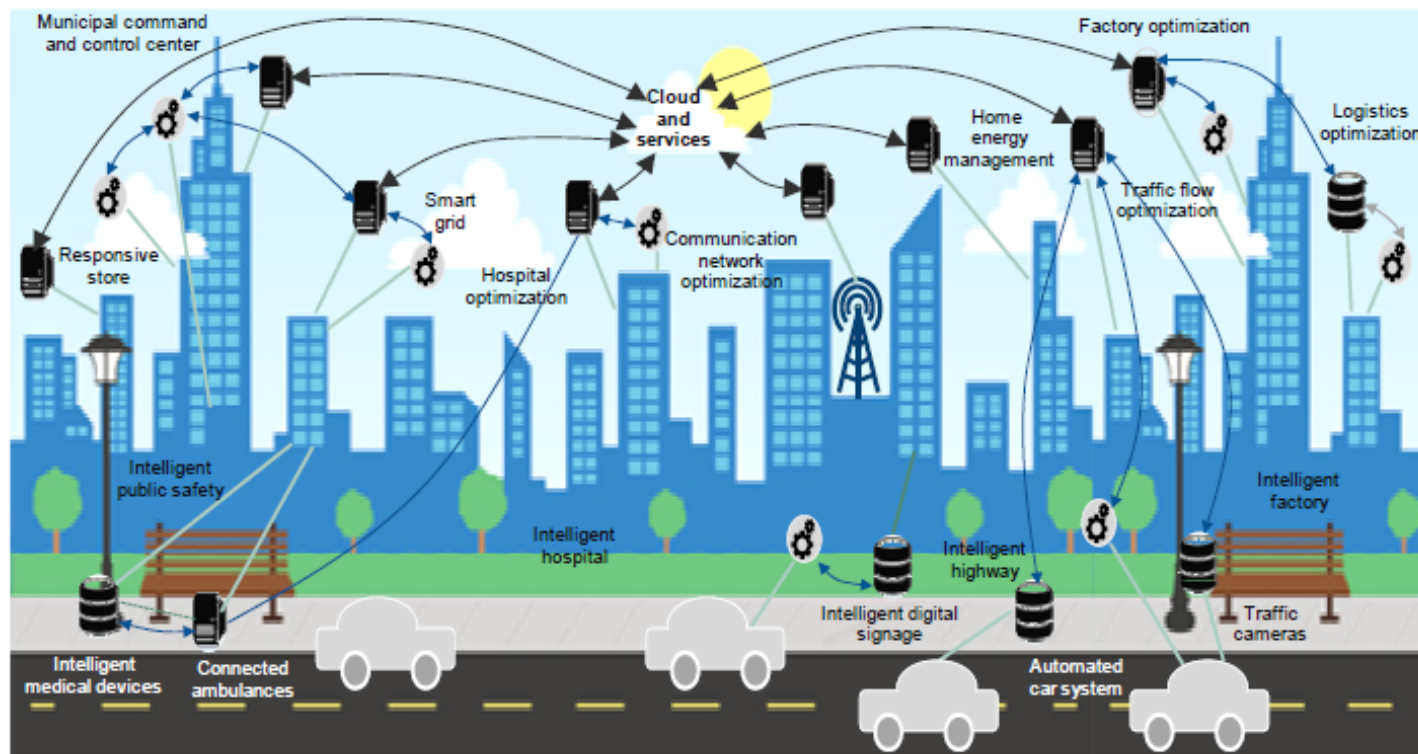


Image Source: IDC Government Insights, 2013

Smart City Trends



Global smart city revenue is expected to grow from \$36.8 billion in 2016 to \$88.7 billion by 2025.

Source: Navigant Research 2016

The research consultancy MarketandMarkets estimates the smart cities component of the Internet of Things market will grow to \$147.5 billion worldwide by 2020

Source: Building Smarter Cities by CompTIA

The consultancy McKinsey and Company takes a similar approach, projecting the smart cities component of the IoT market will range between \$930 billion on the low end of the forecast to \$1.7 trillion on the high end by 2025.

Source: Building Smarter Cities by CompTIA

APA's Smart Cities Initiative



AMERICAN PLANNING ASSOCIATION SMART CITIES AND SUSTAINABILITY INITIATIVE

APRIL 2015



APA Board of Directors – Committee & Task Force Report

BOARD MEETING
DATE: April 16, 2015
TO: APA Board of Directors
FROM: Smart Cities and Sustainability Task Force,
Robert M. Kerns, Jr., AICP, Chair
David Fields, AICP, Vice Chair
Kathleen McMahon, AICP, Vice Chair
SUBJECT: SMART CITIES AND SUSTAINABILITY TASK FORCE
UPDATE
ADOPTED POLICY:
No

TIME OF REPORT:
...After
☒ Information
☐ COMMENT
AGENDA
... Yes
☒ No

FISCAL NOTE:
All activities will be funded from the FY 2015 and future budgets.

