Meeting Date: March 5, 2014   Time: 4:30 pm

Meeting Location: Town Hall – Room 408

Members Present: Alberto Chang (by phone due to emergency); Sergio Modigliani; Lee
                        Selwyn; Ann Connolly Tolkoff (chair); Harrison Scott Bromley MIT
                        Operations Lab Team ("MIT Team"); Karl Kulling (MIT Team), Cameron
                        Hosmer (MIT Team)

Others Present: Dick Benka; Linda Olson Pelhke; Mark Gray

Topic: MIT Operations Lab Briefing

Mr. Modigliani presented background of MGL Proposition 2 ½ to MIT students. Mr. Selwyn explained cohort model in 2012 MGT report. Ms. Tolkoff reviewed preparation of mid-March report to Override Study Committee (OSC).

Ms. Tolkoff reviewed the charge to the Demographic Subcommittee and enumerated the initial set of working hypotheses:

- Impact from housing stock
- Local jobs and economic trends
- Immigration trends
- Family planning trends
- Non-resident programs
- Students who are illegally registered in Brookline, reside elsewhere

Ms. Tolkoff also discussed the bases for testing the hypotheses:

- **Assessment of data**: We have data from national, state, town, school census; input from Linda Pelke; Alberto Chang's work with town and schools, and Lee Selwyn's work with non-resident programs.
- **Modular approaches**: While we have not had success in gaining full access to the work model from MGT, what work is left to establish a predictive model? How many man hours would it take? Who would use this model?

Ms. Tolkoff identified three buckets for discussion:

- What do we know?
- What do we not know?
- How do we answer what we do not know?

Topic: Possible Projects for the MIT Operations Lab Team

Mr. Hosmer reported the result of earlier brainstorming internally where the MIT Team can add value. The three suggestions from the MIT Team are as follows:

1. Modeling: The MIT Team can build a model to predict kindergarten enrollment (using an 80/20 rule where a few factors would explain the population projections). Alternatively, the MIT Team could focus on something specific like the housing stock portion.
2. MGT Report: The MIT Team can take the MGT reports and information and back out their process to validate or disprove their line of thinking
3. Data centralization and visualization and presentation: The MIT Team can take the current data and summarize and provide some analytics.

Selectman Benka referred to a presentation made by the school department on enrollment projections on October 2, 2013, and referred to the iterative nature of the work.

Mr. Selwyn stated preference for option numbers 1 or 3 above as efforts with MGT had been unfruitful.

Mr. Chang reported and Mr. Modigliani underscored the work required by the Demographic Subcommittee of Town and school employees was onerous.

Mr. Chang reported that Jed Ferhenbach is still making reports to Mr. Chang and that he, Mr. Chang was the "bottleneck" in getting data through to the rest of the Subcommittee.

Mr. Chang championed option #1 above as the Subcommittee would be "contracting out" the kindergarten enrollment prediction.

Mr. Modigliani called an accurate predictive model for kindergarten "a miracle."

Linda Pelhke commented on the lack of documentation regarding the MGT cohort model. Areas were not addressed by MGT including live births, the decreased in number of child bearing adults has decreased, etc.

Mr. Benka commented on data interpretation, stating the problem involved trying to disaggregate the K-8 figures from the high school numbers. The space requirements for classes are different at the high school.

Mr. Chang talked the meeting through his report "Summary Analysis and Findings - draft as of March 5, 2014".

Topic: Action Items

The MIT Team will start predictive model for kindergarten enrollment. Mr. Chang requested to better understand the time frame constraints imposed by the MIT course itself and additional information on their approach to option #1 above. The MIT Team will meet next with Demographic Subcommittee on March 12 in person or by phone.

Mr. Chang will continue to work with and to analyze Mr. Fehrenbach's data.

The meeting was adjourned at 6:00 p.m.