

## 11.123 Big Plans & Mega-Urban Landscapes

MIT Department of Urban Studies and Planning  
Spring 2014

### Assignment 1: Elemental Case Study

Due as presentation and report on Lecture 10

Small group project exploring the urban/planning implications of water, food, “nature” (however specifically defined), energy, and communications in the Boston area. Each small group will be assigned an “element” to research and document.

In teams as assigned, conduct an “Elemental Case Study” for the Boston area. What is the history of the relationship between Boston and its [water / food / nature / energy / communications]? How is this relationship reflected in the growth and definition of the city? What do we know from the history of these relationships that might give us clues for planning the future, especially as the city takes on new challenges?

Some suggestions to proceed:

#### *For water –*

What is the relationship of Boston to water(s)? This could be physical, economic, social, and/or political aspects of the relationship between the history and current condition of the city and water that lies around it or flows through it. How and where does Boston get its water? What’s the spatial history of Boston’s search for secure water sources?

#### *For food –*

Where does Boston get its food? You might try to ascertain this by investigating a series of different food products, or sources through popular grocery/food chains. What is the Boston “foodshed”? How might you imagine an urban food web? What is the historical and present-day relationship of farming/agriculture to the city? In this aspect, the history of the Boston Urban Gardening (BUG) project, in particular, would be worth checking out

#### *For nature –*

How might you describe and visualize the dynamic relationship of Boston to nature? This might be nature however defined, from specifically “urban” nature like parks and open spaces to the expansion of the city into “natural” environments. (There might be some overlap between water and nature groups.)

#### *For energy –*

Where does Boston get its energy? What kinds of energy sources are used by the city? (For example, the Northwest generally uses hydro power because of its abundance there.) How are primary distribution plants situated relative to the populations/areas served? What are energy boundaries? Can you imagine a map of old to new, renewable, sources?

*For communications –*

Communications is broad, and encompasses communications networks like telephone, cable, wireless, but also physical communication as in transportation networks. What is a map of Boston cell towers and coverage? What is the historical relationship of Boston to its transportation networks (waterways, roads, streetcars, highways, subways...)?

**For this project it is less important to do an exhaustive report of all aspects of your element, but more one focused, cohesive story of one or two factors of your element.** Your team is curating, in effect, the story of the city and the [ ].

The idea of “sheds” might be useful – watershed, of course, but also “foodshed” or “commutershed.” In the same light, think about boundaries/borders, or gradients.

## **Deliverables**

**10 minute small group presentation**, with up to 6 slides

**6 page written report**, structured as follows

- 1 sheet **introduction**, general terms how element has impacted and transformed the city OR *been* impacted and transformed *by* the city
- 1 sheet **history**, discussing social, political, economic context in which large-scale changes to the element in question occurs in Boston
- 1 sheet **spatial-environmental transformation**, illustrating the physical changes wrought in relation to the element
- 1 sheet **visual** representation of **complete system** showing what you found \*
- 1 sheet **visual** depicting a **detail** or specific moment in the story \*
- 1 sheet on the **future**, showing future implications your study (threats, opportunities)

**\*At least 2 visual representations**, one a “complete” representation of your element in the city, another a detail, diagram, or alternate view that explains a specific part of the story.

**8 ½ x 11 sized, horizontal or vertical format**, font to be 10-11 point Arial, single-space, ¾” margins all around. *Note: planning reports are often done in landscape/horizontal format in order to accommodate plan documents and photos that are landscape in orientation. However, the ultimate format will be up to your team.*

A Boston “city-level” base map and aerial will be provided for your use.