RELATES TO DEVELOPMENT PLAN:
The Smart Cities and Sustainability Task Force relates to the vision, strategic direction, and two goals (Goal nos. 1.5 and 3.1) of the APA Development Plan.

RECOMMENDATION:

THAT THE BOARD ACCEPTS THIS INFORMATIONAL REPORT.

ACTION REQUESTED OF THE BOARD:

None.

Smart Cities & Sustainability ABCs OF SMART CITIES' 0-1s (S827)

American Planning Association (APA)
2015 National Planning Conference
Seattle, Washington

Monday, April 20, 2015
4:15 p.m. - 5:30 p.m.

Rob Kerns, AICP

Chair of APA's Sustainable Communities Division
Director of Development Services, City of Alexandria, VA

Kate McMahon, AICP

Chair of APA's Technology Division
Founder of Applied Communications, LLC, Waltham, MA

Mike Walsh

President and Technology Leader of MetroQuest, Vancouver, BC

Matt Buccchin, AICP, LEED Green Associate

Senior Planner with Hoff Design + Planning Collaborative, Austin, TX

APA Board Report & White Paper

This Presentation

Smart Cities Initiative - Objectives



- Identify the critical technologies that planners need to know about
- Determine what aspects of Smart Cities are most interested in
- Determine how the field of planning can utilize this information to add value to their communities
- Determine appropriate mechanisms of informational transfer
- Identify how we can utilize Smart City technologies to get the word out

Smart Cities Initiative - Recommendations



- Invest in developing the Smart Cities Innovation Portal
- Develop Comprehensive Plan Smart City Guidelines for Land Use, Transportation, & Economic Development
- Partner with Universities, Businesses, & Other Groups to Research Reports on Key Technologies
- Offer Expanded Technology Updates at the National Planning Conference

Smart Cities Initiative - Recommendations



- Work with AICP on integrating technology systems training into broader planning education
- Offer ethics training related to big data
- Advocate for policies that bridge the digital divide
- Create a new Divisions Council Initiative for Smart Cities
 - ✓ Implementing the Action Plan of the Taskforce
 - ✓ Broadening the Involvement in Smart Cities Efforts
 - ✓ Started Summer 2015 / Action Plan Drafted Fall 2015

2016-2017 Division Council Action Plan



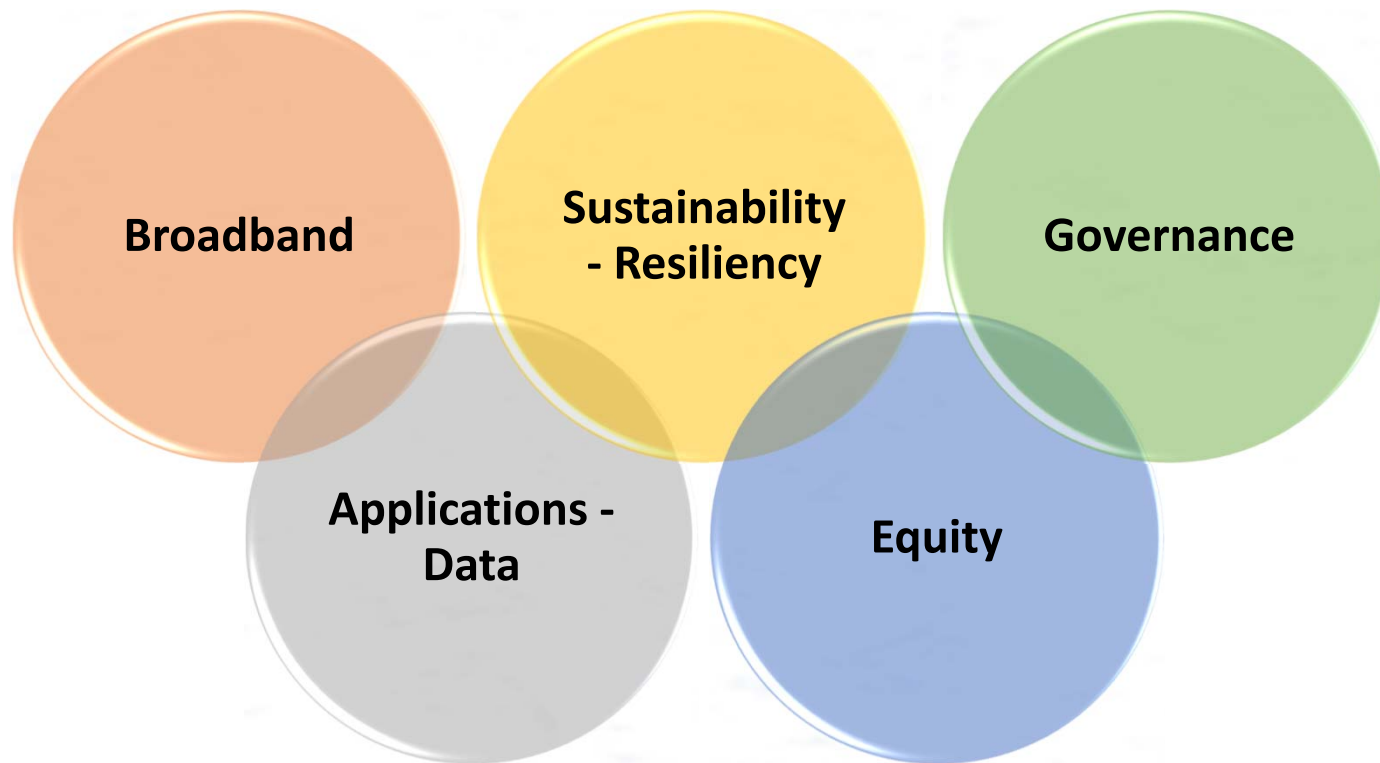
- **Action 1:** Invest in Smart Cities Innovation Portal
- **Action 2:** Maintain “On the Radar” Division initiative webpage
- **Action 3:** Develop comprehensive plan guidelines for the use of technology
- **Action 4:** Identify partnerships to research key technologies
- **Action 5:** Convene technology forums to educate planners on latest smart city trends

