Urban Science Intensive I (USI I) | CUSP-GX-9001 Spring 2016

Ms. Logan Werschky I <u>logan.werschky@nyu.edu</u> Assistant Professor of Practice, NYU CUSP

Purpose

The purpose of the Social Impact Project is to give you the opportunity to work through identifying and solving problems facing the City of New York using real NYC data. Through team-based work, you will cover the full range of a project—from problem identification to analysis to proposed implementation. This experiential learning exercise will provide experience in defining and conducting analysis in preparation for your Agency-based work in the second module of the course and in USI II.

Project topics and problem identification should be selected from recent NYC mayoral initiatives or current events (see References section). The initiatives and strategic plans describe a number of challenges in NYC and the associated goals and strategies in tackling them. The Social Impact Project work will reference the larger goals and strategies but will require more granular problem identification and assessment. The project must demonstrate how data analysis can inform operations and make an impact in addressing a specific problem.

You are welcome to use whatever techniques, methods, or technologies you would like to apply to the project. You are also encouraged to incorporate as many different data sets and techniques into your analysis as you think are relevant, though analysis must include data from at least two datasets. Note that the relationship between the problem, approach, and methods will be closely examined.

Scope of Work

Work is to be completed in teams of four students. Class size may require a team or two of three students. The scope of the project includes:

- Problem identification and definition
- Data identification, collection and manipulation
- Problem assessment
- Data analysis and interpretations
- Ethic and Privacy Consideration
- Risk Identification
- Data visualization and communication
- Proposed implementation and impact

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Process Guides

18F Method Cards https://methods.18f.gov

Kellogg Foundation Logic Model https://www.wkkf.org/resource-directory/resource/2006/02/wk-kellogg-foundation-logic-model-development-guide

Google's Code Style Guides
https://google.github.io/styleguide/Rguide.xml
https://google.github.io/styleguide/pyguide.html

Yau, Nathan. Visualize This: The FlowingData Guide to Design, Visualization, and Statistics. Indianapolis: Wiley Publishing, Inc. 2011.

Resources

These resources provide a jumping off point for the project. References are not comprehensive.

City of New York Sites and Reports

City Charter

http://www.nyc.gov/html/records/pdf/section%201133_citycharter.pdf

Mayor's Management Report
http://www1.nvc.gov/site/operations/services

http://www1.nyc.gov/site/operations/performance/mmr.page

Landing page for NYC Programs and Initiatives http://www1.nyc.gov/nyc-resources/programs.page

Building One City http://www1.nyc.gov/site/operations/projects/dob.page

Housing New York: A Five-Borough, Ten-Year Plan http://www1.nyc.gov/site/housing/index.page

One City: Built to Last http://www.nyc.gov/html/builttolast/assets/downloads/pdf/OneCity.pdf

OneNYC http://www1.nyc.gov/html/onenyc/index.html

Open Data For All http://www1.nyc.gov/assets/home/downloads/pdf/reports/2015/NYC-Open-Data-Plan-2015.pdf

Small Business First http://www1.nyc.gov/site/smallbizfirst/index.page

Vision Zero Action Plan http://www.nyc.gov/html/visionzero/assets/downloads/pdf/nyc-vision-zero-action-plan.pdf

NY-oriented Media

The New York Post
The New York Daily News
The Observer
The New York Times – New York Region section

Problem Identification Summary
 Session 3 – February 8th (due at the beginning of class)

Assignment: Problem Identification Summary. This is a written summary of problem, approach, and data inventory. The document should be 3 – 5 pages and include:

Overview

- City of NYC Context and background
- Description of challenge or opportunity
- Importance of action on the issue

Objectives and Goals

- Problem statement
- Project objectives, including
- Conceptual approach and methods
- Description of proposed end analysis products (including format)

Data Inventory

- Sources, type, and size of data
- Method of access
- Limitations or Risks

Additional Considerations

- Ethics
- Privacy
- Resource needs

Prepare one summary per group and identify all group members on the report.

Submit two copies: one printed copy at the beginning of class, and one electronic copy via NYU Classes.

2. In Class Presentation Session 5 – February 29th

Presentation: Presentation of Topic (8 minutes). The presentation should include the problem, approach, goal, and initial analysis.

These lightening group presentations to the class require succinct, well articulated, and rehearsed descriptions and explanations of the topic, problem, approach and initial analysis. Following the eight minutes presentation, each group has an additional eight minutes of dialogue with the class for discussion and feedback. Constructive criticism from the class is required. Treatment of feedback into