**Systems Synthesis Proposal Guidelines**

***Title of the Project:*** New Orleans Police Department Reducing Violent Crime through Analytics

***Timing:*** Spring 2017

***Client:*** New Orleans Police Department.

***Issue Definition:*** In 2016, NOPD was selected as a participant in the Department of Justice’s Violence Reduction Network. The Network is comprised of city’s that are experiencing an outbreak of violent crime with the purpose of bringing innovative solutions to the challenge. At the same time, NOPD is working to improve how quickly the Department responds to emergency calls for service, reducing violent crime, and increasing the level of community-oriented policing. Instrumental to improving these three components is more efficient and effective allocation of strained resources. NOPD would like to consider specifically when arrests or traffic/pedestrian stops reduce violent crime and conversely, when these activities are less effective. The knowledge gained from this research would help determine where best to spend the limited available time to pro-actively patrol or focus on solving specific cases. In addition, better understanding how and when quality of life issues impact crime including the resolution of those complaints would be instrumental in helping the City understand the prioritization of specific quality of life complaints as they related to crime reduction. NOPD and the City of New Orleans have been leaders in the dissemination of Open Data. These datasets include NOPD Calls for Service, NOPD Stops and Search, NOPD Crime data, and a slew of quality of life related concerns tied to various City Departments. NOPD needs support in analyzing the existing Open Data to understand the relationship between different seemingly disparate datasets to help create an operational understanding of violent crime.

***Scope of Work:*** The project will include an analysis of the existing Open Data for the City of New Orleans. The analysis could utilize machine learning techniques to accommodate the dynamic environment in which NOPD works. The analysis should include the ability to apply the methodology in an ongoing manner with the live Open Data as well as an understanding of the historical context of the efficacy of various approaches to reduce violent crime. Following the analysis, the project should include recommendations for how the Police Department could effectively reduce violent crime.

***Available Data:*** All data available on the data.nola.gov website. When needed, additional data may be available as long as it excludes confidential or personal identifier information.

***Expected Deliverable:*** There are two expected components of the final report. The first is a report that shows which factors influenced and did not influence violent crime. The second is a methodology (or methodologies) to correlate violent crime with the associated data sets.

***Skills Required:*** This project utilizes a broad range of PPM core-course requirements with particular emphasis on statistical and analytical skills to carry out the analysis, policy analysis skills to determine the appropriate recommendation, and communication skills to convey the findings.

***Advisory Board:*** An advisory board could be composed of people with the following expertise:

* Director of Analytics, NOPD
* Deputy Superintendent of Field Operations, NOPD
* Deputy Chief of Staff, NOPD
* Police Commander, NOPD
* Expertise from Heinz College faculty members

***Faculty Advisor:*** Suggest a faculty advisor (optional). Indicate if you have received

confirmation from the faculty member to serve as an advisor.

***Proposer contact info: Name, email, phone #***

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***Client point of contact: Name, email, phone #***

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***Client POC availability:*** The client is available to support the team as needed.