Challenge for Planners



- How do we clearly articulate the community's Smart City vision for the future?
- What are the strategies needed to go from plan to action ... and the metrics/performance measurements to define success?
- How can we avoid the distractions of the “next big thing?”
- How do we protect & maintain the public trust?

COMPONENTS OF SMART CITIES – APA



COMPONENTS OF SMART CITIES – INDUSTRY



Smart Cities Student Design Competition



- Co-sponsored by APA's:
 - ✓ Divisions Council
 - ✓ Student Representatives Council
- Purpose
 - ✓ To introduce and engage students in the Smart City discussion
 - ✓ To encourage planning students to work in interdisciplinary teams with other students of our allied professionals (e.g., architects, landscape architect, engineers, etc.)

2017 APA NATIONAL PLANNING CONFERENCE EVENT - NEW YORK CITY

APA's Smart Cities

STUDENT DESIGN COMPETITION

The American Planning Association (APA) is hosting its first Smart Cities Student Design Competition as part of its 2017 National Planning Conference in New York City. Selected team finalists must be available to present their entry at the national conference between May 8th through May 9th, 2017.

STUDENT / TEAM ELIGIBILITY

To participate in APA's Smart Cities Student Design Competition, a minimum team of three must meet the following requirements:

TEAM LEADER

1. Be an enrolled student in a U.S. or Canadian planning accredited school during the entire competition.
2. Be a student member of APA.
3. Be able, if selected as a finalist, to present your entry to a jury at the National Planning Conference in New York City between May 8th and May 9th, 2017.

ADDITIONAL TEAM MEMBERS

1. All team members must be enrolled at a college or university for the entire competition.
2. At least one additional team member must be able, if selected as a finalist, to join the team leader National APA conference in New York.

COMPETITION OVERVIEW

The term "Smart City" has been around since the 1990s and has been used to emphasize many different aspects of the term. Common elements among these definitions are that Smart Cities use information and technology to engage citizens, deliver city services, and enhance urban systems. The use of Smart City technologies result in cost efficiencies, resilient infrastructure, and an improved urban experience.

The application of Smart City technologies in the real world is limitless and increasing rapidly both within the public and private sectors. To ensure jurors are comparing entries equally, students are invited to apply their best Smart City ideas to improve a pre-selected site in New York City. Submissions are due March 1, 2017. A jury will review all entries. Five finalists will be selected to further present their ideas at a National Planning Conference session in New York City. A single team will be selected as the design competition winner during the conference session and will receive a \$1,000 award.

The APA logo consists of the letters "APA" in a white, bold, sans-serif font, set against a blue square background.

