Department of City and Regional Planning Fall 2011

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### CP228: SUSTAINABLE ECONOMIC DEVELOPMENT STUDIO

The Lawrence Berkeley National Lab (LBNL) is proposing to locate its new campus in the East Bay, at one of six potential sites (Richmond Field Station, Golden Gate Fields in Albany/Berkeley, Berkeley Aquatic Park West, Emeryville/West Berkeley, Brooklyn Basin in Oakland, and Alameda Point). The Lab is planning to make its final selection in late November, 2011. (For more information, see http://www.lbl.gov/Community/second-campus.)

This studio class will investigate how East Bay cities can maximize the economic development potential of this new campus. How might local communities best align their resources to integrate LBNL into the existing innovation ecosystem and localize the benefits of its relocation? What would be the additional policy, planning, and legal tools needed at the local, regional and state levels, especially given the demise of redevelopment?

The clients for this studio will be the City of Berkeley, the City of Richmond, and the East Bay Green Corridor Partnership, a collaboration including UC Berkeley, California State University East Bay, Peralta Community College District, LBNL, and the cities of Berkeley, Oakland, Richmond, Emeryville, Alameda, Albany, El Cerrito and San Leandro. We will also work closely with CP 238, the Development-Design Studio taught by Prof. Michael Smith-Heimer, on the real estate analysis.

Depending on class enrollment, we will work on multiple projects focusing on economic development, land use, and workforce development. The entire class will work on an initial study of LBNL’s existing and potential role in the economy. Then, the class will split into two, with one section (of students also enrolled in CP 238) focusing on market and financial feasibility of the two sites, and the other developing economic development policy and planning recommendations for the clients.

The economic development group will begin by analyzing the existing development trajectory from innovation to commercialization, from LBNL and UC-Berkeley to East Bay startups. How can we explain the historic “innovation drain” from the region, and what is its impact? What types of biosciences companies does the East Bay currently capture, how do they complement the local ecosystem, and what explains their success? What policy and planning tools, particularly related to industrial land and supply chain issues, have best supported their growth? What is the appropriate role for UC-Berkeley? Given this history, what might we expect the LBNL’s economic impact to be on the cities and region, and which of the multiplier effects might be best captured locally? What types of spinoffs and employment opportunities might be expected? What are the likely displacement effects and opportunity costs?

A land use group, working in tandem with CP 238, will analyze the potential impacts of the LBL relocation on two different sites, most likely the Richmond Field Station and one of the West Berkeley sites. The first stage of this project (coordinated with CP 238) will be to investigate land use and real estate market conditions in the vicinity of the sites. Then, the group will conduct a financial feasibility analysis, either of the proposed sites or sites in the adjacent neighborhood.

The policy group will then explore how to rethink the region’s current economic development, focusing in particular on how to best take advantage of existing cluster strengths (e.g., by rezoning adjacent areas), leverage the resources of local anchor institutions, work with redevelopment programs (or their successor), and refine business assistance tools (e.g., by streamlining the business permitting process). Students focusing on workforce development might look at the workforce needs of LBL-related companies likely to grow or spin off in the East Bay. This group will inventory existing workforce development and community college programs focused on opportunities in high-tech and biotech, and profile model programs such as the Biotech Academy. Another group might develop recommendations for a community benefits agreement -- policy mechanisms and funding sources to maximize the benefit of LBNL’s relocation to local disadvantaged residents.

***Prerequisites****: This class is intended for second-year MCP students (who have completed CP 204a) and law students. Others may be admitted with permission of the instructors.*

**Final Products**

* A report on LBNL’s role, existing and potential, in the East Bay economy (Tasks 1 and 2);
* A report with policy and planning recommendations for the City of Berkeley, the City of Richmond, and the East Bay Green Corridor Partnership (Task 4)
* A market and financial feasibility analysis (Task 3)
* Presentations of the findings at the CED-UC Berkeley School of Law Sustainable Economic Development Conference (November 17), as well as to the clients at the end of the semester.

**Tasks**

**Task 1: Background**. (Preliminary scope due September 7, presentation due October 5)

For this task, the class will split into two groups, both conducting interviews and literature reviews. The first group will examine LBNL’s historic and current role in the East Bay and the second will examine the characteristics of the biosciences industry and related clusters.

**Task 2: Analyzing potential impacts.** (Preliminary scope due October 5, presentation due October 24)

This task will involve two groups. Using IMPLAN economic modeling software, the first group will conduct an economic impact analysis of the LBNL Second Campus. This analysis will identify indirect and induced employment effects likely to occur at the county level. Based on an analysis of the existing biosciences industry, the group will estimate which of these impacts are likely to be captured locally, and which will likely occur outside the cities and sub-region.

A second group will conduct two-three case studies of similar projects, such as Mission Bay, Stanford Research Park, and Purdue Research Park. These cases will involve interviews of local officials to determine spinoff effects and effective local policies to support the park and capture benefits locally. This group will work closely with the first group to develop assumptions for the analysis of spatial impacts.

**Task 3 (Smith-Heimer studio**): Market and financial feasibility analysis. (Due at end of semester)

**Task 4: Policy and institutional analysis**. (Preliminary scope due November 2, presentation due at end of semester)

To develop the scope of policy and planning recommendations, the group will work closely with the clients. As needed, different groups may focus on economic development, workforce development, redevelopment, and community benefits policies.

