**Introduction**

Massachusetts General Laws Chapter 40B §20-23 is a state statute that was enacted in 1969 to stimulate housing production in the Commonwealth. In localities in which less than 10% of year-around units are affordable to residents making less than 80% of area median income, Chapter 40B offers density bonuses and streamlines the permitting process to developers who intend to make 20-25% of newly-built units affordable. Chapter 40B has been responsible for the development of 35,500 affordable units in the Commonwealth.

To my knowledge, there have been no studies that systematically analyze the extent to which 40B units have been located in areas that offer high opportunity to residents. Opportunity can be defined as neighborhood conditions and resources that are conducive to helping residents in that community succeed; indicators that measure high or low opportunity can be both conduits and impediments to opportunity, respectively. There has been a increasing focus on developing affordable housing in areas that provide opportunity for residents based on improvements seen in mental and physical health of adult residents when moving to areas of higher opportunity.

My approach is to create an *Opportunity Index* to analyze the 133 40B developments that are located in the Boston Core Based Statistical Area (CBSA).

**Methods**

The Index’s study area is the Boston CBSA but excludes the city itself because Chapter 40B does not apply there. It incorporates seven indicators, which include poverty level, school proficiency, proximity to jobs, labor market engagement, transportation costs, environmental health hazards, and access to public transportation. I then tested if my Index is consistent with expectations by running individual regressions on the Index as well as the 7 comprising indicators, using median home value as the explanatory variable. I mapped the 133 40B developments in my study area and analyzed their distribution. I found the Index score that corresponded to their location, and compared the score to the area average. I did the same for the seven indicators.

**Results**

This analysis suggests that Chapter 40B developments are not deliberately located in areas of higher opportunity that would benefit residents living in their affordable units. The Opportunity Index is mapped at the top left of this poster. As the first table to the left shows, the 133 40B developments scored an average of 2.8 on the Opportunity Index, just below the 2.9 average for the entire CBSA. For the Index and all indicators, there are no statistically significant differences between the scores for the 40B locations and the CBSA average.

The results of the regressions using Median Home Values as the dependent variable to test that the Index is consistent with expectations demonstrates that my Index is viable, with two exceptions. There is no statistically significant relationship between the School Proficiency Indicator (SPI) and poverty. This may be because HUD uses 4th grade test scores to measure proficiency, while developers and the public may look for other characteristics that are associated with areas of opportunity and the development of 40Bs. If there were, I would expect to have statistically significant findings, and that the mean scores for 40B developments to be higher than that of the CBSA mean if on average 40B developments were being built in above average opportunity areas.

I ran multiple regressions with both the 40B developments and the number of affordable units built under the program as my dependent variable, but none were statistically significant. This is consistent with my finding that there appears to be no relationship between neighborhood characteristics that are associated with areas of opportunity and the development of 40Bs. If there were, I would expect to have statistically significant findings, and that the mean scores for 40B developments to be higher than that of the CBSA mean on average 40B developments were being built in above average opportunity areas.