Project Site

- Site is bounded by 10th and 11th Avenues and W. 17th and 17th Streets
- Includes the private property of the site itself (including above & below ground) and extends for the full public right-of-way to the private property of all abutting sites



Project Site

- The site:
 - appears in aerial imagery to be vacant (i.e., a blank slate)
 - includes a bus stop
 - abuts Chelsea Piers, the High Line Park, and the Hudson River Greenway



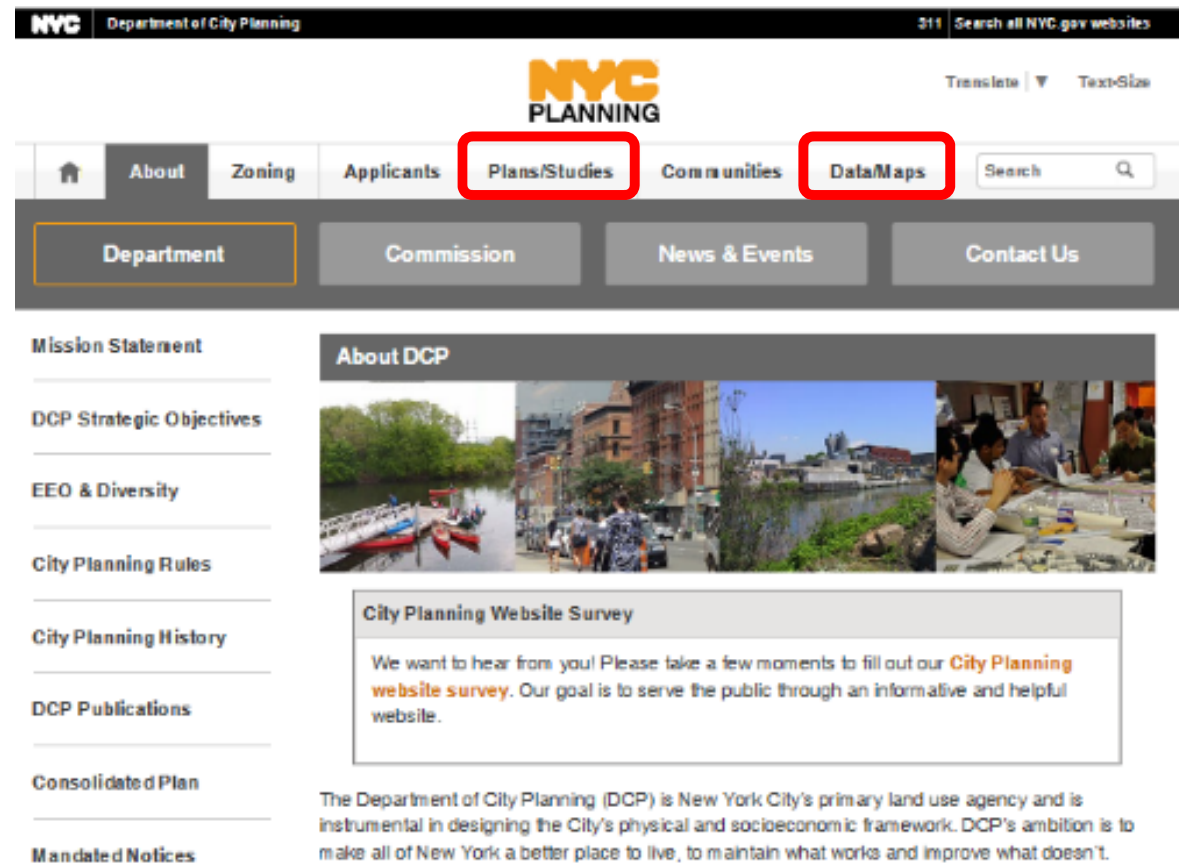
Additional Resources



- NYC Department of City Planning's Website:

<http://www1.nyc.gov/site/planning/about/departments.page>

- GoogleEarth / Maps
- Bing Maps



Rules & Regulations



- All proposed improvements must be located on, under, and within the physical airspace of the project site boundary (delineated by the red line).
- While improvements can be proposed within the public right-of-way, no improvements are allowed on any of the private properties abutting the project site.
- While no off-site improvements can be suggested, proposed on-site improvements which may involve or improve connectivity to off-site areas should be described (e.g., a proposed bus station and/or trail improvements).
- No streets can be closed.
- No connection to the NYC subway system is allowed. This is because there is not currently a station or line on or under the site and it would be not feasible to do so for this project.
- The proposed design must be based in reality.

Criteria & Jury

- Creativity of Ideas. (30 pts.)
- Quantity of Smart City ideas. (25 pts.)
- Quality of Research, Writing, & Document Preparation. (20 pts.)
- Quality of Design. (20 pts.)
- Team Collaboration. (5 pts.)
- Optional Content or Material. (up to 5 additional pts.)

