Department of Landscape Architecture
LA 8522—Spring 2014

Project 1: Landscape Performance Metrics in Public Health (35 % of Course Grade)

How does the built environment impact public health? What are the critical tools to evaluate specific design features? This assignment is intended to get you thinking about community open space, design, and public health. Each group of students will be assigned a neighborhood to conduct behavior observation. The group of students will visit the site together and gather site measurements such as land use, density, street network etc. Each group will then develop behavior maps and tables documenting residents' use of the neighborhood open spaces. Next, students will work together to develop performance metrics evaluating neighborhood features promoting physical activity. Due to the small size of our class, each individual will be responsible to develop metrics for one particular evaluation category such as accessibility, safety, or aesthetics etc. And students will work together to compile all the information into a final report.

Project Objectives:

1. Identify features of neighborhood built environment that influence health.
2. Evaluate the evidence for the link between built environment and health.
3. Propose landscape performance metrics to assess the health consequences of neighborhood design forms.

Phase One: Case Studies
For the first phase, work in groups of 2 - 3 students to gather information of the study neighborhoods, articulate analysis about the neighborhood's site context, streets, and park/open space.

The following are some suggested aspects of SITE CONTEXT you might want to measure and discuss in your team:

- Land use in nearby area (approximately 1/2 mile length/radius from the neighborhood's boundaries) and residential density
- Circulation and accessibility – vehicular, pedestrian, location of transit line(s), and other
- Linkages to other important open space/activities/public infrastructures
- Neighborhood design characteristics (tree coverage, street network, lot size, street setbacks, open spaces, architectural styles, street lights, etc.).

For USER BEHAVIORS, you need to develop the following elements:

1. Three behavior maps addressing user activities in three time slots of the day: morning, noon, and afternoon.
2. A table/tables showing daily use pattern of the neighborhood open spaces (streets, parks, etc.).
3. A written summary of the neighborhood design qualities (in bullet form) that encourage/discourage physical activity.

The team work will be presented in PowerPoint on **Monday, Feb. 3**. The pdf of work should be formatted to 11x17 booklet to be submitted for review.

Phase Two: Performance Metrics for Neighborhood Environment
In the second phase, the members of each team will work together to decide the major categories and indices for evaluating the design qualities of a community open space that would affect health. Each student will select one particular category to work on. And at the end all the information will need to be compiled into a final report.

The final presentation for this phase should be presented in PowerPoint format.

Develop a booklet for submission (i.e. 8.5x11 or 11x17), **Due on Monday, Feb.24.**

The final report should include at least the following elements:
1. Introduction
2. Metrics: evaluation categories and indices
3. Conclusions

Other elements that you feel are needed can also be included.

Schedule (see class syllabus)

Evaluation/Grading

Phase One (group)	15%
Phase Two (group work)	10%
(Individual work)	10%
	35%

Criteria for Grading:
1. Efficient and productive use of time (new work to present each day of class; steady progress)
2. Demonstrate awareness and understanding of built environmental factors contributing to human health
3. Thoroughness and in-depth considerations of multiple environmental factors
4. Writing clarity

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Project 2: Greenway Design in Starkville, MS (45 % of Course Grade)

Greenways as defined by Little (1990) as protected linear corridor that improve environmental quality and provide for outdoor recreation. Although greenways have been a component of landscape planning for over a century, only recently they have been considered central to the open space planning process. For this project, we are going to develop a greenway design for the city of Starkville that would promote public health by providing spaces for recreation, socialization, and mediating environmental pollutions. The greenway is also able to protect biodiversity, protect regional cultural characteristics, and allow for economic growth and development. You will need to use landscape performance metrics created in project one to evaluate/assess how well your site plan perform for public health.

Project Objectives:

1. To understand and grapple with the critical issues with regard to site design and public health
2. To propose a design response appropriate to site context and program
3. To evaluate site design for the built environment-health link.

Phase One: Analysis of Site Context

For the first phase, the class will work as a group. Each student will be responsible to gather information, articulate the analysis about the site context regarding one of the following categories:

The following are some suggested aspects of SITE CONTEXT you might want to measure and discuss in your team:

- Land use in nearby area (approximately 1/2 mile length/radius from the neighborhood's boundaries), character of the neighborhoods and surrounding areas
- Circulation and accessibility – vehicular, pedestrian, location of transit line(s), access considerations, and parking opportunities
- Topography, hydrology, soils, wildlife, habitat assessment and suitability analysis
- Demographics, needs assessment, and socio-cultural considerations
- Economic and future opportunities (what might the project mean to the economic opportunities of the community and downtown Starkville in terms of real estate and commercial development?)

Analysis should condense/explain the information and the implication of the information. It is important to not simply present the information, but interpret information in a way that is helpful to create design ideas and concepts.

Phase One will be presented in PowerPoint on **Monday, March 24**. Group will develop a booklet for submission (11x17), Due by the class.

Phase Two: Greenway Master Plan

Using the analysis materials you developed in phase one, it is time to begin *design* work. Break apart what is inventory versus what is truly analysis that conveys design and programming decisions. Where is your design inspiration coming from? How do you take the context analysis to the next level so that it clearly conveys your emerging concepts? Develop presentation boards (you decide the size and number) that include the following elements…

E 1: Concept statement

- Based on the previous context and neighborhood analysis materials, prepare a *concept statement/plan* and show the key considerations that most influence your emerging concept.

E 2: Master Plan

- An illustrative master plan -- you decide ideal scale for sheet size depending on your layout decisions; include enough detail of adjacent land uses to support/enhance your plan. Add images, precedents, or sketches to explain the design features.

E 3: Performance Assessment

- Using the landscape performance metrics you developed in project one to evaluate the design qualities of your master plan that would help promote public health. You need to create a chart showing the scores your project receive in each design category and a written summary addressing key issues in your site plan to achieve performance benefits in terms of promoting public health.

Phase Two will be presented on **Friday, April 11**.

Phase Three: Site Design

The students will select one area on your plan and develop it in greater details. It is acceptable to slightly revise the master plan in response to new information gained during this more detailed study.

Please include the following elements as minimum:

E1: An illustrative site plan with a scale appropriate to sheet size.
E2: Two sections, showing locations on plan.
E3: Two eye-level perspectives. Make sure to include the necessary contexts. Indicate on plan where perspective is taken from.

The final presentation (phase two and phase three) will be on Wednesday, April 30.
PDF of final works due on April 30 at 5pm.

Schedule (see class syllabus)
Evaluation/Grading

Phase One	10%
Phase Two	20%
Phase Three	15%
	45%