**Task 5. Final Report.** (Due December 14)

**Class Schedule and Readings (Tentative)**

*All readings are available on the web or on the class bSpace website.*

**August 29** Introduction to the project and clients

**August 31** Class tour of sites

Reading: Watch Richmond and West Berkeley presentations at http://www.lbl.gov/Community/second-campus

**September 7** Overview of LBNL and the Second Campus: Dr. Kem Robinson

Technology Transfer and Startups: Michael Cohen and Cheryl Fragiadakis (invited)

Class presentation: Preliminary scope for Task 1.

Readings:

Smilor, R., O’Donnell, N., Stein, G., & Welborn, R.S. 2007. The Research University and the Development of High-Technology Centers in the United States. *Economic Development Quarterly*, 21, 3: pp. 203-222.

UCB Center for Community Innovation, *Innovating the Green Economy in California Regions* (<http://communityinnovation.berkeley.edu/publications.html>) – SKIM Chapters 3-6 and East Bay appendix

**September 12** Introduction to interview methods in regional economic analysis

Reading:

Healey, M. et al. 1993. Interviewing business owners and managers: A review of

methods and techniques. *Geoforum* 24,3.

**September 14** Regional innovation: Thinking about clusters and research parks

Readings:

Porter, Michael.  2000.  “Location, Competition and Economic Development: Local Clusters in a Global Economy.” *Economic Development Quarterly,* vol. 14, No. 1: 15-34.

Held, James R. 1996. “Clusters as an Economic Development Tool: Beyond the Pitfalls.”

*Economic Development Quarterly* 10: 249-261.

Feser, Edward, Renski, Henry and Goldstein, Harvey. 2008. Clusters and Economic Development Outcomes: An Analysis of the Link between Clustering and Industry Growth. *Economic Development Quarterly*, Vol. 22, No. 4, 324-344 (2008)

Muro, Mark and Fikri, Kenan. 2011. “Job Creation on a Budget: How Regional Industry Clusters Can Add Jobs, Bolster Enterpreneurship, and Spark Innovation.” Broooking-Rockefeller Project on State and Metropolitan Innovation, <http://www.brookings.edu/papers/2011/0119_clusters_muro.aspx> (2011).

Others TBA

**September 19** Group meetings (no class)

**September 21** Class presentation: Interview results

**September 26** Introduction to economic data and cluster analysis techniques

Readings:

Richman, Louis S. 1993 Why the economic data mislead us. *Fortune* 127,5: 108-111. http://money.cnn.com/magazines/fortune/fortune\_archive/1993/03/08/77578/index.htm

Collaborative Economics. 2007. *Industry Clusters of Opportunity User Guide* (esp. Part 1, How to Identify Clusters of Opportunity). <http://www.coecon.com/Reports/ECONOMY/ClustersGuide.pdf>

**September 28** Overview of economic impact analysis

Readings:

Davis, H. Craig. 1993. Input-output analysis and Regional economic impact analysis: A comparison of approaches. Chapters 4 and 5, pp. 53-94. *Regional Economic Impact Analysis and Project Evaluation*. Vancouver, BC: UBC Press.

**October 3** Economic impact analysis via IMPLAN, Laurel Lucia, UCB Center for Labor Research and Education

Readings:

MIG, Inc. 2000. Pp. 95-187, Chapters 8-16 in *IMPLAN Pro User’s Guide*. Stillwater, MN: Minnesota IMPLAN Group.

###### Stevens, Benjamin and Lahr, Michael. 1988. “Regional Economic Multipliers: Definition, Measurement, and Application.” EDQ 2,1: 88-96.

**October 5** Field trip to Mission Bay, Kelley Kahn, SFRA (meet at Philz Coffee, at the corner of 4th Street and Berry Street, 1:30 PM)

**October 10** Prep for Oct 12 presentations; group meetings on case studies and impact analysis

**October 12** Class presentations on LBNL, bioscience clusters, and preliminary scope for Task 2

**October 17** Group meetings (1-1:30 case studies, 1:30-3 impact)

**October 19** Overview of zoning and other land use regulatory tools – also discussion of Task 3 and 4 scope – for sites: economic impact? Permitting process by cities? land availability/rezoning issues by city?

**October 24** Group meetings (KC takes IMPLAN group, CE takes case studies)

**October 26** Methods for Tasks 3 and 4; division of labor and group meetings

**October 31** Overview of economic development policy tools OR skills mismatch OR group meetings

**November 2** Class presentations on economic impact, case studies, and preliminary scope for Tasks 3 and 4

**November 7** Group meetings (KC out of town)

**November 9** Advanced zoning and land use regulatory tools (KC out of town)

**November 14**  Group meetings

**November 16** Dress rehearsal for November 17 conference presentation

**November 17** Presentation at CED/Boalt Sustainable Economic Development Conference, Brower Center (http://urbansustainability.berkeley.edu).

**November 21** Guest presentation on CBAs

**November 23** Class cancelled, Thanksgiving

**November 28**  Working session on draft report

**November 30** Class presentation to clients