# **Moving Forward:**

The Spring 2016 semester will directly advance the design thinking and project development of the Fall 2015 semester.

Continuing the 3-week module/mutation organization, the remaining exercises will force more detailed architectural expression and synthesis of the ideas generated to date - connecting the dots across the scales of design. The final module will step back from architecture, understanding and positioning the projects as a collection of urban catalysts for transformation in the Midwest.

The culmination of the work will result in both publication and exhibition deliverables. The studio will edit and curate the breadth of work towards a meaningful vision for HSR in the Midwest.

Below: sections of HSR stations developed Fall 2015 Semester



South Bend



Kalamazoo



Ann Arbor







Detroit



Mississauga

### Abstract:

"In an effort to jump-start high-speed rail in the US, the Obama administration awarded \$7 billion for projects in California, Florida and Wisconsin. Republican governors in Florida and Wisconsin rejected the funding, backed out of high-speed rail plans, and sent those dollars to California."

"[...] political pressure against bullet trains has come from conservatives who argue that such systems should acquire private financial backing and prove that their operations will at minimum be cost-neutral. It's a burden state and federal governments do not place on other huge transportation projects such as freeways and airports."

Despite much uncertainty, high speed rail in the United States is forging ahead with a unique speculative burden. Both public and private sector initiatives have emerged, competing to demonstrate the value HSR can bring to their regions. These projects are not simply creating rail corridors, but leveraging the adjacent social and economic impact of rail investment towards new transformative design opportunities.

A High Speed Rail network in the Great Lakes Region would connect the economic hubs of Chicago and Toronto, putting 50 million people within 3 hours of each other. 80% of Midwesterners live within 25 miles of a railroad.

This studio will reconsider collateral development opportunities (hybrids, dualisms, mixed-use, TOD) integrated with urban mobility - particularly focusing on the stations, terminals and intermodal hubs of a regional high speed rail network.

While the benefits of HSR investment are often considered in broad strokes, the impact is most palpable at the stations where its multiplier effects literally spill out into the adjacent urban context. As the 'points of presence' of a new connectivity network, this studio will be challenged to unlock new design opportunities that exploit this unique potential.

How does the role of the station change in the community, the town or the city?

How can we advance conventional TOD thinking to capture new programs, users and systems?

How can this new form of connectivity embrace/redefine the lifestyle associated with our region?

Can hybrid buildings focused on rapid intermodal transportation infuse new life into disused areas and economies?

What new building types and forms can emerge from this new demand?



All Aboard Florida, Miami Central Station (SOM)



TransBay Transit Center, San Francisco (Pelli Clarke Pelli)

# **Description:**

Focus:

This studio will connect the theme of the Cloud Studios (hybrids) to the fundamental need for new mobility solutions in our region. By focusing on the stations and station-area development, we hope to position architecture as a decisive component in realizing meaningful HSR impact in a community.

In pursuit of hybridism, we will rethink conventional station design by:

- Moving beyond typical retail and hospitality oriented station program towards new living, working, recreational and infrastructural synergies
- Create productive exchanges between uses rather than simply combining and separating
- Develop context-relevant solutions that are responsive to local challenges and opportunities
- Cultivate a new architecture that is specific to a place and that place's transit oriented needs

As part of a regional and multi-scaled approach, the studio will be challenged to:

- Remain conscious of larger scale dynamics while focusing on specific, place-based architecture
- Continue to explore design within the contemporary political atmosphere of Chicago/Midwest
- Develop a system-wide identity (brand) and design concept for a series of discreet projects
- Understand the similarities as well as unique qualities of each station as it relates to the timeline of station design.

### The Line:

The 'site' for the studio is a collection of potential stations along a per-determined HSR corridor connecting Chicago to Toronto. The studio will be divided into 2 to 3 person teams, each will take on the design of the station and a stationarea development plan (1/4 mile radius).



Proposed HSR corridor and station locations

### Sites:

### Stations and Station Areas:

The effected cities along the corridor each have their own histories and futures. This studio will tease out that history in order to determine the most appropriate installation to meet the needs and desires of that specific area. The effect that each of these stations can have will be measured at a variety of different scales.

- What programs and interconnections are necessary for the success of a given station and location? •
- How will the embedment of this station into its given area effect (both positively and negatively) its immediate surroundings?
- How far reaching are the changes which emerge from the installation of this mass collector of people?



Proposed HSR station locations w/ population total and density





Kalamazoo





Toronto



Proposed HSR station locations w/1/4 mile radius

## **Working Format:**

### Research and Design Studio:

The studio is organized into a series of 3-week modules (see following page for detailed timeline). There will be approximately six modules per semester, three per term.

