General Guidance for Breakout Groups

*Advancing the Spatially Enabled Smart Campus* meeting is one of a long series of specialist meetings organized at the Upham Hotel over the past 25 years, and will follow a pattern that has been found to work well. It will combine a small number of context-setting presentations with ample time for discussion in plenary sessions, small groups, and informal social gatherings. In general, spatial@ucsb specialist meetings promote intensive discussion on themes related to theoretical issues, technological developments, and applications of geographical information science and spatial thinking in science and society. Such meetings are often catalysts for new research and teaching programs, new software developments, and funded research initiatives. Position papers, presentations and final reports from prior meetings are archived and available to the public at [http://www.ncgia.ucsb.edu/](http://www.ncgia.ucsb.edu/), [http://www.csiss.org/events/meetings/specialist.htm](http://www.csiss.org/events/meetings/specialist.htm), and [http://www.spatial.ucsb.edu/events/meetings.php](http://www.spatial.ucsb.edu/events/meetings.php).

At this meeting, there will be two sessions with three breakout groups in each. Although moderators, reporters, and recorders are designated for each group in advance, meeting participants may self-select the groups they prefer to participate in. Each group may use its time as it prefers. Suggested questions from the meeting organizers are provided but are not binding on the groups.

**Session I: What are the Pre-requisites and Desired Outcomes of Smart Campus Implementations?**

- Group 1—Sustainability perspective
- Group 2—New technologies perspective
- Group 3—Knowledge Infrastructure perspective

Groups may set their own agenda, but possible questions to consider include:

- What services could/should a smart campus provide?
- How do/can smart campuses contribute to sustainability/knowledge infrastructure/technology development?
- Are there best-practice examples of smart campuses? Are these practices transferable?
- What sensor and other networks are needed to enable smart campus services?
- How are mobile information and communication technologies (ICT) best integrated into the implementation of the smart campus?
- What are the design features of a dashboard for organizing and displaying the availability and results of smart campus implementations?
- How might volunteered geographic information (VGI) inform the design and evaluation of smart campus services?
- How can geospatially enabled ICT/VGI contribute an understanding of diurnal and seasonal demographics of campus buildings and spaces?

**Session II: How to Integrate Knowledge Infrastructures and Management into the Smart Campus**

- Group 1—the academic perspective for smarter science
- Group 2—an/the action plan for smarter planning
- Group 3—building a/the case for space

Possible Questions for groups to consider:
• How can the unique challenges of academia be aligned with possible smart-campus spatially enabled transformations that enhance learning, discovery, and invention?
  o How do/might smart campus implementations contribute to the intellectual development of educational institutions?
  o How might smart campus databases and resources contribute to teaching and research opportunities for students/faculty?
  o What strategies are most successful for engaging students in the implementation and assessment of smart campuses?
  o What are the frontiers for possible smart campus research/deployment?

• Formulate a “case for space” to university administrators, highlighting evidence-based documentation of contributions to sustainability, knowledge sharing, student involvement, safety, and other perspectives.
  o What are the prioritized list of services for a smart campus and what research is required to help realize them?
  o How can spatially enabled knowledge infrastructures and sensor networks augment our understanding of smart campuses?

• Devise an action plan for how this meeting might foster an exchange of best practices and experiences among campuses through research, publications, and repositories of smart-campus projects (see possible prototype of a globalized linked universities network at http://linkeduniversities.org/).
  o How are the possibilities and accomplishments of smart campuses transferred to broader communities (cities, states, nations, industries, etc.)?

• Define alternative and complementary scenarios for a “Smart Campus 2025.”

Note: in an effort to attain broader consciousness to thoughts that arise from group discussions and plenary sessions, the organizers are exploring the use of a real-time collaborative document editor—(http://epad.ifgi.de/p/smartcampus). Details will be provided at the meeting.