Institutions, Infrastructure, Topography: Oakland 2050

All design is about predicting—and shaping—the future. Combining research and imagination, designers' visions help create the ways in which we live, work and interact with each other. No field of design has the capacity to look further, or more holistically, into the future than urban design: these speculations can offer glimpses into how, what and where our future cities will be.

The Urban Laboratory design studio seeks to educate architects to be leaders for vision-based change at the scales of block, neighborhood, city and region. The studio will focus on a particular kind of urban design project: the creation of a long-term community vision plan for a neighborhood of Pittsburgh. This year, the neighborhood in question is our own, Oakland.

Oakland is principally characterized by three conditions: world-class universities, libraries and museums, institutions that draw national and international audiences while supporting regional growth; an elaborate and complex infrastructure typified by multiple generations of access, utilities and transportation; and third, a densely variegated topography with which both the institutions and the infrastructure must contend. The studio will explore the potential future interrelationship of these three conditions into the next half-century. How can Oakland intensify, diversify and hybridize as one of the most important neighborhoods in the city?

The studio intends to build upon on some of the emerging transit ideas in the ongoing MOVEPGH study and the recent Oakland 2025 plan. It plans to examine the implications of these potential changes by looking beyond the current plans towards a longer term vision for Oakland that imagines how three major aspects of the neighborhood could develop:

1. Evolving the Town & Gown Interface. Major institutions including Pitt, UPMC and CMU are all growing, expanding Oaklnd's importance as a regional economic driver and a commuter employment center. At the same time the Oakland 2025 plan calls for Oakland to become a more diverse residential neighborhood by densifying student housing and diversifying housing options. We want to explore how the town and gown interaction which is essential to the region's economy but which also in many ways separates Oakland from the rest of the city, can evolve and hybridize (physically, socially economically etc..)
2. Increasing Density and Mobility. Currently, a variety of stakeholders are considering the implications of building a light rail line from Downtown to Oakland paired with an intentional upzoning of this corridor. We will play this out to see what it might mean for Oakland. What are the implications of adding new transit infrastructure? How and where could density increase? How could urban mobility evolve? BikePGH and the Oakland Planning and Development Corporation are also gaining traction on proposals to aggressively introduce

cycling infrastructure into Oakland, we want to think about what happen beyond this.
3. We are also interested in how the city and the landscape (topography and ecology) interact in Oakland and on its edges, and how the challenge of building a low carbon city—via both sensible passive systems but also the introduction of new technologies—might change both urban life over the next four decades.

The studio will build on real world planning efforts and ideas, but explore them in a manner that is longer term and more speculative than is typically possible professionally. Students will interface with a group of stakeholders including the Oakland Planning and Development Corporation, City Planning, Pittsburgh Community Reinvestment Group, other Oakland organizations, and the incoming mayor's administration.

The Urban Laboratory, like urban design in the real world, is a collaborative studio where students work in teams. For the first third of the semester students will work in large groups on analysis and the development of a neighborhood scale vision. During the remainder of the semester students will work in teams of two to propose and develop a discrete project within the larger vision. There are two possible approaches to the project, a site specific intervention (e.g., a building and adjacent public space, a park, a city block, etc.) or an urban system (e.g., a streetscape, a trail system, stormwater solutions, housing or a transportation kit of parts and framework). In addition to the projects, a larger group of 3-4 students will continue to develop the overall neighborhood scale vision.

Storytelling and presentation is particularly important in urban design, where architects must communicate complex ideas at a range of scales to a diverse audience. The studio will emphasize the use of innovative narrative digital techniques for communication and presentation. The primary deliverable for most major assignments and critiques will take the form of digital slide shows using images, text and animation to communicate the content. Final studio deliverables will also include the creation of physical models and a final studio publication.

Students will be expected to participate in a studio field trip to Brooklyn and Queens from 7 through 9 September.