At the end of each 3-week module will be a pin-up and review to validate the work. The work will build/compound across each module and be collectively evaluated at the midterm and final reviews.

The majority of research will conclude by the midterm of Fall 2015. The second half of the Fall semester is dedicated to site specific 'design studies' which provide the foundation for the Spring 2016 semester of detailed design.

#### Spring 2016 Fall 2015 Mid Final Mid Final Design proposals HSR Research Site and team selection 6-8 Hybrid Station Designs Station Typology Research Impact plans (TOD) Field Research Series of 2-week Design Line "Masterplan" studies Individual Work 2-person Teams 2-person Teams Collective studio work

# Logistics:

### Class Meeting Days:

Modified Studio Schedule: Classes will always meet during normal studio hours on Monday, Wednesday or Friday, 2pm to 6pm. Instructors will hold a full studio day two of the three class sessions per week, the third class session is by appointment only, or a full studio determined on an as-needed basis.

Classes will be held both at IIT Crown Hall, and at the office of Skidmore Owings and Merrill, 224 S Michigan Ave. On days class is held at SOM, class will begin at 2:30 and conclude at 5:30 in order to allow time for students to commute back and forth with other classes.

#### Site Visits

There are no planned site visits in the Spring semester - however there may be opportunities to share the work at each city. Student travel will be optional on these trips.

#### Team Projects:

This studio is intended to be collaborative. Students are already divided into teams from the previous semester, new students will be allocated into existing or new teams immediately. In the final module the studio will work on production in different teams towards studio-wide consistency.

#### Deliverables:

All deliverables will need to adhere to a standard formats established by the studio instructors. Drawings that do not follow format will be required to be redrawn or excluded from consideration when grading. Physical models will be built in a consistent scale and materiality as determined by the studio.

The studio will follow the conventional review format, with midterm and final reviews during the allotted COA time windows. In between the major reviews, the class operates on a 2-week module with a pin-up concluding each.

There will be no collective required readings across the studio, however the instructors will target specific case studies and articles to student groups as projects evolve, it is expected that these assignments are taken seriously.

#### Attendance and Grading:

Attendance is mandatory as required by the IIT COA. Any student in excess of two absences will be eligible for grade reduction or an incomplete.

Grading will be conducted collectively by the instructors. Grades will be determined primarily by the work developed and presented at the midterm and final reviews. In addition, grades are influenced by participation and engagement beyond studio hours. Students will be notified by midterm of unsatisfactory progress, in order to allow corrective action before receiving a C, incomplete or Fail grade.

### Americans with Disabilities Act (ADA) Policy Statement:

Reasonable accommodations will be made for students with documented disabilities. In order to receive accommodations, students must go through the Center for Disability Resources office. The Center for Disability Resources (CDR) is located in Life Sciences Room 218, telephone 312 567.5744 or disabilities@iit.edu

### Instructors:

Mark Nagis Mark.Nagis@som.com

Mark Nagis is an Associate Director and Senior Architectural Designer at Skidmore Owings and Merrill LLP. He has also taught at The School of the Art Institute of Chicago, The University of Illinois at Chicago as well as Illinois Institute of Technology during his nine years of practicing architecture in Chicago. Mark obtained his Bachelors of Science in Architectural Studies from The University of Illinois at Champaign-Urbana and his Masters of Architecture from Southern California Institute of Architecture (SCIarc).

Robert Bracken Robert.Bracken@som.com

Robert Bracken is a senior urban designer in the Chicago office of Skidmore Owings and Merrill LLP. He has over ten years of experience in urban design, architecture and preservation projects. Robert holds a Master of Architecture and a Master of Preservation Studies from Tulane University and a Master of Architecture in Urban Design from Harvard University.

Skidmore Owings and Merrill

With years of experience in mixed-use, transportation-integrated and high-speed rail design projects across the world, we hope to build off SOM's strong foundation of working knowledge in the subject. Accordingly we have developed an interdisciplinary panel of SOM representation to guide the studio on specific topics throughout the semester, ranging from HSR station positioning and urban design, to graphic representation and presentation skills.

Thomas Hussey Director of Urban Design and Planning, Chicago HSR Planning in China (Beijing Bohai, Tianjin Yujaipu)

Kristopher Takacs Associate Director, Project Manager, New York HSR Planning in the United Stated (All Aboard Florida, Denver Union Station)

Gunnar Hand Senior Urban Designer, Los Angeles HSR Planning in the United States (California HSR Program)

Jacob Gay Senior Architectural Designer, Chicago Design, Graphics, Presentation

Justin Petersen Senior Architectural Designer, Chicago Design, Graphics, Presentation

Jorge Rovira Senior Architectural Designer, Chicago Design, Graphics, Presentation

David Mulder Architectural Assistant, Chicago Graphics, Presentation