

## **SOCIAL IMPACT PROJECT**

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

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#### **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

#### **Data**

All data for the project must be in the public domain. Green data in the CUSP Data Facility and NYC Open Data are great starting points.

## **Deliverables**

There are four sets of deliverables for the project. They are sequenced to build on each other.

### **1. Problem Identification Summary**

#### **Session 3 – February 8<sup>th</sup>** (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 29<sup>th</sup>**

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

These lightning 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 the final projects will be considered in the final assessment.

### **3. Group Social Impact Project Report and Individual Executive Summary** **Week of Session 6 – Due March 14<sup>th</sup> at 10AM**

Assignment: Group Report and Individual Executive Summary

The final Social Impact Project report will combine your conceptual framework with the technical methods and results. Your report will be more than a technical summary. It will explain the technical methods and results of analysis in the context of the problem, approach and goal of the project. Address how the work gets you closer to solving the problem you identified. In addition to this, the report should outline:

- the data
- techniques for data cleaning and transformations
- analytical methods
- ethical and privacy considerations
- data outputs and results
- reproducibility
- suggested next steps.

The group report should be no more than 10 pages, excluding charts, maps, tables, figures, references, etc. Include a link to the project GitHub. Prepare one summary per group and identify all group members on the report. Submit one electronic copy via NYU Classes.

Each student will complete a one-page (maximum) Executive Summary individually. The Executive Summary will be a memo (format) that presents the project, highlighting key findings, takeaways, and recommendations. Submit individually via NYU Classes.

### **4. Final Social Impact Project Presentations** **Session 8 – March 25<sup>TH</sup>, National Grid Auditorium**

Presentation: Group presentation of full project and results

Guest Panel: Panelists TBD. Past panels have included leadership and practitioners from NYC MODA, OEM, EDC, HPD, NYPD, and CUSP.

Presentations should highlight the results of the Social Impact Project. They need to provide context--the problem, relevance, approaches and methods, data sources, and other considerations covered in the course—while emphasizing the impact and implementation recommendations.

#### **Grading**

All students on a team will receive the same grade for the project presentations and report. Students will receive individual grades on the 1-page executive summary. Note that presentation grades will include assessment of your presentation skills in addition to the content. Both individual and joint practice is essential.

## **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](http://www.nyc.gov/html/records/pdf/section%201133_citycharter.pdf)

Mayor's Management Report

<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*

*DNAinfo*

*Gothamist*

WNYC

## **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.