-
- ## Selected Finalists
- Comprehensiveness, Quality and Effectiveness of Team Presentation. (15 pts.)

Additional information can be found at:
<https://www.planning.org/conference/designcompetition/>



Submittal Requirements

Each team must submit the following to be considered as an official entrant:

- **Completed Entry Form.**
- **Poster.** A PDF of one (1) 36x48" (Arch E paper size).
- **Report.** A PDF of an associated report indicating background analysis, researched best practices, and description of the proposed improvements is required. The proposed design should be further defined in the report (max.# of pages not to exceed 10 pp., double-sided).

All entries need to be submitted by the Team Leader via Dropbox. This requires submittal of the entry form at least two days prior to the deadline in order to receive a Dropbox link to upload the entry package.

- **(Optional) Other.** One additional content or material in any format may be used to further convey the design decisions made in your project.

The entire submittal package shall be the sole work of the creative student team members.

Student Team Eligibility



Team Leader

- Be an enrolled student in a PAB-accredited program during the entire competition.
- Be a student member of APA.
- Be able, if selected as a finalist, to present your entry to a jury at the National Planning Conference in New York between May 6-9, 2017.

Additional Team Members

- All team members must be enrolled at the same college or university as the team leader for the entire competition.
- At least one additional team member must be able, if selected as a finalist, to join the team leader at the National Planning Conference in New York between May 6-9, 2017.

Timeline

- **Monday, Feb. 27, 2017 – Deadline to request Dropbox Access**
 - ✓ The team leader should email Matt Bucchin, AICP, the completed entry form (available at <https://www.planning.org/media/document/9114738/>) at least two days prior to the submittal deadline to receive access to a Dropbox account.

- **Wednesday, Mar. 1, 2017 – Submissions are due by 5:00 p.m. (EST)**
 - ✓ All required submittal materials must be uploaded by the deadline; no entries will be accepted after the deadline.

- **Tuesday, Apr. 4, 2017 – The five (5) Finalist Teams will be notified**
 - ✓ The Team Leader will be notified by email if the team has been chosen as a finalist to present in New York.



Timeline

- Monday, May. 8, 2017 – Finalist Presentations (@ 1:30 p.m.)

- ✓ The team leader and at least one other team member of each finalist team will be required to present their submittal to the Jury in the Tech Zone.

- Winner Announced (TBD, but will most likely be Tuesday)

- ✓ The selected winner of APA's Inaugural Student Design Competition will be announced in the Tech Zone at the conference.

Questions / Answers To Date

QUESTION

- In the announcement on the APA Website, there was a link for “Additional Background Material”... will the link include additional background material on the site?

ANSWER

- A hyperlink was subsequently added to that page providing access to the NYC Department of City Planning’s Website providing additional background information on local plans and studies and area GIS data.

Questions / Answers To Date

QUESTION

- Are students from candidate programs (i.e., schools currently going through the PAB accreditation process) allowed to participate in the competition?

ANSWER

- Unfortunately, the minimum requirements for the SDC required that at least the Team Leader needed to be affiliated with a planning accredited program. This was only a requirement for the Team Lead because it was assumed and intended to allow other students from non-planning programs within the same school to participate.

Questions / Answers To Date

QUESTION

- The criteria says that team members “must be enrolled at the same college or university as the team leader for the entire competition” ... some of our students graduate May 5th just prior to the conference. Are they still able to participate.

ANSWER

- Since this SDC was announced back in October of 2016, this stipulation was intended to ensure that participants were current students. It did not intend to disqualify students who graduate just prior to the conference. These students will be allowed to participate in the SDC and present at the National Planning Conference if they are one of the selected finalists.

Questions / Answers To Date

QUESTION

- Are there any requirements regarding the type of proposed improvements on the site (e.g., is it acceptable to build a building or construction like shelter within the site)?

ANSWER

- There are no restrictions on the proposed types of improvements. That is why we chose a site which (at least at the time of the aerial photo was taken) there was no current development or buildings shown. We wanted students to approach it like it was a blank slate to see what you all could come up with.

Q&A and Additional Resources



- **<https://www.planning.org/resources/ontheradar/smartcities/>**
 - Introductory presentation on Smart Cities
 - Information on upcoming Smart City-related conferences
 - Information on the Smart Cities Student Design Competition
 - Information on the Smart Cities Awards
- **<https://www.planning.org/resources/ontheradar/smartcities/smartcitiesbibliography.htm>**
 - Links to the Smart Cities White Paper, Innovation Portal, articles and other resources

Q&A



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THANK YOU & WE LOOK FORWARD TO YOUR SUBMISSIONS

Matt Bucchin, AICP

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